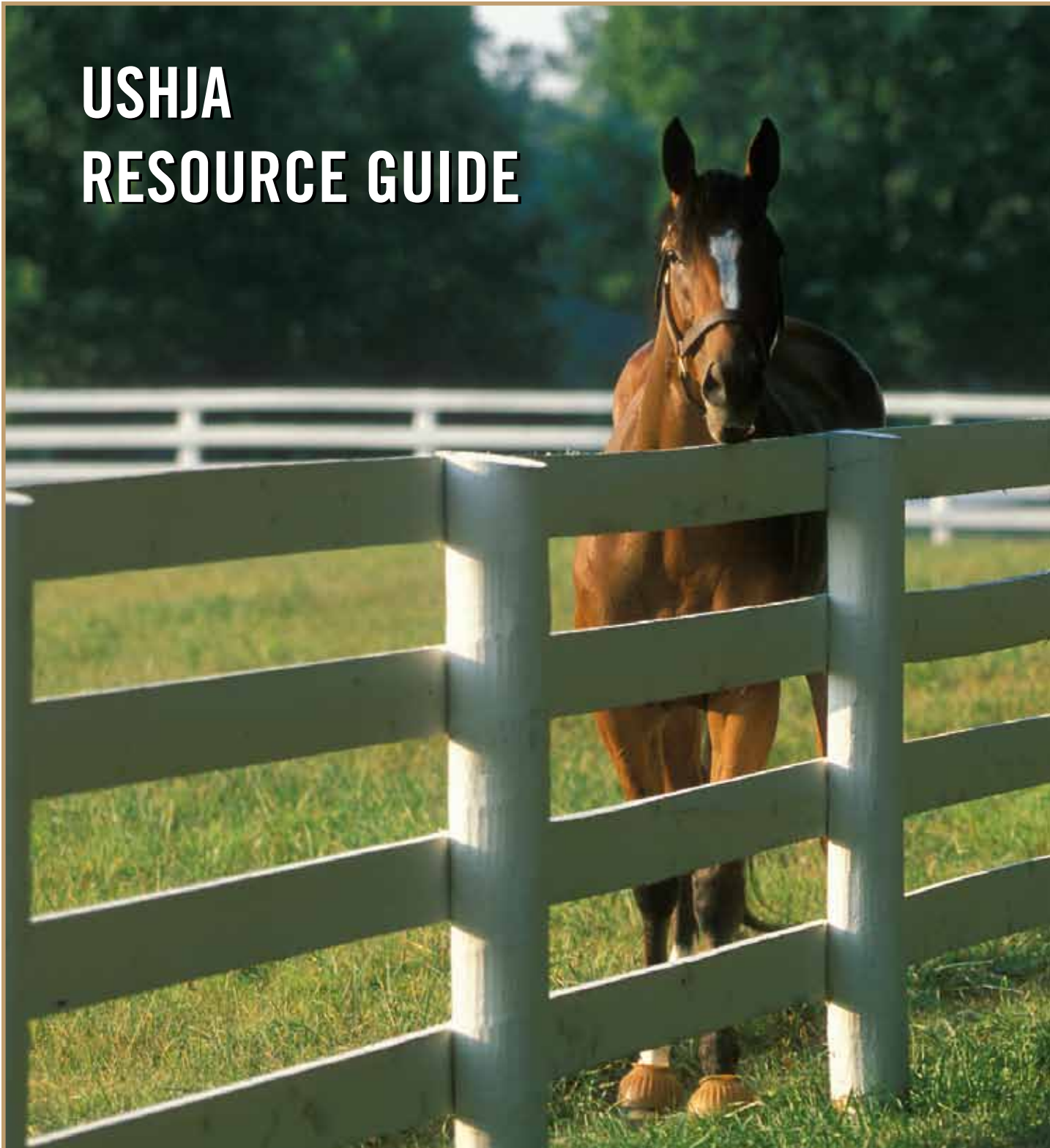



USHJA RESOURCE GUIDE



UNITED STATES 
HUNTER JUMPER ASSOCIATION™



USHJA RESOURCE GUIDE INTRODUCTION

Welcome to the USHJA Resource Guide. This guide is a compilation of three previously published guides: The Horse Welfare Guide, The Owner's Guide and The Trainer's Guide. These are three main areas where USHJA committees have identified the need to produce educational materials for our members. In an effort to conserve resources while increasing our reach to our members, we produced this comprehensive guide.

DISCLAIMER:

This guide was created, in part, by the committees of the United States Hunter Jumper Association, Inc. as an educational and informational resource for our members and the public. The information contained in this booklet has been compiled from various sources, including articles, publications and the like, and is presented only as an educational guide. It is not intended to nor does it provide specific veterinary or other professional advice, and the reader should seek independent professional advice as needed.

By creating this booklet, neither USHJA; its officers, board members, committee members or staff; nor any person or entity involved with the design or production of this guide is offering professional services or advice. Although USHJA strives to keep information accurate and current, it makes no warranties or guarantees as to its accuracy and currency. USHJA is not liable for any damages, claims or actions incurred or undertaken as a direct or indirect result of using the information contained in this booklet.

© 2010 United States Hunter Jumper Association, Inc. All rights reserved. Reproduction in part or in full without permission is prohibited by law. USHJA is not responsible for any errors or omissions in the publication or for the use of its copyrighted materials in any unauthorized manner.

USHJA PROGRAMS

USHJA strives to offer programs to benefit all levels of membership. Below are a few of the exciting programs USHJA offers. For a complete listing of USHJA programs, awards, benefits and membership options, please visit the USHJA website at www.ushja.org.

Emerging Athletes Program

The EAP was created specifically to develop and implement a system of identifying and nurturing talented young riders. The EAP provides opportunities for young riders to advance their education as they strive to become knowledgeable horsemen within the hunter/jumper community.

Through the EAP Program, riders will learn from top professionals and be evaluated on their knowledge, horsemanship and riding ability.

Clinics Program

Education is one of the primary goals of the USHJA. Through the USHJA Clinics Programs, many opportunities exist for our outstanding professionals and leaders in the industry to give back their experience and knowledge to all levels of equestrian participants.

International Hunter Derby

The High Performance Hunter Committee developed this program to bring the lost art of tradition and horsemanship back to the show ring. This committee has developed a series of classes with the hope of an international sensation. The USHJA International Hunter Derby Series was created to bring show hunters to the international level; to increase spectator, media and sponsorship interest; and to bring tradition and basic riding principles back to the sport of showing hunters.

Junior Career Development Program

The purpose of the USHJA Junior Career Development Program is to allow junior riders the opportunity to be an apprentice for a day, onsite, with a competition official (e.g. judge, show manager, show secretary, steward, course designer, vet or farrier). The program allows junior riders an opportunity to have a better understanding of the duties and responsibilities of these officials and to determine if they would like to pursue a career in one of these positions.

Outreach Competition and Medal Program

Both programs are designed to encourage increased participation from hunter/jumper groups of every level across the United States.

Created by the USHJA's B/C/Local Task Force and the Affiliates Committee, the new programs will set a minimum standard for local competitions that want the right to refer to the USEF rulebook for governance without the USEF or USHJA having any regulatory function regarding their association or horse show. Included in the Outreach Programs will be four Outreach Medal Classes that are designed to give riders who compete at unrated or schooling shows the ability to achieve national recognition.

Trainer Certification Program

The mission of the USHJA Trainer Certification Program is to preserve the American Hunter/Jumper Forward System of riding and jumping through the development of a comprehensive education and certification program for all levels of professional trainers. The USHJA Trainer Certification Program is a voluntary program. It is intended to help promote trainer credibility and offer ongoing professional support. Certification does demonstrate a marketable merit of knowledge that will gain in credibility with each passing year.

Trainer Symposiums

The Symposiums offer attendees a rare opportunity to participate in practical training sessions and round table discussions with top professionals in the industry. The schedule offers three days of hunters, equitation and jumpers. Each of the disciplines is broken into sections: i.e. Junior Hunters, Intermediate Equitation and Junior/Amateur Owner Jumpers. The sections will have 3-4 demonstration riders for the clinician to work and explain different techniques, exercises and tips for various levels of riders and horses. This is a great opportunity for professionals and members to exchange thoughts and ideas on training exercises, training aids, and business practices.

UNITED STATES HUNTER JUMPER ASSOCIATION STAFF

USHJA EXECUTIVE OFFICERS

President William J. Moroney Direct: 301.730.8280 Email: bill2760@aol.com	Vice President Chrystine Tauber Direct: 561.791.8669 Email: taubercj@msn.com	Chief Executive Officer Shelby French Direct: 859.225.6701 Email: sfrench@ushja.org	Secretary Beth Miner Direct: 651.429.2037 Email: beminer@comcast.net	Treasurer Skip Thornbury Direct: 513.625.6500 Email: skipght@hughes.net
---	--	--	---	---

ACCOUNTING

Chief Financial Officer Lisa Moss Direct: 859.225.6712 Email: lmoss@ushja.org Audit, Finance, Budgeting	Accounting Manager Georgia Holbrook Direct: 859.225.6711 Email: gholbrook@ushja.org Cash Receipts, Disbursements, Payroll
---	--

MUSEUM & AWARDS

Museum Curator Kristyn Kay Direct: 859.225.6708 E-mail: kkay@ushja.org Museum	Awards Manager Marla Holt Direct: 859.225.6710 Email: mholt@ushja.org Awards
--	--

PROGRAMS & EDUCATION

Director of Competitive & Educational Programs Kelley Mallery Direct: 859.225.6717 Cell: 859.967.3193 Email: kmallery@ushja.org Educational & Competitive Programs, WCHR, National and International Hunter Derby, Committees and Task Forces	Programs & Education Ambassador Carrie Vaught Direct: 859.225.6703 Email: cvaught@ushja.org Programs, Clinics, Horsemanship Quiz Challenge, Committees and Task Forces
---	--

LEGAL COUNSEL

Marianne Kutner Direct: 516.883.2353 Cell: 917.892.7249 Email: equessq@aol.com or mkutner@ushja.org
--

MARKETING & COMMUNICATIONS

Director of Marketing & Communications / Managing Director of the USHJA Foundation Whitney Allen Direct: 859.225.6707 Email: wallen@ushja.org Advertising, <i>In Stride</i> , Marks/Logos, Sponsorship	Assistant to the Marketing & Communications Director Jill Magee Insko Direct: 859.940.3073 Email: jinsko@ushja.org Direct support for the Marketing Director, Logo Requests Managing	Graphic Designer Matt Todd Direct: 859.225.6715 Email: mtodd@ushja.org Graphic Design, Web Design, Print	Managing Editor of <i>In Stride</i> Tricia Booker Email: tbooker@ushja.org USHJA <i>In Stride</i> Magazine	Marketing & Communications Manager Robbi Meisel Direct: 859.225.6706 Email: rmeisel@ushja.org Press Releases, Brand Management, Social Media
---	---	--	---	--

FACILITY

Facility Manager Terry Popp Direct: 859.225.6713 Email: tpopp@ushja.org Building Maintenance, Mail	Office Manager Amanda Bryant Direct: 859.225.6702 Email: abryant@ushja.org Direct Office Support
--	--

ZONES, DATA, & COMPETITIONS

Director of Zones, Data & Competitions Diane Popp Direct: 859.225.6704 Email: dpopp@ushja.org Zones, WCHR points, Membership and Affiliates,	Zones & Competitions Senior Coordinator Kim Knotek Direct: 859.225.6709 Email: kknotek@ushja.org Zones & Competition Data, Membership, Affiliates, Program Awards, IHSA, and Outreach Competitions	Zones & Competitions Senior Coordinator Christina Murphy Direct: 859.225.6714 Email: cmurphy@ushja.org Zones & Competition Data, Zone Jumper Committees, Jumper Championships, Zone Scholarships and Grants, Zone Clinics
--	--	---

USHJA HORSE WELFARE GUIDE

SARATOGA HORSEWORKS LTD
254

Table of Contents

I. Introduction	1
Opening Letter from the USHJA Horse Welfare Committee	
Vital Signs for Quick Reference (temperature, heart rate, etc.)	
USHJA Code of Conduct for Horse Welfare	
Open Letter to the Trainers (By the Horse Welfare Committee, In Stride, Summer 2006)	
II. What to do if you see abuse	2
(By the Horse Welfare Committee, In Stride, Summer 2006)	
III. Medications	2
Equine Medications: The Risks vs. The Benefits (By Shauna Spurlock, DVM. In Stride. August 2008)	
Nutrients and Nutraceuticals: The Equine Supplement Debate (By Shauna Spurlock, DVM. In Stride. December 2008)	
USEF Drugs and Medications (Reprinted with permission from the USEF.)	
USHJA Shoeing and Medication Booklet	
IV. First Aid	7
Ensuring Good Health Year after Year (By Dr. Mark Baus, DVM.)	
Disaster Relief (By Allison Rogers reprinted with permission of Equus Magazine September 1996 issue #227)	
Red-Alert Situations	
A Well-Rounded Medicine Chest	
Is He in Shock?	
Trailing an Injured Horse	
Calming Your Horse	
V. Barn Management	13
Providing Quality Care in a Faltering Economy (By Rachelle Wilhelm, In Stride. February 2009)	
Ensuring Good Health for Your Horse (Dr. Mark Baus, In Stride. October 2009)	
Retirement Options (By Rachelle Wilhelm, In Stride. August 2009)	
Managing the Aging Horse (2007 USHJA Owners Guide)	
VI. Footing, Lameness and Back Soreness	19
Where the Hoof Meets the Ground (By Hilary M. Clayton, BVMS, PhD, MRCVS, In Stride. Fall 2006)	
How the Hoof Interacts with the Footing	
Footing Materials	
Common Footing Problems	
Back Soreness (By Michael Ball, DVM, In Stride. February 2007)	
Evaluating Lameness	
VII. Hoof Care and Footing	22
Happy Hooves, Happy Horses (By Lisa Munniksmma. In Stride. October 2008)	
Hoof Care to Keep Him Sound (By Elaine Pascoe with Duncan Peters, DVM, Practical Horseman. October 2007)	
VIII. Riding	28
The Importance of Conditioning (By Michael Ball, DVM, In Stride. Summer 2006)	
Schooling (By Geoff Teal, In Stride, June 2007.)	
IX. Shipping	30
Long Distance Shipping (By Mark Baus, DVM and Steve Soule, DVM, In Stride. Spring 2006)	
Before Shipping	
During the Trip	
Upon Arrival	
X. Competing	31
Taking Care at the Show (By Bill Moroney, The Chronicle of the Horse. March 10, 2006)	
On Longeing and More (By Bill Moroney, The Chronicle of the Horse. March 10, 2006)	
Equine Management for the Long Run (By Rachelle Wilhelm, In Stride. August 2009)	
How Many Classes (By Glenna Wirtanen)	
The Measure of Success (By Whitney Allen, In Stride. June 2008)	
Competing In the Heat (By Mark Baus, DVM, In Stride. April 2007)	

I. Introduction

Opening Letter from the Horse Welfare Committee

Dear Members of USHJA:

Since the USHJA was founded, it has strived for excellence in education. One of the most important factors of equestrian education is horse welfare. The USHJA Horse Welfare Committee has spent the last few years monitoring the industry and providing educational articles on horse welfare for the members of USHJA.

Recently this committee decided that it would be beneficial to our members to provide these articles and research in one central location. The result is this booklet. It is our hope that you find it useful in furthering your education on horse welfare and are able to use it as a resource guide.

We encourage you to provide us with any suggestions you may have for future versions of this booklet. If you have any questions or comments please contact the USHJA office at 859-225-6700 or fax us at 859-258-9033.

Sincerely,

The USHJA Horse Welfare Committee

The USHJA Code of Conduct for Horse Welfare

The mission of the United States Hunter Jumper Association is to unify and represent the interests of all levels of participants in order to promote and enhance the hunter and jumper disciplines and provide educational experiences in a manner that will benefit both horses and members. The USHJA Horse Welfare Committee develops and implements guidelines and rules that exist specifically for the welfare of the horse. USHJA expects that every person involved in showing horses adheres to the UHSJA Code of Conduct for the Welfare of the Horse:

Horses are one of only a few animals used as athletes, often required to undergo extensive training before reaching their physiological or psychological limits as competitive individuals. Under these circumstances, decisions about horse welfare may be strongly influenced by the potential benefits to the rider, the owner or trainer. Therefore, all equestrians must acknowledge and accept that at all times the welfare of the horse is the first priority and must never be second to competitive, personal, or commercial influences.

The well-being of the horse takes precedence over the demands of trainers, riders, owners, organizers, sponsors or officials.

Competition management must always consider the horses' welfare relative to the competition and schooling areas, ground surfaces, weather conditions, stabling, equipment and other related site safety issues.

Adequate provisions must be made for ventilation, feeding, watering and maintaining a healthy environment when horses are stabled on competition grounds.

In the interest of the horse, the competence of the rider is considered essential.

The highest level of veterinary care available must be provided at all levels of competition.

USHJA will establish adequate controls in order that all persons and bodies respect the welfare of the horse.

Emphasis will be placed on increasing education in training and equestrian practices and promoting scientific studies in equine health.

USHJA urges its members to pursue the highest level of horsemanship by continued education through clinics at all levels. The USHJA Horse Welfare Committee is dedicated to bringing the best horsemanship ideas together, throughout the United States, in an effort to promote understanding and fair treatment of horses at every opportunity.

Open Letter to Trainers on Horse Welfare

(By the Horse Welfare Committee)

USHJA would like to take this opportunity to ask each of you to help us spread the message of horse welfare. Horse welfare is a topic that must be of utmost importance to everyone involved in the horse industry. From caring for our equine partners at home to competing at horse shows, we ask that as trainers you help us set the gold standard of horse welfare.

Trainers play a vital role in the care and maintenance of our horses. As such, riders, owners and spectators look to the trainers to learn what is acceptable. We ask that all trainers help our industry by promoting solid practices of horse welfare. Some examples of what riders, owners and spectators are exposed to are longeing, bathing and general care of the animal. By communicating the proper methods of simple everyday activities such as longeing and bathing (e.g., not continuing to lounge until a horse is lathered; avoiding spraying the horse in the face with the hose), you can help spread the message of proper horsemanship and thereby promote the idea of horse welfare.

It is the responsibility of every trainer to set an example for those looking for guidance. As trainers, you are the mentors of this industry. Together we must protect the horses; as horsemen, it is our job.

II. What to do If You See Abuse

(By the Horse Welfare Committee)

The USHJA Horse Welfare Committee has put together a few tips on what to do if you witness an act of cruelty or abuse at a horse show. If you see a case of abuse or cruelty, please contact the show steward to report the incident. You may go to any member of the show staff who is carrying a radio and ask him to locate the steward. Have the steward come to the location of the incident. If the steward is not available, locate the show manager and follow the same procedure. Also, try to have another person witness the incident. If there is anyone nearby with a camera, please ask him to take pictures or videos of the incident. Remember that it is critical to have the steward at the incident location so he can intercede and stop any action that is cruel or abusive. While waiting for the steward, or if you are unable to locate a steward, you may, in a calm manner, approach the person committing the act and ask him to stop. Many times this will be all that is required for the abuse or cruel action to stop. If the steward arrives at the incident scene and you feel that he has not handled the situation properly, you may fill out a USEF Member's Confidential Evaluation Form, which can be obtained from a steward. Should you feel uncomfortable asking the steward for the form, you can download it from the USEF website at <http://www.usef.org>.

It is important that we work together for the welfare of the horse. Put simply, if you witness abuse or cruelty, get the steward!

III. Medications

Equine Medications: The Risks vs. The Benefits

(By Shauna Spurlock, DVM. In Stride. August 2008)

One of the first rules of veterinary medicine is "do no harm." On a daily basis, veterinarians attempt to make accurate observations, apply appropriate diagnostic procedures and correctly interpret the results of those tests; prognosticate based on knowledge, training and experience; and successfully treat or control clinical symptoms. Elimination of a disease process with surgery might be required, but more commonly it is resolution or abatement of the disease with time and control of symptoms. Each step through this process is crucial to the final result.

When dealing with show horses, we add to the mix the requirement that these steps be done within the rules of the governing organization. The current Drugs and Medications Rules allow a veterinarian tremendous latitude in each step of the treatment process up to and including the use of medications that are medically necessary. At the same time, these rules speak to the well-being and safety of the horse.

For the most part, we are looking at two general areas where medications are used: to improve the clinical soundness and to affect attitude. Medications to improve soundness may be used to control the symptoms of a newly acquired condition or for a chronic low-grade condition. Because of the strenuous year-round schedule of horse shows, the demands on horses are such that the timing of a rest that could allow a condition to resolve might be dictated by the calendar. For the older campaigner, controlling the aches and pains of age and use allows the horse to continue its career. The two classes of drugs employed to improve clinical soundness are corticosteroids and nonsteroidal anti-

inflammatory drugs (NSAIDs). These drugs produce the desired effects by controlling the signs of inflammation.

Inflammation is defined as redness and swelling with heat and pain. There is a series of cellular events in response to cell injury that produces inflammatory mediators. The damaged cell wall releases a molecule that begins this “inflammatory cascade.” There are two paths this substance can follow that ultimately result in the production of either prostaglandin or leukotriene molecules. This process is crucial to healing and, in general, is beneficial. The prostaglandins and leukotrienes increase circulation and make capillary blood vessels leaky, resulting in redness, heat and swelling. They also increase the sensitivity of the receptors in the area. This results in pain, which is believed to be an evolutionary safeguard to keep the horse from doing further damage to itself. Steroids work at the cell membrane level to block the release of the initiating molecule. NSAIDs work at one branch of the cascade, the branch that produces prostaglandin. Both of these families of drugs are excellent means to control the signs of inflammation, but we must recognize that they do not address the cause; therefore they do not make the underlying condition go away. These drugs must be part of a treatment plan that is designed to: 1) remove the disease (i.e. surgery); 2) control pain while the healing process proceeds to resolution; or 3) control the clinical signs, accepting that the underlying cause is still present.

Any of these options is predicated on a thorough knowledge of the horse’s condition, the specific diagnosis and knowledge of the likely course of the disease. The outcome can be greatly affected if any of the above steps are omitted. For example, without an accurate diagnosis, the removal of pain may have devastating results. Let’s say a horse is out in the pasture. He comes in very lame with a small skin abrasion over his elbow. On bute, he becomes clinically sound in a few days. The odds are that it is just soft tissue trauma. However, without a specific diagnosis, the owners can’t rule out the possibility that he could have an incomplete fracture of his elbow that, with a return to use, could become a complete fracture.

The risk of such catastrophic events will also vary with the horse’s level of work. Obviously, a horse showing in hand is less likely to severely aggravate an injury than a grand prix jumper. Certainly not every horse that comes in with an injury from the field requires an in-depth diagnostic workup, but you must see that with each treatment and each injury, there are both risks and benefits from treating with anti-inflammatory medication.

As with any drugs, the anti-inflammatory medications all have unique sets of potential adverse effects. In general, the higher the doses, the more risk there is of unwanted side effects.

The NSAIDs block the production of prostaglandins. As outlined above, prostaglandins are involved in the inflammatory response. But in an unfortunate design plan, prostaglandins are also crucial to the health and normal functioning of a number of major organ systems. In the stomach and intestines, prostaglandins regulate motility, the secretion of digestive fluids, the flow of blood and also the health of the lining of the digestive system. In the kidneys, prostaglandins regulate blood flow and help to maintain normal electrolyte levels in urine and blood. Keeping these functions in mind, it becomes evident that the adverse effects of decreasing “good” prostaglandin production include ulceration of the intestinal tract and damage to the kidneys due to a change in blood flow. All of these potential adverse effects are made worse in the face of dehydration.

Recently, a distinction has been identified in the mechanism by which the essential prostaglandins that maintain health and the prostaglandins that are turned on as a part of inflammation are produced. This is in two forms of an enzyme called cyclooxygenase; these are now identified as COX-1 and COX-2. The distinction between these two is not 100%, but there is a tendency for the COX-1 pathway to result in the prostaglandins that maintain tissue health, while the COX-2 pathway results in more of the inflammatory prostaglandins. This has given life to a different way of thinking about anti-prostaglandin drugs. If you can selectively inhibit only the inflammatory path, then the changes for adverse effects are minimized. Research towards finding drugs with greater selectivity for the inflammatory prostaglandins is ongoing. Most of the NSAIDs currently used suppress COX-1 to a great extent, but also will decrease COX-2 pathways, resulting in their anti-inflammatory properties. There are several COX-2 inhibitors now available, and it is likely that others will be coming along. Again, these drugs do not affect only COX-2; they just have less effect on COX-1. There is ongoing research looking into differences in the tissue distribution of each of these pathways. These differences may help explain why NSAIDs seem to have different clinical responses. For example, it is generally considered that phenylbutazone is more effective for musculoskeletal pain than flunixin meglumine, which is considered to be more effective for visceral or abdominal pain. This subjective difference in clinical response and the accumulating research that there is a scientific basis for this difference is likely the basis for the practice of “stacking” or using multiple NSAIDs. While there have been studies that show a better control of clinical lameness with a combination of two drugs than with either drug alone, there is also concern that the detrimental side effects may be additive. The potential for the NSAIDs to affect normal physiology in the joints, intestinal and bone healing, in addition to the increased risk of gastrointestinal ulceration and kidney damage, has led to the rules that limit this practice and limit the risk for the horse. Even when using two NSAIDs in accordance with the existing rules, it should be done understanding the real risk as well as the potential benefit.

Steroids, the other major family of drugs used to control inflammation, can be given orally, by intramuscular or intravenous injections, or by injection into a joint. They also suppress the normal response to infection and have been incriminated in producing laminitis. The exact

mechanism has not been clearly elucidated, but the higher the dose, the greater the risk, and some specific drugs within the family are more commonly implicated. The second area of clinical concern is the effect repeated use can have on the health of the joint cartilage. Most notably in high motion joints, repeated use seems to change the environment of the joint in such a way that wear of the articular surface can be exacerbated. Damage to the articular cartilage is a very serious concern, as this type of cartilage is not replaced, and once gone, it is gone forever. If steroids are used in a joint and the horse is allowed to rest, then the effects seem to be minimized. Therefore, use of steroids should be weighed against the risk and the longterm goals for the horse.

Besides using medication to improve soundness, the second area where medication is most commonly used is in altering attitude or responsiveness. While some equine disciplines embrace an animated expressive attitude, it would typically be quieting that is sought in the hunter ring. In this application, steroids again make the list, along with electrolytes including magnesium or calcium, vitamins such as thiamine, and lastly, the tranquilizers. There is far less scientific data and more anecdotal information available on behavior modification. For example, the use of magnesium to calm seems to be predicated on the reported observation that slow intravenous infusion of magnesium resulted in the horses appearing more sedate.

Certainly, there are significant ethical questions with this whole application, for it does seem that the training and innate personality of the horse should be a part of the animal's showing success. The concern about behavior modification has been a driving force in the area of drug testing and the medication rules for horse show organizing bodies for decades. The use and abuse of reserpine, a long-term tranquilizer, was one of the first drugs targeted for testing and banning from the show ring. Yet, here we are still discussing the pros and cons of behavior modification. Aside from Acepromazine, which periodically is mentioned as a drug that some would like to see considered for legalization and for which a horse may be easily tested, the other drugs and medications on this list are far more difficult to detect.

With more chronic and repeated systemic use of a steroid, or its precursor ACTH (as might be encountered with behavior modification), adrenal exhaustion can also occur. When the repeated use is discontinued, the adrenal gland cannot respond normally and the results can include depression, decreased appetite, weight loss and poor hair coat.

The intravenous administration of magnesium or calcium is not without risk. Both of these electrolytes play a role in muscle contraction and stimulation of other excitable tissue. Medically, magnesium is used to treat some heart arrhythmias and also the muscle rigidity associated with tetanus. Likewise calcium, which is used to treat diseases that produce a drop in this vital substance, is well recognized as something that must be given slowly due to an increase in heart rate that can progress to life-threatening arrhythmia during medical applications. Often, when given therapeutically for serious medical conditions, electrocardiogram monitoring is employed to minimize the chances of adverse effects. Ultimately, of course, using any medication or supplement for the purpose of altering the horse's mental state is forbidden under USEF Drugs and Medications Rules.

There is no such thing as a perfectly safe drug. All drugs have the potential for good and also for adverse effects. In our attempt to ready horses for the show ring, it is essential that we consider both aspects. Further, it seems clear that there is no perfect drug rule and there will undoubtedly always be an unfortunate few who challenge and attempt to circumvent the spirit of the rule. But in truth, the rules are written with the welfare of the horse in mind, both in helping to minimize the risk of adverse effects and allowing for the judicious control of pain. It is always important to weigh the risk of any medication versus both the short-term and long-term effects. Using any medication should be in thoughtful consultation between the owner, trainer and veterinarian. To give a medication means that there is acceptance of both the potential benefit as well as the inherent risk.

Flunixin Meglumine (trade name Banamine): a non-steroidal anti-inflammatory drug, or NSAID. The NSAID category includes phenylbutazone, naproxen, ketoprofen and other drugs that reduce inflammation of tissue, thereby reducing pain, redness, fever and swelling.

Prostaglandins: a group of chemicals produced by the body in response to trauma and infection. They initiate the inflammatory process, which begins the healing process. If the inflammatory process is excessive or prolonged, steroidal or non-steroidal anti-inflammatory drugs (NSAIDs) may be used to reduce the inflammatory process by exerting anti-prostaglandin effects.

The author is co-owner (with her husband Dr. Gareth Spurlock) of Spurlock Equine Associates in Virginia. A pleasure horse and racehorse owner with a background in Morgan and American Saddlebred show horses, she has given lectures and published articles on equine internal medicine and clinical pharmacology.

Nutrients and Nutraceuticals: The Equine Supplement Debate

(By Shauna Spurlock, DVM. **In Stride**. December 2008)

Hay, oats and water are the basis for feeding our horses. This is where we start with any nutritional plan. Good-quality products provide calories and building blocks for energy and body maintenance from carbohydrates, proteins and fats. In addition, the foods contain minerals

and vitamins essential to cell function and health in our horses.

It has long been recognized that certain nutrients are needed in varying amounts, depending on the activity level and use of a horse. Untold research has gone into the development and continuing refinement of nutritional guidelines for equines. By analyzing feed, including the grain, hay and pasture, veterinarians and veterinary nutritionists can help maximize the delivery of nutrients with inclusion of specific supplements that address dietary deficiencies or control of specific disease conditions.

For example, horses with muscle conditions such as polysaccharide storage myopathy (PSSM) or hyperkalemic periodic paralysis (HYPP) benefit from modifications in diet such as a shift in caloric content away from carbohydrates and toward fat sources (PSSM), or to diets containing less potassium (HYPP). In addition, breeding farms may be able to decrease the incidence of some developmental orthopedic diseases with improved levels of trace minerals and protein levels. Providing necessary nutrients at optimal levels for the individual horse is the goal of any nutritional plan.

But nutritional supplements have another fast-growing and sometimes questionable use, and that is to give nutrient components in levels that exceed known nutritional requirements or to utilize substances with no documented need in the target species. Nutraceuticals, as these products have become known, are marketed as food supplements and not drugs, a very important distinction. When a drug is reviewed and approved by the Food and Drug Administration, both the safety of the product and the efficacy of the product must be demonstrated in the target species. The approval process is undeniably expensive and time consuming, but is designed to protect us from fraudulent products and keep our animals safe.

With nutritional supplements, there are no governmental requirements or oversight for either safety or efficacy. Because of this important difference, nutraceuticals cannot—or at least should not—make claims about treating or preventing specific diseases. These products are instead described as a means to improve a specific body function such as joint health, muscle function or intestinal health. As everyone looks for a competitive edge as well as a means to improve the quality of life for our horses, this market has become hugely lucrative. It has been estimated that on the human market, sales of joint supplements between July 1998 and May 1999 exceeded \$500 million. Lots of money and little oversight can make for some potentially unsafe scenarios. When considering the use of any supplement, it is often the cost that takes center stage; will this supplement do something that a more expensive drug is approved to do? And while cost may not be inconsequential, one should really consider a number of issues related to the product itself: Who makes it, how it is made and what proof is there that it works and is safe?

Manufacturers that produce these products run the gamut from those with a sincere interest in improving the health and well-being of the horse to those that may be more motivated by financial gain. These differences may be reflected in everything from the research and science behind the product to the manufacturing itself. There are no required manufacturing standards, but some manufacturers voluntarily elect to adhere to Good Manufacturing Processes, as would be used in drug production. Others follow far less stringent and questionable practices that may affect the uniformity of active ingredients and the purity of the final product.

Studies investigating the active ingredients in nutraceuticals on both the human and veterinary market have found a disturbing number of inaccuracies. Some of the mucopolysaccharide joint supplements, including those with glucosamine and chondroitin sulfate, have been found to vary from the label claim even to the point of some products containing none of the proposed active ingredient. While the efficacy of a product can be debated, it is clearly impossible for the product to work if the active ingredient is at suboptimal levels or not present at all.

The question of efficacy has been and will continue to be challenging. The cost of research to demonstrate efficacy can be staggering. Further, studies that are done are often sponsored by the manufacturer, which to some extent may taint the results. The basis of efficacy claims is often anecdotal, subjective and/or based on a very small number of horses. In addition, information used to support the use of a product may be based on data from a different species. Such cross-species information may be helpful but we should never lose sight of the fact that not all species respond the same, and extrapolation can be dangerous.

A clear example is drugs like morphine in horses. While used at an established dose to control pain in humans, similar doses in a horse result in profound excitement. And even the commonly used tranquilizer xylazine requires far different dosing for optimal and safe use in horses as compared to cows and dogs. We knew about these marked species differences because of research that was done with the drug in various target species. With nutraceuticals, this information may or may not be available.

Even the labeling of a product can vary. While a list of ingredients using common names should be present in decreasing order of amounts, some manufacturers supply limited information and may use confusing terms. If you look at the label, you should be able to determine what you are feeding. With careful review, you should also be able to determine if the supplement contains components that might be obtained in a different, possibly less expensive form, allowing for a full understanding of the total intake of a specific nutrient from everything that is fed to the horse. For example, if the supplement is primarily a protein source, but you are already feeding a grain that is high in protein,

this supplement may be unnecessary.

Of even greater concern is the fact that there is no requirement to establish the safety of nutraceuticals prior to marketing the product. Certainly, if the nutraceutical produces undesirable effects, that can be far more significant than failing to produce the desired results. Not only do approved drugs go through evaluation for safety prior to marketing, there is also a reporting system maintained by the Food and Drug Administration Center for Veterinary Medicine for adverse effects observed in the field post-marketing. This is a voluntary reporting system, which undoubtedly results in the under-reporting of problems, but it is still a valuable resource for veterinarians, horse owners and the regulatory agency to determine if any actions such as recall or modification of label warning or instructions might be necessary.

The issue of safety can be tricky. Even nutrients that are generally recognized as safe when fed at recommended levels in a well-balanced diet may not be safe when fed at higher levels, as in some nutraceutical products. Tryptophan is an amino acid, part of protein in the diet. At levels that far exceed nutritional requirements, it has been suggested as a calming agent. First, there is currently no good evidence that it truly has a calming effect, and even those who advocate this use do not provide a target blood level or dose to achieve calming. But even more troubling is the fact that, at very high levels, it has been suggested that amino acid imbalances are likely to have a long-term health impact. In humans, high levels of tryptophan have been tied to a chronic debilitating disease of the nerves.

Also consider magnesium, another nutrient that at higher levels is suggested for use as a calming agent. These high doses have been associated with mineral imbalances. There may also be a risk related to how the magnesium supplement is manufactured. Magnesium-containing supplements are available for use in cattle, but the manufacturing of products intended specifically for cattle could have residues that may be toxic to horses. For example, if the magnesium product were to contain monesin residue, this would be toxic or even fatal for horses.

The Committee on Examining the Safety of Dietary Supplements for Horses, Dogs and Cats at the National Research Council, as well as the Center for Veterinary Medicine at the Food and Drug Administration, has recommended that a comprehensive reporting system should be established with data made available to the public. It has not been—and there is no indication that it will become—the duty of any governmental agency to police this market. It is the responsibility of horse owners and care-givers to protect themselves against products that fail to perform, as well as dangerous products. But, without a means to gather and disseminate this important information, that can be difficult if not impossible.

As consumers, and with the well-being of your horses in mind, it becomes our individual responsibility to be diligent. When you consider adding a supplement, look carefully at the label. Ask yourself what the product is intended to do, what ingredients are present and what evidence there is that it works and is safe. Ask questions of your veterinarian, nutritionists and the company to satisfy yourself that the product is more than likely to do as it claims, safely.

With horses in competition, you should also consider whether the supplement contains forbidden substances which may test positive. Conversely, if a manufacturer clearly states a product does not contain forbidden substances, that is no assurance that it doesn't. Some people believe that if the product is natural or plant-derived, it must be free of what we typically think of as drugs or forbidden substances. Remember that many drugs were first identified as extracts of plants. Digitalis, a derivative of the plant foxglove, is used as a potent heart medication but is nonetheless a forbidden substance. Other examples include morphine from the poppy plant, marijuana, atropine from the Belladonna plant and several others.

The nutraceutical market is filled with so many products, good and bad, that it becomes impossible to know them all. But know the ones you choose to feed. Be a well-informed and critical consumer. Beware of the too-good-to-be-true claims and try to set objective measures of response. Lastly, remember that if a product does not, in your opinion, work, or you experience what you believe to be adverse effects, speak up. At this point, all we have to police the industry is the willingness to share this very important information.

USEF Drugs and Medications

(Reprinted with permission from the USEF)

- The drug rules can be found on the USEF website/hardcopy rulebook under Chapter 4.
- For more detailed information regarding forbidden substances, suggested withdrawal times, compliance with the drug rules, etc., you can locate via the website or by hardcopy information supplied by the USEF Drugs and Medications Department. The hardcopy, can be requested from the USEF D&M office.
- Most breeds and disciplines that compete under USEF rules are subject to the Therapeutic Substance Provisions (GR410-412).

- FEI-recognized events are subject to the FEI Veterinary Regulations. This is a no foreign-substance rule, which includes reporting requirements for the treatment of illness and injury.
- Under USEF rules, the trainer is held responsible and accountable for the condition of the horse or pony and for compliance with the rules. A trainer is defined as any adult or adults who has or shares the responsibility for the care, training, custody, condition or performance of a horse or pony. Said person must sign the entry blank at any licensed competition whether said person is a trainer, owner, rider, agent and/or coach.
- The Federation cautions against the use of so-called herbal and natural products, the ingredients and properties of which are not known.
- Cooperation with the drug-testing veterinarian and/or his technician is paramount.
- Members can find medication report forms at the competition office or with the steward.
- A trainer of a horse/pony found to contain a forbidden substance/overage may be subject to whatever penalty is assessed by the hearing committee (except for administrative penalties issued by the chairman of the drugs and medications committee).
- An owner of a horse/pony found to contain a forbidden substance/overage may be asked to forfeit all winnings at the subject competition and pay a \$200 redistribution fee to the competition.
- Individuals who have questions about the drug rules may contact the USEF Drugs and Medication Department at (614) 771-7707.

USHJA Shoeing and Medication Booklet

Overall Horse Care Information

This scheduling tool (available on the USHJA website <http://www.ushja.org/shoeingandmedication.pdf>) helps owners keep track of their horse's care. This table provides a section for owners to write in overall horse information such as farrier, dentist, coggins, vaccinations, deworming and other possible treatments and medications a horse may receive

IV. First Aid

Ensuring Good Health Year After Year

(By Dr. Mark Baus, DVM)

Your horse's health and fitness is important not only for optimum performance in the show ring but is also essential for day-to day-vitality and a long, healthy life. Central to maintaining long-term health in your horse is the wellness program structured with your veterinarian's help.

A typical wellness program usually involves the following activities:

- Yearly physical examination
- Vaccinations
- Parasite control
- Dentistry
- Nutritional counseling

The yearly physical examination or wellness examination allows your veterinarian to identify health issues before they become serious. The examination process also allows you to address concerns and ask questions about your horse's health that have accumulated over the past year.

Vaccination requirements are different for each part of the country and are also dependent on travel and horse show schedules. For horses that are actively horse showing, inoculation for equine influenza and equine herpesvirus (Flu & Rhino) are essential. The frequency of this inoculation should be carefully determined with your veterinarian to provide your horse with optimum protection and to meet the needs of the horse show facilities you will be visiting. Most horses in the United States will require inoculation for West Nile virus, Eastern & Western encephalitis and tetanus at least once yearly. Rabies inoculation, although not required in all parts of the country, is performed not only for

the horse's protection but for public health concerns. The need for Potomac horse fever, botulism and strangles inoculations will depend on the specific needs of your region and where you go throughout the year.

The parasite control program that you choose is vital to your horse's well-being. With your veterinarian's help, you can choose either an intermittent deworming program using a variety of paste dewormers at regular intervals or a daily deworming program supplemented by paste deworming two to four times yearly. Many factors will determine the best program for keeping your horse protected from parasites. Among these factors include yearly rainfall (a wet, lush environment requires a more aggressive parasite program) and the concentration of horses on the property they reside.

Dental care for your horse is beneficial for two reasons. As enamel points develop on the molar teeth, the ability to properly grind food intake is compromised. These enamel points will cause injury to the lining of the cheeks as well as the tongue, which makes chewing painful and less efficient. The second reason for regular dental care is the performance aspect. In order for your horse to properly accept the bit and respond appropriately to rider input, the teeth must be maintained by a once or twice yearly procedure known as floating. Your veterinarian can advise you on the best interval to float your horse's teeth and who should perform this procedure.

As athletes, your horse's nutritional needs are extremely important. In addition to determining the proper weight for your horse, the proper blend of feed intake is important. The days of "hay, oats and water" are long gone. Hay is still an important part of any horse's diet, but the type and amount of hay is critical. There are many grain-based formulations that help round out your horse's nutritional needs. Determining the best blend of hay, grain and nutritional supplements will, undoubtedly require expert advice from your veterinarian or even a nutritional expert with a strong background in equine nutrition.

Although their accuracy is questionable, the regular use of a weight tape can help track changes in your horse's weight. Although health problems can occur at any time, careful attention to these five areas will go a long way in preventing many illnesses and will ensure top performance from our equine athletes.

Disaster Relief

(By Allison Rogers Reprinted with permission of **Equus** Magazine September 1996 issue #227)

The best things you can take to the scene of an equine emergency are not bandages and salves but a clear head and first-aid know-how. When your horse suffers a severe injury or is suddenly stricken with a serious illness, you don't have time to panic or do research: You have to react quickly. But in addition to knowing which bandage goes where, you must know how to distinguish which conditions actually are serious and which just look bad, what you can treat and what you can't, and whether you need to call a veterinarian. By first sorting the serious problems from the minor, you'll give your ailing horse his best chance of a full recovery.

With many injuries and illnesses, appearances can be deceiving: A long but shallow gash on the leg can look frightening, while a life-threatening puncture wound often appears trivial at first glance. In deciding how to handle an immediate crisis, it's critical to determine the context and seriousness of the situation.

Piece together the chain of events leading up to the injury or illness. For instance, check out a bleeding horse's surroundings to determine what caused the injury: Skid marks in the mud indicate that he was running when injured. Strands of old barbed wire embedded in the paddock footing could have pierced a sole. A metal wagon tongue or piece of wood jutting out somewhere could have clipped a leg. If a horse is colicking, check his paddock for possible toxins such as poisonous plants or mold feed. Don't spend more than a few seconds on this assessment; if the cause is not obvious, move on.

Gauge the severity of his injuries. Consider everything, including his respiration rate and skin temperature, his alertness, any bleeding, his locomotion, his appearance and even his posture. Is he breathing? Can he walk? Is he depressed? Is he bleeding? Where is the laceration? Is the blood oozing or gushing? How long and deep is the cut? Is he bleeding from the nose, ears or other body opening? If he is lame, is he dead lame, three legged lame or only favoring one leg? What sounds do you hear? Is he gasping or gurgling when he breathes? If he is limping, can you hear bone ends grating? Is a laceration "sucking" air?

Using all this information, come up with a worst-case scenario: in emergencies, doing too much is preferable to doing too little. Remember that a severely colicking horse often rolls violently, causing himself secondary injuries, so don't overlook a serious yet more subtle ailment.

Determine your next course of action. While in many cases you'll want to summon a veterinarian for your own peace of mind at least some situations are so time sensitive that you'll need to attend to the horse's serious injuries first: a blocked windpipe can suffocate a horse in mere minutes. A sliced artery can bleed the life out of a horse in about 15 minutes. Shock can overwhelm a horse's system within an hour.

The scenarios that follow describe emergency situations. Using the clues given, judge the severity of each horse's condition. See if you can

appropriately appraise the problem and plot the correct course of action.

No Cut-and-Dried Wound

As you are exercising your horse one day in the arena, he shies and runs backward into the hinge of a gate, leaving a two-inch gash in the pastern of his right hind leg. He hops forward on three legs then stops. You jump off to inspect the wound, which is bleeding steadily. When your horse finally puts weight on the hoof, a stream of yellow liquid spurts out.

In this situation you can assume four things:

- You know that the hinge - a blunt, not sharp, object - caused the gash, so the tissue likely has received substantial trauma.
- Because the blood is streaming, not pulsing, the lateral digital vein, not artery, was cut.
- The presence of the yellow exudates tells you that a synovial space (either joint or a sheath) has been opened.
- Because he can put full weight on the leg, no major bones are broken.

This type of injury is particularly dangerous. An exercising horse is at greater risk of bleeding to death from a leg wound than a resting horse because the heart is pumping faster and blood is being diverted from nonessential areas to his hard working legs. In addition, the spleen releases its emergency store of red blood cells and plasma into the bloodstream to aid a working horse. Combined, these three processes greatly increase his risk of suffering a fatal hemorrhage. Also, any wound that involves a joint is particularly serious because of the joints susceptibility to infection and subsequent degradation. And any lower-leg laceration more than one inch in length is considered a major wound.

What should you do?

- Concentrate first on stanching the blood flow. Apply a pressure bandage, an inch-thick stack of clean cloth, over the wound and secure it with a wrap of some sort. A handkerchief or shirt sleeve will suffice if you don't have gauze handy.
- Call a veterinarian, and tell him a joint or sheath is leaking.
- Calm the horse to get his blood pressure closer to normal. Remaining calm yourself, gently massage his ears, gums or other favorite spot.
- Once the pressure bandage is in place, assess the horse's general condition. A steady loss of blood can induce shock, the potentially fatal failure of the vital body systems that is usually brought on by a serious injury.
- If shock seems to be setting in, blanket him to keep him warm. Offer him water with electrolytes if you have some - and nibbles of grass or hay. Keep him calm and still.
- If the bleeding hasn't stopped, apply more pressure to the wound.
- As you wait for the veterinarian, your impulse probably is to clean and irrigate the wound. Had the laceration not involved a joint, that might have been the correct course of action. But, because this wound is so serious, you don't want to do anything to make matters worse. For now, leave the bandage on, and let the veterinarian take over when he arrives.
- If your horse has not had a Tetanus shot within the last year, ask your veterinarian to administer a booster.

Don't

- Don't walk the injured horse to the barn. Instead, bring treatment to him.
- Don't hose the wound if it is still bleeding or a vital structure (a joint or other body cavity, ligament or tendon sheath or organ) is involved. Neither should you possibly further contaminate the wound by trying to clean it out.
- Don't remove a blood-soaked bandage if the wound is still oozing. This can disrupt the clotting action. Instead, add clean bandages to the stack.
- Don't sedate or tranquilize the horse: His blood pressure could drop so quickly that he loses consciousness.

A Bad Feeling in Her Gut

One evening as you are giving your horses their dinner, you notice that one mare seems very anxious and is biting her flanks and wringing her tail. She is sweating and covered with bedding from rolling in her stall. You immediately suspect colic. Her temperature is normal, her pulse is 50 beats per minute, her gums are paler than usual and her abdomen is distended and booms when you tap it with your fingers.

Most commonly, a mare with these signs would be suffering from a bowel bloated with gas - one of the less-serious forms of colic. Had the mare's temperature been elevated, her gums dark or yellow, her pulse over 60 beats per minute, a more serious form of colic such as twisted bowel probably would have been the problem. Her pulse is strong enough that she doesn't appear to be going into shock. The odds of surviving a grassy impaction are good.

What should you do?

- At any sign of colic, however mild, call a veterinarian. To appropriately treat a colic episode and try to prevent a recurrence, you need to know what kind of colic you are dealing with, something only your veterinarian can tell you.
- If you have the painkiller Banamine and have experience administering it, give the mare some now. Administer only one dose unless

instructed to give more later, and call the veterinarian immediately if the mare's pain doesn't subside or if it returns.

- Take the mare's vital signs every 10 minutes to track her condition, and write them down. This information will help your veterinarian diagnose and treat your horse.
- Put the mare in a stall or small paddock. Clean out any existing manure piles so you can monitor her output, and remove anything that might cause injury if she rolls or rubs.
- Examine any manure produced for abnormal color, consistency or smell, and make note of any foreign material in it. Also, test the manure for sand: add one or two manure balls to a clear jar of warm water, shake, then let stand. Two or three minutes later, check the bottom of the jar for sand.
- If the pain has not gotten worse and the horse is not exhibiting the reluctance to move and soreness of laminitis, a common but serious by-product of severe illness, walk her for five minutes every half hour, up and down moderate to steep slopes, if they are available, to encourage release of the gas.
- If the pain has not returned after one hour and she seems thirsty, offer her cool water. If you have electrolytes, add some to a second bucket of water and offer her that as well.
- If she's not back to normal after two hours, ask your veterinarian to return immediately and be prepared to take the mare to a veterinary hospital right away. If, however, she seems comfortable and has passed at least two gallons of manure, you can feed her a handful of hay every hour and an oil mash every three hours. Continue checking her vital signs. If the pain returns, don't try to treat it yourself; instead, get her to a veterinarian immediately.

Don't

- Don't force a horse in severe pain to get up or walk.
- Don't give her water or food if green froth is oozing from the mare's nostrils, indicating that her stomach is overfull and the contents are backing up through her esophagus.
- Don't give the painkiller phenylbutazone ("bute") to a colicking horse. This anti-inflammatory can suppress necessary natural reactions and cover up signs that the veterinarian should know about. It can also make painful ulcers of the stomach much worse.

What's Eating Him?

When your horse arrives at his pasture gate to be taken in for his dinner, he is covered with hives and agitated, rubbing his face and body against anything that holds still. His eyes and muzzle are beginning to swell, and he "snores" faintly with each breath. The hives and itching tell you that the horse is probably having an allergic reaction, although to what is not important right now. What is crucial is that he is developing difficulty breathing, as evidenced by the snoring. If the swelling is not stopped, your horse's airway could swell shut, suffocating him in minutes. Your only concern right now is easing his breathing.

What should you do?

- Send someone to call a veterinarian for you. Don't leave the horse alone - even for a minute - until his breathing returns to normal.
- Pack his head with ice to try to reduce the swelling. If you have nothing else, strap bags of frozen vegetables around his muzzle, cheeks and ears with compression wrap or tape. When using cold compresses or ice on a wound, it is common to leave the pack on for five minutes, then off for 15 minutes, to avoid injury from the cold. But the head has enough circulation that you can leave an ice pack on as long as needed.
- While he may want to hang his head, encourage him to hold it up to slow the swelling.
- If his muzzle continues to swell, hold open his nostrils to ease his breathing.
- If the horse seems to be in imminent danger of suffocation, the veterinarian may insert a length of pliable tubing into one nostril or make an incision into the airway through the neck - called a tracheotomy. Both measures are considered last resorts and can cause grave problems if done improperly.

Don't

- Don't encourage the horse to eat or drink; his swallowing mechanism may also be compromised by the allergic reaction.
- Don't let the animal hang his head, which speeds swelling.
- Don't sedate the horse. Some sedatives cause nasal swelling, and the last thing you want is for the horse to relax so much that he drops his head or tries to lie down.

One Wrong Step

With each horse you turn out on cool mornings, you hold your breath and pray no one gets hurt as they race around the slippery field expending their pent-up energy. Sure enough one day, just after the herd takes off at a mad gallop, one mare slips, flinches, then hops to a stop, standing with her left hind leg flexed so that only the toe touches the ground.

As you head toward the mare, you follow her path and search the ground for the cause of her injury, such as a piece of wire or a nail that could have punctured a foot, or a hole that might have wrenched an ankle. But you find only a skid mark. Likewise, a quick inspection of

her leg reveals a slight trembling but no cuts, bumps, swelling or bleeding. You notice that flexing her legs seems to annoy her.

Leg injuries can be difficult to diagnose and because you can make matters much worse with inappropriate treatment, a swift and accurate assessment of the mare's injury is crucial.

- There is no evidence that the mare's leg is broken: She bears weight on it when you ask her to walk, and you neither see nor feel any swelling, bumps or odd angles. Thus, you feel comfortable moving the mare to the barn, where you can clean her hoof and examine it more closely. With each step, her gait improves, although she remains obviously uncomfortable.
- After the foot is rinsed off, check the sole for puncture wounds or other hoof problems such as bruises, although the absence of harmful objects in the pasture makes both conditions unlikely. Hoof testers reveal no foot tenderness.
- The mare's signs suggest a strained ligament or tendon, which sometimes isn't immediately apparent. Let the mare rest in her stall for about an hour, then reexamine her. If the back of her leg is swollen from about two inches to six inches below the point of the hock, she probably strained the plantar ligament in the hock, a condition called curb. A swelling on the back of the lower leg usually indicates a bowed tendon, whereas swelling around the fetlock is evidence of a strained suspensory ligament or deep flexor tendon.

What should you do?

- Consult your veterinarian.
- Keep the horse in her stall.
- Apply ice to that area for five minutes every half hour for a couple of hours.
- If the swelling is worse the next day, call the veterinarian again.

Don't

- Don't move a horse who you suspect has broken a leg.
- Don't give bute to a seriously injured horse; it can reduce the horse's natural protective actions and mask signs important for diagnosis.
- Don't leave an ice pack on for more than five minutes at a time. Wait 15 minutes before reapplying it to the same spot.

Unfortunately, few emergencies are as clear-cut as these scenarios. Sometimes, the horse suffers two or three injuries at once, or, by the time you realize something is wrong, so much time has passed that you're not sure what to do. However, by learning how to recognize and handle life-threatening situations, you'll be better able to stabilize your horse's condition before the veterinarian arrives, improving your horse's chances of complete recovery.

Red-Alert Situations

Bleeding

- Fresh wound losing more than one pint per minute
- White mucus membranes
- Any bleeding from a body cavity

Body Posture

- Head pressing
- Sawhorse stance (indicative of tetanus)
- Contorted position or camped-in-front posture (indicative of laminitis)
- Nonbearing or dangling leg
- Extra angle or bend in leg
- Prostrate

Breathing - normal: 8 to 16 breaths per minute

- More than 20 breaths per minute in a resting horse
- Obstructed or gasping breaths

Circulation - normal blood pressure: 155 over 70

- Capillary refill time more than three seconds.
- Red, brown, yellow or blue gums or other mucous membranes
- Pinched skin remains elevated for more than one second

Intestinal Sounds - normal: gurgling squeaking, rasping

- Silent or muted
- Only high squeaks or ping sounds

Mobility

- Repeated falling
- Unable or extremely reluctant to rise or move
- Uncoordinated, unsteady or circling

Pulse - normal at-rest pulse: 32 to 44 beats per minute

- Greater than 60 beats per minute
- Weak or irregular
- Pounding pulse in feet

Temperature - normal: 100 to 101 degrees Fahrenheit

- Higher than 105 degrees
- Lower than 98 degrees

Wounds

- Vital organ prolapsed
- Involvement of intestines, lungs, eyeballs and braincase
- Penetration of synovial space of joint

A Well-Rounded Medicine Chest

A well-appointed medicine chest can mean the difference between life and death when your horse is injured. Whether you opt to buy a preassembled first-aid kit or assemble your own, make sure your kit includes these necessities:

To assess the situation

- Glass, electronic or plastic strip thermometer
- A stethoscope
- A penlight

To cleanse the wound

- Gauze squares and sponges for cleaning and applying pressure to wounds
- Forceps for removing foreign bodies or pinching shut a bleeding artery
- Surgical scrub
- Saline solution
- Jet-spray bottle for irrigating wounds

To dress the wound

- “Butterfly” bandages for pulling together the sides of narrow, fresh and clean wounds
- Nonstick wound pads
- Padding (cotton sheets, quilts, etc.)
- Compression bandage (Vetrap, Coban, Expandover, etc.)
- Wrap (stretch gauze)
- Easyboot or other treatment boot

Miscellaneous

- Cold wraps
- Scissors
- First-aid tape
- Reference materials
- Some high tech options also are available to make treatment easier
- Heart rate monitor with warning beeper to warn you if the horse’s system goes into overdrive
- An oximeter, which measures the amount of oxygen in the blood, to check for signs of shock
- A Doppler sphygmomanometer (blood-pressure cuff)
- Clippers, to remove hair from around the wound



Photo Credit: Michelle C Dunn

- A Water Pik dental cleaning device to irrigate the wound
- Splint boots for lower-leg dislocations, fractures or severed tendons
- Support boots for wrenched joints or as extra support during trailering.

(Call your veterinarian with any questions about the above items.)

Is He in Shock?

If you answer “yes” to any of the following questions your horse could be experiencing shock, a potentially fatal failure of the body’s systems that constitutes a red-alert situation.

- Are his gums extremely pale or even milky white with a blue tint along the teeth?
- Are the “whites” of his eyes devoid of the thin blood vessels normally visible?
- If you press your fingertip firmly against his gums, does it take more than three seconds for the color to return to the spot?
- Is he weak?
- If you pinch a small amount of skin where the horse’s neck meets his shoulder, does the “tent” remain in place for more than three seconds?
- Are his ears and lower legs cold and clammy, with little or no pulse?

Trailering an Injured Horse

In many cases, you can save time - and possibly your horse’s life - by trailering him to a veterinary clinic instead of waiting for the veterinarian to come to you. To make the horse’s trip less stressful - both physically and emotionally - make the ride as comfortable as possible:

- If possible, transport the horse in a van or gooseneck instead of a two-horse tagalong trailer. The bigger “rigs” ride much more smoothly.
- Don’t remove stall partitions to give the horse more room. He may need to lean against the stall sides during the trip.
- If the horse requires yet more stability, rig a belly or butt strap.
- Leave the horse untied or loosely tied so that he can use his head and neck to balance.
- Haul horses with rear-limb fractures facing forward and forelimb fractures facing backward, so they can most comfortably brace against braking and accelerating.

Calming Your Horse

In many emergencies, the best thing you can do for your horse is keep him calm until the veterinarian arrives. Even when in pain, a horse often responds positively to the voice and touch of someone he knows. Find out in advance which combination of the following ministrations are likely to relax your horse in a crisis:

- With a currycomb or your fingers, rub his chest and between his front legs.
- Massage the crest of his mane about six inches above the withers. Slowly work up his neck to the poll.
- Lightly tug on tufts of mane just behind the ears.
- Gently work the cartilage in the ear’s base and tip back and forth between your thumb and fingers.
- Wrap your fingers around the ear, causing it to close, and gently run your hand up the ear, releasing your grip before you reach the tip.

V. Barn Management

Providing Quality Care in a Faltering Economy

(By Rachelle Wilhelm, In Stride. February 2009)

Looking to stretch your equine dollar? Here are some suggestions from the Horse Welfare Committee

Dr. Steve Soule is a practicing veterinarian in Florida, where he serves primarily Federation Equestre Internationale and “A” show hunter/jumper and dressage clients. Shawna Dietrich operates her own equine insurance agency, as well as a rehabilitation and retirement center for show horses. Glenna Wirtanen serves as chairman of the United States Hunter Jumper Association Horse Welfare Committee and is a licensed United States Equestrian Federation steward.

The horse world isn’t immune to the effects of the current worldwide economic crisis, unfortunately. Whether you own one horse or 20, chances are you’ve felt the crunch of supporting the equines in your charge.

As a horse owner, you assume responsibility for the well-being of your horse, but the harsh realization is that caring for your horse in a declining economy isn’t as easy as it used to be. Owners across the country are facing rising costs in hay and grain—as well as farrier and veterinary services—combined with other financial obligations. As a result, humane societies and rescue facilities are reporting record numbers of abandoned and starved horses.

There are ways to cut costs and save money while still providing your horse with quality care. In this article, Steve Soule, Shawna Dietrich and Glenna Wirtanen, all members of the United States Hunter Jumper Association's Horse Welfare Committee, share their thoughts on this subject.

Evaluate Your Feeding Program

Feeding efficiently to ensure that your horse is receiving adequate nutrients and the energy required to maintain his health and performance is the first step in cutting costs.

In many cases, horses are overfed and receive more energy than their bodies require. Good-quality forage should be the basis of all feeding programs and is less expensive than grain. In fact, most mature horses can meet their maintenance requirements on good quality forage alone. However, performance horses or young growing stock often need grain added to the diet for energy or growing bodies. "Good-quality feed by a reputable company meets virtually all the requirements of a healthy horse," explains Steve, a veterinarian. "Most feed companies have grains custom made for different stages of a horse's life or different levels of performance. These feeds are very well formulated to meet all the horse's needs, containing the vitamins, minerals and electrolytes a horse requires."

Glena recommends consulting with a veterinarian or nutritionist to review feeding programs, as it is beneficial not only to the pocketbook, but to the horse's well-being. Each horse, whether he's a high-performance horse, a retired horse, a yearling or a pasture pony, has different nutritional needs. The pasture pony doesn't have the same nutrient and energy requirements of the high-performance horse, for example. By evaluating what you're feeding him, you could very well save money. "Consulting with a professional who is knowledgeable will help you evaluate your feeding program," Glenna says.

She warns against skimping on the quality of feed to save a few bucks, as the effects could be more costly than the money saved. "Keeping your horse healthy and well-fed should be your priority, and will always pay off in the long run," she explains. The frequency with which you give your horse hay can save dollars, too. Rather than two large feedings, Shawna suggests feeding smaller amounts of hay multiple times throughout the day. By using this approach to feeding the horses at her facility, she's seen a significant cutback in the amount of hay trampled into the ground and wasted. Not only that, multiple feedings better suit the horse and his digestive tract, keeping him content. Another plus: Horses with adequate amounts of roughage in their diet are less likely to chew on boards and ruin fences and stalls. To ensure your horse gets the most out of the hay and grain you're feeding him, keep his dental care on a regular cycle. When a horse's teeth are healthy, he's able to chew and digest his feed properly, but if his teeth are sore and make chewing and swallowing painful, he'll drop and waste his feed. It's recommended that all mature horses receive at least an annual visit from the dentist, while young or geriatric horses should be checked twice yearly.

Cut Back on Supplements

"Supplements are the biggest drain on a horse owner's pocketbook, and the easiest to cut out altogether," Steve says. It's a sentiment that Glenna and Shawna also share. Supplements are additional nutrients such as vitamins, minerals, extra protein and energy that are added to a horse's diet in the hope of improving his health or giving him a competitive edge. "A lot of people get caught up thinking that they have to give this for the hair, this for the hoof, this for the joint, etc.," Steve says. In reality, if you've established a well-planned nutritional program for your horse, using quality hay and grain, there's little need for supplements.



Buy in Bulk and Split Costs

Buying feedstuff and bedding in bulk is one of the easiest ways to save. "Buying hay by the ton is cheaper than buying it bale by bale," Shawna explains. "Likewise, forgoing the pretty, fluffy pine bedding for shavings that are just as functional and can be bought in bulk can save money, too."

However, be careful buying items with expiration dates (like supplements) in bulk because it's likely that they'll go bad before you'll have a chance to use them. In instances like this, splitting a purchase with a neighbor is ideal. "Going in with a neighbor can be beneficial in a lot of instances. You can split the farm call when the vet comes, travel to shows together to save gas—the options are really endless if you get creative," Glenna says.

Review Immunization and Worming Schedules

“The environment you’re in and the risk factors present should determine which vaccines you give your horse,” Steve explains. If you’re in an area where botulism or Potomac Fever are rarities, for example, you may not have to immunize your horse against those diseases. Of course, whether your horse leaves the farm, comes in contact with other horses or where you take him greatly determines the vaccines he needs and the frequency with which he should get them. “You may live in New York and only give the West Nile vaccine annually in the spring, but if you take your horse to Florida where the warm weather is conducive to mosquitoes, it’ll be imperative that he’s up-to-date on the vaccine,” Steve explains.

Developing a worming program that suits your facility can also bring down costs. For example, if you have 10 horses sharing a 20-acre field versus 10 horses sharing a 150-acre field, the group in the 20-acre field will have a higher worm count and therefore have to be wormed more frequently than the group on the 150 acres. One way to customize your worming program is to do periodical fecal counts, and when egg counts appear high, worm your horses.

Practice Preventative Maintenance

Taking care of equipment and heading off problems before they develop will save time and money. “If I can stay on top of keeping the tractor and manure spreader up-to-date on servicing, I don’t have to pay for a panic call when something breaks down,” Shawna relates.

Keeping gear cleaned and leather tack well conditioned will prolong its life. Good-quality equipment can last for years if cared for correctly. The same is true of your horse; instead of waiting for him to come up head-bobbing lame or go off his feed, spend a few minutes each day checking him over and paying close attention to his vital signs. Catching the first signs of a lameness or serious sickness could be the difference between a major vet bill and a routine farm call.

Evaluate the Need for Shoes

“One of the first things I do when horses come to me is evaluate whether or not they need shoes,” Shawna says. “Many of the horses come to me with front shoes on, but if they have a strong hoof and will be on good footing, they’re happier barefoot.” Even if your horse can’t go completely barefoot, using front shoes alone is an option. Keeping shoes off of just one or two horses in the barn can translate to hundreds of dollars saved throughout the year.

Steve shares the same point of view and adds that in his practice, he sees a lot of horses going to the farrier more often than necessary. Often, the blacksmith gets on a schedule that suits his calendar rather than a schedule that is tailored to fit an individual horse’s hoof growth. The latter type of schedule could potentially save owners a significant amount of money in one year’s time. “In my practice, it’s not uncommon for horses to be on a three and-a-half to four-week schedule. There are individuals out there who need that type of intensive care, but on average, six to seven weeks between shoeings can be adequate,” Steve explains.

Ensuring Good Health for Your Horse

(Dr. Mark Baus, In Stride. October 2009)

Your horse’s health and fitness are important not only for optimum performance in the show ring but are also essential for day-to-day vitality and a long, healthy life. Central to maintaining long-term health in your horse is the wellness program structured with your veterinarian’s help. A typical wellness program usually involves the following activities:

- Yearly physical examination
- Vaccinations
- Parasite control
- Dentistry
- Nutritional counseling

Yearly Physical Examination

The yearly physical or wellness examination allows your veterinarian to identify health issues before they become serious. The examination process also allows you to address concerns and ask questions about your horse’s health that have accumulated over the past year.

Vaccinations

Vaccination requirements are different for each part of the country and are also dependent on travel and horse show schedules. For horses that are actively showing, inoculation for equine influenza and equine herpes virus (flu & rhino) are essential. The frequency of this inoculation should be carefully determined with your veterinarian to provide your horse with optimum protection and to meet the needs of the horse show facilities you will be visiting. Most horses in the United States will require inoculation for West Nile virus, Eastern & Western encephalitis and tetanus at least once yearly. Rabies inoculation, although not required in all parts of the country, is performed not only for the horse’s protection but for public health concerns. The need for Potomac horse fever, botulism and strangles inoculations will depend on the specific

needs of your region and where you go throughout the year.

Parasite control

The parasite control program that you choose is vital to your horse's wellbeing. With your veterinarian's help, you can choose either an intermittent deworming program using a variety of paste dewormers at regular intervals or a daily deworming program supplemented by paste deworming two to four times yearly. Many factors will determine the best program for keeping your horse protected from parasites. Among these factors include yearly rainfall (a wet, lush environment requires a more aggressive parasite program) and the concentration of horses on the property they reside.

Dentistry

Dental care for your horse is beneficial for two reasons. As enamel points develop on the molar teeth, the ability to properly grind food intake is compromised. These enamel points will cause injury to the lining of the cheeks as well as the tongue, which makes chewing painful and less efficient. The second reason for regular dental care is the performance aspect. In order for your horse to properly accept the bit and respond appropriately to rider input, the teeth must be maintained by a once- or twice-yearly procedure known as floating. Your veterinarian can advise you on the best interval to float your horse's teeth and who should perform this procedure.



Photo Credit: Flashpoint Photography

Nutritional counseling

As an athlete, your horse has extremely important nutritional needs. In addition to determining the proper weight for your horse, the proper blend of feed intake is important. The days of "hay, oats and water" are long gone. Hay is still an important part of any horse's diet, but the type and amount of hay is critical. There are many grain-based formulations that help round out your horse's nutritional needs. Determining the best blend of hay, grain and nutritional supplements will undoubtedly necessitate expert advice from your veterinarian or even a nutritional expert with a strong background in equine requirements. Although their accuracy is questionable, the regular use of a weight tape can help track changes in your horse's weight. Although health problems can occur at any time, careful attention to these five areas will go a long way in preventing many illnesses and will ensure top performance from our equine athletes.

Mark R. Baus, DVM, graduated from veterinary school in 1981 and joined Dr. Rick Mitchell in practice in the Fairfield/Winchester, Connecticut, area. He is a member of the ethics committee for the American Association of Equine Practitioners.

Retirement Options

(By Rachelle Wilhelm, In Stride. August 2009)

There comes a point in each horse's life when he loses the zest for competition or can no longer perform at his usual level.

Whether he's showing his age, a little unsoundness has cropped up, or he's stopping at the jumps he used to take in stride, it's important not to push the horse beyond his limit. When retirement is the only feasible option, deciding what to do with your longtime partner can be frustrating. Unfortunately, not all horse owners have sufficient space and pasture room or the funds necessary to let the horse live out his retirement. Selling the horse is an option, but letting someone else decide how your horse will spend his last years can be a chilling thought. There's the risk that he could wind up abused, neglected, in pain or sold at auction. Fortunately, there are many different options available to owners when it comes to finding suitable retirement arrangements. Regardless of the scenario, your horse deserves the best possible outcome.

Therapeutic Centers

If your retired horse can be ridden and has a gentle disposition, consider donating him to a therapeutic riding center. Most therapeutic centers are always on the lookout for horses that are physically and mentally capable of handling the task of a therapy horse. Retired show horses often fit the bill nicely, as they have the athleticism and sensitivity to adhere to the needs of riders with disabilities. However, there are some specialized expectations. First and foremost, a therapy horse needs to be safe, predictable and sound. He has to be intelligent, well conditioned, patient, hardworking and versatile. Since a variety of riders and volunteers work with the horse on a daily basis, it's all the more important that he be well trained and well behaved.

Denise Spittler is the program director of Central Kentucky Riding for Hope, a therapeutic center that has been providing equine-assisted activities to the Lexington, Kentucky, community for 28 years. Her program offers a variety of equine activities and therapies designed for people with disabilities or diverse needs. She describes the perfect therapeutic horse as one that is calm and accepting of multiple handlers and ever-changing environments. "Experience is the key to success for therapeutic horses," Denise explains. "A horse needs to be well-trained in their specific discipline and be able to walk, trot and canter with light cues." Highly reactive horses and those intolerant of beginners aren't a good fit.

CKRH maintains a diverse herd of horses that includes miniatures and ponies, but before horses are accepted into any therapeutic program, they must pass a detailed evaluation. At CKRH, the staff performs a phone screening and then schedules a visit to evaluate the horse at the owner's site. "If the horse continues to be an appropriate candidate for CKRH, he will come to us for a 90-day trial visit," Denise explains. "After 90 days, the horse will either be returned to his owner if not appropriate or accepted into the program through a lease or donation."

As with most therapeutic centers, CKRH has limited space and is unable to keep horses that aren't able to participate in therapeutic activities. For that reason, Denise prefers that donors be willing to accept the horse back when retired. However, if the owner isn't able to take the horse, CKRH places the horse in a suitable retirement facility.

As an added bonus, owners who donate their horse are eligible for a tax credit. They also get the satisfaction of knowing that their horse is helping to improve the lives of individuals in need. NARHA, the national organization for equine-assisted therapy, has nearly 800 member centers throughout the United States. To find a therapeutic center near you, visit the NARHA website, www.narha.org.

Nonprofit Riding Programs

Many owners who donate a horse to a nonprofit riding program such as a college, university or riding camp find a happy medium between that horse's high performance career and full retirement. The lighter, lower-demand work of a consistent riding program keeps the horse happy and useful well into his golden years.

Sandra McCarthy, director of English riding at the University of Findlay in Findlay, Ohio, says that she is constantly looking for horses to fit the needs of her program. The university houses all levels of horses from green 2-year-olds to veteran show horses to accommodate its students and its Intercollegiate Horse Show Association equestrian team. Sandra says that her staff holds a potential horse's soundness and temperament above an impressive show record or level of training. "Horses that are good-minded are the most important thing," she explains. "We can't tolerate any bad behavioral issues such as rearing, bucking people off, striking or aggressiveness in a teaching facility." That said, concessions are sometimes made, particularly with the advanced-level horses. "We try to be realistic about the type of behavior we will tolerate," she continues. "Obviously, a beginner-level horse cannot bite or kick. An upper-level horse may be given a little more leeway as they are generally used for advanced riders."

Before acceptance into the program, each horse must pass a two-week trial period and vet exam. Most academic programs are willing to accept horses with minor health issues and Findlay is no exception. The program has a number of horses that are serviceably sound, and with proper care and a conscientious prevention program, fit in the program well. "We don't over-jump them and we do a lot of maintenance," Sandra says of the older equines that have "been there and done that." However, larger issues such as blindness or a neurological disorder aren't viable at the farm.

Findlay encourages its donors to stay in contact and updated on their horses' new careers. "We have donors that contact us every semester and have exchanged emails with students. We have donors that lease their horses back in the summertime, as well," Sandra says. "We like hearing from donors and we always try to keep them updated on their horses."

When the horses are no longer able to keep up with the demands of the riding program, the owners are contacted. "Generally we have a student that wants to retire the horse. Most of the horses retire with prior program grads, and live with them as part-time lesson horses, trail horses or just pasture ornaments," Sandra explains.

College, university or riding camp programs that accept donated horses can be found by searching the Internet. Each program has its own evaluation process and criteria for the type of horses needed, and in many cases, owners are eligible for a tax credit.

Retirement Home

If you're fortunate enough to be able to afford to keep your horse through the end of his days, a professional retirement facility might be the perfect fit. These barns are specifically suited to caring for the retired equine and offer everything from pasture care to the amenities of a full-service boarding facility. When it comes to selecting a retirement facility, it's important to ask questions and visit your horse's potential new home. "So many times, people will find a facility on the Internet that has a nice website, but when they go to drop their horse off, they're

disappointed with the reality of the facility,” Shawna Dietrich says. Shawna is the founder of Dietrich and Company Equine Insurance and operates Fox Hill Farm in Simpsonville, Kentucky, where she cares for retired performance horses.

The most important element in selecting a facility is the people taking care of the horse. “I’m very hands-on at my barn,” Shawna says. “I know each horse’s personality, so that if one flicks his ear the wrong way, I know he’s uncomfortable.” While that type of hands-on care is ideal, not every farm is set up to provide such detailed care. Still, it’s important to avoid barns where employees just go through the motions of caring for the horses.

“These older horses can turn on a dime and lose a hundred pounds in a heartbeat if you don’t pay attention,” Shawna says. At her facility, the daily care of each horse is adjusted to fit the individual’s needs. “When selecting a facility, look for the kind of care your horse demands and talk to the people at the facility. When you visit the barn, pay attention to the other horses. Are they well cared for? Are they bright-eyed? Do they have a healthy coat? Do they seem happy and content? The horses at the barn can speak volumes about the type of care your horse will receive and if he will be happy at his new home,” Shawna explains. When visiting a potential facility, ask for references of current and past clients and interview each about their experiences with the facility. Knowing about potential issues beforehand will save you time and your horse any discomfort.

When choosing a retirement home, consider how much involvement the facility allows you to have with your horse. Are you able to visit as you please? Do you have any say in his day-to-day care? “All of these are important questions to ask,” Shawna says. “You have to decide what sort of participation you want to have.”

The reality of a retirement facility is that it’s a long-term financial commitment. With advances in care, horses are living well into their 30s and if you retire your horse at 20, you could very well be looking at 10 more years of support.

Managing the Aging Performance Horse

2007 USHJA Owners Guide

Purchasing or owning the aging performance horse requires close attention to his inevitable declining soundness. As a fit athlete, soundness is an important determinant of a horse’s performance level. Soundness is the expression used to describe the presence or absence of orthopedic pain in the equine athlete. The sad fact is that horses develop wear-and-tear issues in their limbs and back that will determine their level of usefulness as they grow older.

In general, lameness issues can be divided into two broad categories. The first category of lameness includes cases that require a period of rest to allow for healing. A typical example of this is a horse with an injured suspensory ligament. The other category is the horse with a condition that allows him to remain in work as long as the pain from the lameness can be safely managed. These cases are typically regulated with appropriate medications such as bute or Banamine. Also, horses in this second category can be managed by various joint injections to maintain adequate and comfortable levels of performance.

Ultimately, every show horse will get to a point where the combined soundness issues will start to affect performance. As wear-and-tear issues in the show horse accumulate, owners and trainers will need to determine if use levels need to change. One option is to alter that horse’s job. That might involve seeking a rider who needs a horse to perform at a lower, less strenuous jumping level. Further, the horse may be suitable for dressage or pleasure trail riding, or docile enough



for a therapeutic riding center.

Discussions among the owner, veterinarian and trainer will determine a potential suitable situation for an aging athlete.

- Does he need rest or rehab to continue?
- Does his age or physical condition require a change in job or discipline?
- Do you want to sell or donate him?
- Are you financially able to pay for his care for the remainder of life?

Depending on the answers to these questions and your individual situation, you might consider some of the following options. Some horses readily adapt to different environments. The key is to find a facility that considers the best interests of the animal.

- For Profit - Farms where you pay a monthly fee for the life of the animal. He is not typically ridden. Services will differ depending on the individual animal's specific health needs and the particular facility setup.
- Not-For-Profit - These include equestrian schools and therapeutic riding facilities where you would donate (transfer ownership) of the animal.
- Breeding Operations - If you have a well bred mare, there are farms that offer different arrangements such as a buyout, lease or foal share.

As your horse is solely dependent on you for his welfare, it is imperative that you carefully research the various options. Visit the facilities that you are considering to make sure they meet a high standard of care. A few prudent points to examine include finding out if the manager has an understanding of your horse's past level of show care, what kind of paddocks are available, access to stalls or run-in sheds, grooming and whether the facility is equipped to handle special medications, feeding or shoeing.

The USHJA website provides a list of facilities for your consideration. While USHJA does not formally endorse these operations, care has been taken to provide locations where our members have had positive experiences.

VI. Footing, Back Soreness and Lameness

Where the Hoof Meets the Ground

(By Hilary M. Clayton, BVMS, PhD, MRCVS. In Stride. Fall 2006)

Footing is an important aspect of horse management that affects both performance and soundness. The optimal footing for a particular arena depends on a number of factors, including the sport, climate and location (indoors or outdoors). The basic essentials are a level, hard-packed base covered by 2 to 2.5 inches of suitable cushioning material. This article will focus on the selection and maintenance of the cushion material, and will give guidelines for detecting and correcting common problems with the footing.

How the Hoof Interacts with the Footing

Footing is used to cushion the impact of the hoof with the ground and to provide a stable surface for the hoof to push against during locomotion and jumping. The first step toward understanding footing requirements is to learn how the hoof interacts with the surface.

As it approaches the ground, the hoof is moving forward and downward. Contact with the ground stops the motion of the hoof, and this sudden deceleration causes concussion that is potentially damaging to the horse's bones and joints. One of the mechanisms for absorbing concussion is by deformation or movement of the footing material.

The amount of concussion transmitted to the horse's limb depends on the hardness of the footing. Hard footing does not move when the hoof hits it, so the hoof is stopped abruptly, which causes jarring concussion in every stride. Soft footing moves a little, allowing the hoof to sink into the surface so it decelerates the hoof gradually, and the footing absorbs some of the concussion. The depth of the hoofprints gives an indication of the hardness of the surface and how much concussion is absorbed by the footing.

The effects of concussion accumulate over the course of an athletic horse's career. The force of each impact and the number of impacts determine the likelihood of injury. Harder impacts are associated with faster speeds and landing over fences. In racehorses, the concussion resulting from training and racing at high speed is implicated in fractures of the limb bones, whereas in jumping horses the predominant concussion-related injury is arthritis. Like older people, many older horses have mild arthritis that is compatible with continuing an athletic career if managed appropriately, which includes working the horse on good, resilient footing. Hard surfaces, on the other hand, exacerbate lameness in arthritic horses. In light of the high concussion associated with jumping, there may be a grain of truth in the saying that a horse only has so many jumps in him.

Jumping horses need footing that offers security at takeoff and some give during landing. At takeoff, the ideal footing allows the horse's toe to dig in slightly, then offers sufficient resistance that it does not give way as the hind hooves push off. On very hard footing the toe cannot dig into the surface, and the lack of hoof rotation aggravates lameness in horses with navicular disease or check ligament injuries. On the other hand, a soft surface with low shear resistance allows the toe to penetrate easily but may give way as the hoof pushes off. Think about how it would feel if you were a sprinter ready to explode out of the starting blocks but at the moment you push against the blocks they fall over, giving you nothing to push against. When the footing gives way, the horse's muscles must work harder to generate the propulsion needed to clear the fence. Consequently, the muscles are rapidly fatigued. Tired muscles put more load on the flexor tendons and suspensory ligaments, predisposing the horse to bowed tendons and pulled suspensories.

When landing from a fence, the main concerns are to control concussion and reduce slipping. The footing needs to move a little so that it slows his hoof gradually, which reduces concussion, but it should not slide so much that the horse loses control of the hoof movement and feels insecure.

The property of footing that gives it security at take off and landing is known technically as shear resistance, which indicates how much substance the footing has. Jumping arenas need more substance than arenas that are used only for flat work. The next section will describe the characteristics of different types of footing materials and how to achieve the necessary substance.

Footing Materials

Sand

Sand is the most frequently used surface material due to its easy availability and cost effectiveness. Different types of sand vary widely in their suitability for riding surfaces, due to differences in the size and hardness of the grains. Grain size affects dustiness, compaction and water retention. Arenas used only for flat work are often based on coarser sand, such as 2NS, which consist predominantly of medium-coarse and coarse grains. The disadvantage to a coarser sand is that it tends to roll or shear under the horse's hoof. The sand used in jumping arenas needs a higher content of fine particles (clay or stone dust) to give it more structure and stability. The effect is like a rubber doorstep that resists sliding across the floor. In a similar manner, fine particles in the sand resist sliding of the hoof. Jumping arenas typically contain around 80 percent sand and 20 percent fines. Sand with a high content of fine material requires more maintenance than coarser sand. After it gets wet, the fine particles pack hard as it dries, so the footing needs to be harrowed frequently to keep the cushion fluffy. The more fine particles there are in the sand, the more it becomes compressed and compacted by horse traffic and, due to its high compactability, greater tractor power is required to harrow it. Fine particles are also responsible for dustiness when the sand dries out.

Hard (granite) sand is durable, which is particularly important in an arena that sees a lot of traffic. Soft (calcite) sand breaks down and turns to dust relatively quickly, especially in heavily used arenas. Hardness can be tested by placing a few sand grains on a hard surface and compressing them with a spoon. If the grains are easily crushed, the sand is soft.

Sometimes sand is used alone as arena footing, but it is often possible to improve the performance of sand by adding other materials that affect its physical properties and the way it interacts with the horse's hoof.

Additives

The most common additive is water, which is used to increase the stability of the footing and reduce dust. To get a feeling for the effect of watering sand footing, think of running on the beach and how much easier it is to run at the water's edge compared with the running on the dry sand farther up the beach. Water is cheap and effective, but the effects don't last long - only until the water evaporates. If an arena needs to be watered frequently, consider installing a watering system or adding a product with a longer-lasting effect. Magnesium chloride or calcium chloride is sometimes mixed into the footing to retain water. These are inexpensive additives, but since they are salts they are corrosive to machinery, and they may irritate skin wounds and the paws of small animals. Comparing the two salts, calcium chloride is considerably more caustic and should only be used when magnesium chloride is not available. Products derived from natural or synthetic oils suppress dust for much longer than water and without the adverse environmental effects of calcium or magnesium chloride. The drawback is greater cost.

Amendments

When the footing is less-than-perfect, amendments such as rubber, fibers, felt, nylon or foam are added to improve the properties of the riding surface. Depending on the type of amendment, it is possible to increase cushion (air or fluffiness), increase stability, increase water retention, reduce slipping, reduce compaction and minimize maintenance.

Textiles

Textiles include a broad range of products, such as material made from felt, nylon or foam. They are currently the most popular amendments used for jumping arenas. Textiles provide cushion, stabilize the sand, help to aerate the footing, prevent compaction and may help to retain

moisture. Products in this category should provide an exceptionally consistent riding surface.

Rubber Products

Rubber adds cushion and resilience to the surface and may reduce compaction, but it may also allow sand to dry out more rapidly. Granular and shredded rubber particles are available, with different shapes being appropriate to mix with different types of sand. If the rubber is derived from recycled tires, however, it is very important that all the metal has been removed by passing the rubber through a series of magnets. Obviously, the presence of metal particles in the footing is dangerous.

Wood Products

In some areas, wood products such as bark, wood chips and shavings are readily available and inexpensive. They are often mixed with sand to give the substance more cushion, or they may be used alone. Wood-based surfaces offer some cushioning, but can become slippery if they are deep. Wood products help to retain moisture in the surface, which reduces the frequency of watering. The biggest drawback is that they break down relatively quickly and turn into dust.

Synthetic Footings

Synthetic footings consist of sand grains coated with a wax or polymer. The coating eliminates dust and gives the footing structure and stability without having to add water. Synthetic footings require a substantial initial investment, but ultimately pay for themselves over time due to their durability and low maintenance requirements.

Common Footing Problems

Too Hard

Compaction causes a surface to become hard. Surface materials with a high content of clay or stone dust are particularly susceptible to compaction, especially when the surface gets wet and then dries out. The jarring effect of a hard surface causes horses to move stiffly and exacerbates lameness in arthritic horses. Harrowing the surface loosens the material and introduces air, which makes it fluffier. Amendments such as textiles, rubber or wood chips are often added to reduce compaction and give a hard surface more cushion.

Too Deep

For most types of footing, a depth of 2 to 2½ inches is adequate. Deeper footing tends to give way as the horse pushes off, so he must generate more muscular force to achieve the same amount of propulsion compared with a firmer surface. Due to the extra effort required, the muscles fatigue more rapidly on deep surfaces, putting tendons at greater risk of injury. Deep footing can be improved by removing some of the surface material, by keeping it well watered or by adding a stabilizer such as a textile or fibrous material.

Too Slick

Slick footing allows the hoof to slide excessively during pushoff or landing. A person walking on ice tries to keep his weight over his feet and avoids reaching forward or pushing out behind himself. In the same way, a horse moving on a slippery surface reduces the range of motion of his legs as they swing back and forth, resulting in a short, choppy stride. In judged sports such as hunters, this is not what the judges are looking for. Even more important, slippery surfaces are dangerous; loss of control of hoof motion can cause a fall or a serious jumping error.

Too Dusty

Dust is unpleasant for horses, riders and spectators, especially those with respiratory sensitivities. Dust is a consequence of fine particles (silt, clay, stone dust) in the surface material becoming airborne when disturbed by the action of the hooves or even the wind. Addition of bonding agents such as water or oil reduces dust. Some types of footing, particularly soft sand and wood products, are prone to disintegrate into dust, especially in arenas with heavy traffic. When the footing does break down it may be possible to improve the rideability for a while using bonding agents to keep the dust under control, but eventually the surface will need to be replaced. Synthetic footings are dust free.

Finding the Right Footing

Unless you have considerable experience with different types of footing, it is worthwhile hiring a professional footing consultant to help you choose and install the best footing for your arena. Footing consultants are experts in arena design, footing installation and maintenance procedures. For an existing arena with footing problems, the consultant will help you to select the appropriate amendments and additives to revitalize the footing.

Back Soreness

(By Michael Ball, DVM. In Stride. February 2007)

Back soreness can be one of the most difficult and elusive diagnostic challenges in the horse. There are direct (primary) back problems (direct trauma from a poor-fitting saddle, arthritis) and, much more commonly, indirect (secondary) back problems. From a musculoskeletal standpoint, a horse's back and neck are extremely complicated. There are hundreds of individual ligaments and numerous muscles and

their tendon attachments holding together all of the vertebrae and pelvic structures that compose the back. Each vertebra actually has four true “joint” articulations with cartilage, joint fluid and surrounding soft-tissue structures just like the fetlock, a more typical joint. There are 14 small “joints” in the neck alone. Although much less common than in a limb joint, the joints of the vertebrae can suffer from arthritis caused by trauma, injury, wear and tear, and even congenital problems, such as OCD. The tissues of the back can be traumatized while rolling, bucking, rearing, playing, having a leg lose footing and slipping out and pulling back on a tie, as well as during the rigors of riding. A horse’s saddle and padding can be a contributing factor in some cases.

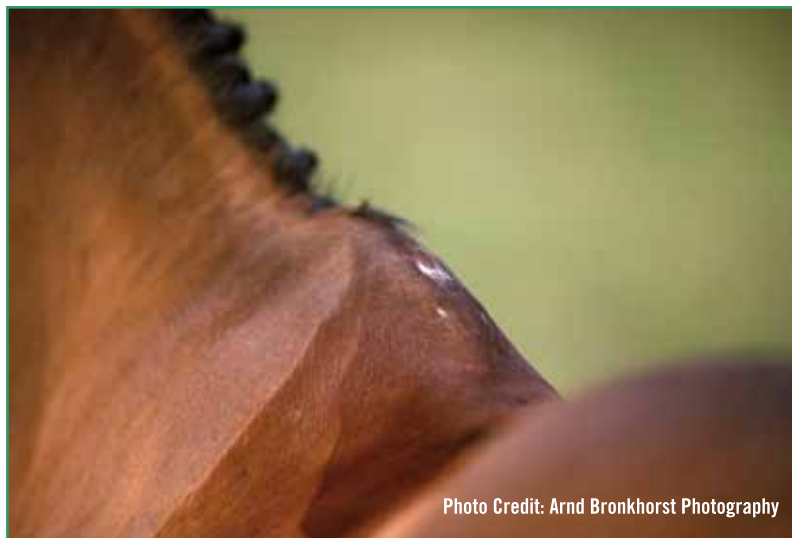


Photo Credit: Arnd Bronkhorst Photography

Signs

The signs of back pain can be extremely variable from horse to horse, with the main sign primarily being poor performance. Subtle signs can be noticed - including tail swishing, a directional difference in the way the horse rides (difficulty bending in one direction or with collection), difficulty with leads, ear pinning, head shaking, flatness when jumping or refusing. There is sometimes a difference in the horse’s movement depending on whether he is being ridden - or ridden under saddle as opposed to bareback. These signs, of course, may have many other causes including behavioral and training issues, or even natural performance limitations, so it is very important to have a complete veterinary examination performed to know what course of action to take and decide if there is a medical condition that needs to be addressed before more intense or alternative training.

Diagnosis

Diagnosis of back pain can be very difficult and starts with extremely thorough observation. Seeing what the horse’s body can do without forced manipulation can be helpful. It is great to see a horse with his back curved around, balancing on three legs while scratching that spot behind his ear with a hind foot! The horse who will nibble a carrot over his withers to the right but not to the left may have pain on one side of his neck (it might be caused by stretching inflamed tissue on one side or compressing inflamed tissue on the other side). Palpation of all the long muscles of the back and muscles of the rump while watching and feeling for a reaction is important. The lumbosacral area, pelvis and sacroiliac areas often can be manipulated in order to determine degree of movement and reaction. This really is the tip of the iceberg, because there are so many deep structures and such large masses of muscle covering them, it is very possible to be over a problem area and get little to no reaction. After palpation, local anesthesia can be administered to confirm an area of suspected pain. In addition, nuclear scans (scintigraphy) and thermography can be used to isolate problem (inflamed) areas, followed by ultrasonography and radiology to further define the problem and help decide on a course of treatment.

Saddle Fit

Saddle fit should be evaluated as well as the saddle structure for problems such as a broken tree or bunching of padding material causing a pressure point. A correctly fitting saddle needs to fit the horse as well as allow the rider to sit balanced and centered. The saddle should not interfere with the horse’s movement or the rider’s aids; with a well-fitting saddle the rider will feel secure and balanced with her legs staying in the correct position without constant adjustment. The padding needs to be evaluated as well as the saddle. Some padding can cause pressure points, which trigger a response in the muscles under it. In many cases, more is not necessarily better - padding cannot make up for a poor-fitting saddle. The new neoprene and gel-type pads have been very beneficial in a number of cases I have worked on.



Photo Credit: Flashpoint Photography

Evaluating Lameness

It is also very important to conduct a thorough lameness evaluation, as many back problems are actually secondary to lameness issues. If lameness issues related to back pain are not addressed, treatments focused on the back are likely to be short-lived and unsuccessful in the

long run. Various treatments including locally injected and systemic anti-inflammatory medications, muscle relaxants, correction of poor saddle fit or padding problems, stretching exercises pre- and post-exercise, massage therapy, chiropractic and acupuncture can be effective in treating various types of back pain. The treatments must be undertaken considering whether the pain is primary or secondary, acute or chronic, soft tissue, bone/joint (or both), and be based on a sound localization and diagnosis of the cause of the pain. Back pain can be perplexing and frustrating to diagnose and treat. It may take some time to completely figure out, but should be considered when dealing with training issues and/or poor performance.

Dr. Michael Ball and his wife, Dr. Christina Cable, operate the private practice Early Winter Equine Medicine & Surgery in Ithaca, NY. He is also an FEI veterinarian and has traveled extensively as a team vet with the USET.

VII. Hoof Care

Happy Hooves, Happy Horses

(By Lisa Munniksma. In Stride. October 2008)

"Oh, my aching feet," you moan after a long day of working, riding and attending family activities. Your two feet support your 100-, 200- or 300-pound frame and experience the true wear-and-tear of your day. By the evening, you're feeling that they're worn out.

Just imagine how your horse's feet feel. Instead of holding up their share of a few hundred pounds, they're the base for 1,000-plus pounds. With these four tiny pedestals of support, you ask your horse to run, jump and turn on a dime. It's no wonder, then, that performance horses' feet experience a range of issues.

USHJA In Stride asked two of the industry's most experienced farriers to discuss some common hoof issues found in hunter and jumper horses, how to recognize the problems and what to do about them.

Shelly Feet

Structurally weak feet are common among performance horses in this country, largely due to environmental and management conditions. Frequent bathing, long periods of wet or dry weather, unbalanced nutrition and a lack of turnout contribute to crumbling, shelly feet. These feet are prone to cracking and are difficult to keep shoes on. Moisture balance in feet is a key component to hoof strength and health. Horses that are exposed to water regularly, such as during bathing, and then returned to their absorbent wood-shavings-bedded stall face a constant fluctuation in hoof moisture. A nutritional program that offers your horse a balance of vitamins and minerals contributes greatly to hoof quality as well. Supplements promoted for improved hoof conditioning shouldn't be necessary for horses that are receiving the nutrition they need from their regular diet.

Horses have biomechanical devices designed to regulate hoof integrity, including a vast circulatory system within the structures of the foot. "The more a horse moves around, the stronger his feet are going to be," says farrier Jack Miller, of Lantana, Florida. But with the way horsekeeping has evolved, horses don't often get as much turnout or exercise time as they should. This challenge requires you to be vigilant about monitoring hooves' condition year-round.

Cracking and crumbling is an obvious sign of shelly feet, although you don't have to allow the condition to advance that far. Look at the bottom of your horse's hooves to check out the moisture balance. Is the frog hard and dry, or is it pliable? The sole, too, can show evidence of drying out. Similar to the way the ground cracks in the middle of a dry spell in the hot summer months, the hoof sole can exhibit shallow fissures from drying out.

Ask your farrier how your horse's hooves are looking and if you should be using moisturizer or a hoof sealant.

Sole Bruises

Bruising is a common hoof issue among all kinds of performance horses. Often, sole bruises lead to a mystery lameness, which can range in severity from a slight limp to resistance against bearing weight on that foot.

Farrier Tony Bucci, based in Wellington, Florida, says bruises can occur deep in the hoof and while you might suspect a bruise as a cause of lameness, you might not actually see one. It can be as long as two months later that evidence of the bruise emerges on the sole.

Bruises on hooves occur in the same way that bruises on your skin occur—trauma from an impact. Horses would most commonly suffer from sole bruises after working on a rocky or uneven surface. They can also get bruised from impact with an object or frozen, uneven ground during turnout.

Horses wearing shoes are less likely to become bruised, although it can happen to shod horses with soft soles, caused by any combination of genetics, nutrition, hoof care practices and management.

Tony recommends toughening up horses' soles to improve the hoof's condition and prevent bruising. There are a number of sole paints on the market, although he says Venice turpentine works, too. One caution is that some sole paints contain DMSO, and that could show up in a test for controlled substances at a show. Allowing your horse to go barefoot and to develop a natural hardening of his sole can also be beneficial, but that's not often a realistic solution for performance horses.

If your veterinarian suspects your horse has a sole bruise, he'll probably recommend steps to reduce the inflammation in the hoof. Soaking the hoof in cold water, putting a poultice on the hoof and giving oral anti-inflammatory drugs are common options. Your horse will also require some time off from work. Horses that consistently have problems with sole bruises can be shod with a pad to protect the entire underside of the foot.

Quarter Cracks

Quarter cracks were brought into the spotlight as a hoof issue when Thoroughbred racehorse Big Brown made his bid for the 2008 Triple Crown. Despite the condition's notoriety, Jack says he doesn't see too many quarter cracks; maybe just three at a show the size of the Capital Challenge and more often in jumpers than in hunters.

Horse owners who haven't had experience with quarter cracks often confuse them with toe cracks. Quarter cracks, says Jack, begin at the hairline and progress downward. Toe cracks—often caused by dry feet—begin at the ground and progress upward.

Quarter cracks are caused by too much pressure in a weak area of the hoof. On some horses' feet, you can see vertical lines that look like they can become cracks at any time. Your farrier should keep the hoof well-balanced so as not to place too much pressure on that line and cause the crack to split open.

If a quarter crack does split open, your veterinarian will first want to treat it for any infection that might be present with a topical antibacterial agent such as povidone iodine. Depending on the severity of the crack, it might heal on its own with some careful hoof balancing or it might need mechanical repair, such as with a fiberglass patch or with metal wires, to maintain the structure of the hoof and provide strength to the area around the crack.

Imbalanced Feet

Hoof imbalance is the most common issue Jack and Tony see with horses around the country. Improper trimming and shoeing affects not only the hoof but the whole skeleton, which can impact the horse's gaits, tendons and ligaments, muscle development and growth.

A balanced foot is important for every horse, although Jack says the degree of hoof care precision necessary among hunters and jumpers varies slightly. Hunter horses, he says, can be looked at as race cars that need to be finely tuned with hooves kept in balance to achieve correct movement. Jumper horses, while they require equal care and consideration, are often less affected by minute changes in hoof balance because there's not as much emphasis on their way of going.

A big issue with imbalanced feet is that even educated horse owners have difficulty recognizing this problem.

"You have to develop an eye for it. That takes a number of years," Tony says.

There is some debate among farriers about whether you can accurately judge a hoof's balance based on the level of the hairline at the coronet band. One more accepted method to recognize a balanced hoof is to pick up your horse's leg as if you're going to pick his hoof. Hold your hand under his cannon bone, and allow his hoof to hang freely. Look down his hoof to see if it's level, symmetrical and balanced on all sides.

"That's a very good guide to good and bad shoeing," Tony says.

You can also judge hoof balance with the angle of the hoof. Each horse will have a different ideal angle based on its particular conformation. The angle of the hoof should mimic the angle of the pastern and of the shoulder.

Farriery is an evolving science. Each year, new research uncovers treatment options and new methods of trimming and shoeing. Just as white line disease used to be a big issue that's become more manageable, so will shelly feet, quarter cracks and sole bruises become less troubling.

As farriers attend more clinics and symposiums, they learn about the latest advancements in the field. More educated farriers mean fewer imbalanced hooves. As a horse owner, you, too, can do your part to educate yourself by talking with your farrier and veterinarian about your horse's hoof care.

Hoof Care to Keep Him Sound

(By Elaine Pascoe with Duncan Peters, DVM. Practical Horseman. October 2007)

You lavish lots of attention on your horse's feet. You clean them daily, check his shoes and perhaps apply a hoof dressing from time to time. You make sure they're trimmed and shod regularly. And his feet look beautiful - but beauty is, in this case, horn deep. It's what goes on inside that really counts. Out of sight, behind the hoof wall, are complex structures carefully engineered to absorb shock and support your horse as he gallops, jumps and turns. When a serious foot problem sidelines him, more often than not these internal structures are involved. In this article, we'll open a window into the "black box" of the hoof and explain how you can cut your risks. The list of problems that can develop inside the foot is long, so we'll focus mainly on some injuries and chronic conditions that are common causes of lameness.

Behind the Hoof Wall

The core of your horse's foot is actually a joint. Three bones come together here:

The **coffin bone** (also called the pedal bone, third phalanx, or P3) underlies the hoof wall at the front. Two flexible wings, the lateral cartilages, extend from this wedge-shaped bone along the sides of the foot.

The **small pastern bone** (second phalanx, or P2) sits atop the coffin bone and links it to the pastern above.

The **navicular bone** (distal sesamoid) is tucked behind the first two. Where they meet, the bone surfaces are covered with a slick layer of cartilage. The bones are arranged to distribute force and pressure when your horse puts his foot down. His body weight, coming down through the small pastern bone, disperses through the navicular bone to the heel and through the coffin bone to the toe. There's not a lot of movement in this joint - the bones are lashed together tightly with strong ligaments - but it gives enough to absorb the impact of landing.

But there's much more to the foot. Two of the major tendons that extend and flex the leg are anchored here, and layers of padding and protection surround and support the structures.

The **digital extensor tendon** runs down the front of the leg and attaches to the upper front of the coffin bone. Its job is to straighten and extend the limb.

The **deep digital flexor tendon** (DDFT), which bends the limb, runs behind the joint to attach to the bottom of the coffin bone. At the heel, where it passes over the navicular bone, its fibers fan out. The DDFT is stretched taut at the moment when your horse weights his foot, helping to support the bone.

The joint is enclosed in a tightly fitted membrane, creating a fluid-filled joint capsule. At the back, a pouch called the **navicular bursa** sits like a fluid-filled balloon over the navicular bone, helping to cushion the bone from the pressure of the DDFT over it.

The **digital cushion**, a thick pad of fiber and fat, lies under the heels, between the two lateral cartilage wings that extend from the coffin bone. When your horse puts weight on his foot, the pressure flattens the cushion. The cushion pushes out the cartilage wings, and the hoof expands a bit to take the force. The digital cushion also helps keep circulation moving in the foot by acting like a pump, pushing blood out of the foot when it's squeezed.

The hoof itself is made of **horn** - basically, protein, like your fingernails - many layers thick and as tough as armor. The wall is the sturdiest part, thickest at the toe and narrowing gradually along the sides. It grows down continuously from special tissue in the coronary band at the top of the hoof. The thinner sole grows from similar tissue under the coffin bone.

At the heels, the wall takes a sharp turn in on each side to form the **bars of the foot**, two distinct ridges that you can see on the sole, running back toward the toe. Between the bars is the v-shaped **frog**. The wall, bars and frog are the main weight-bearing surfaces, and their design helps the walls to expand slightly under pressure, absorbing shock.

An ingenious system keeps the hoof wall firmly anchored to the coffin bone. Over the bone is a thin layer of tissue with thousands of hair-like projections, the **sensitive laminae**. They interlock like VelcroR with similar projections on the inner surface of the wall, the **insensitive laminae**.

All these structures work together, step after step, out of sight and out of mind - until something goes wrong.

Suddenly Sore

Your horse is a bit off after your trail ride. Or maybe he hops out of his stall one morning on three legs. You can feel warmth in the sore foot, but behind the hoof wall you can't tell what's going on. Hiding inside might be a

Sole bruise. A hard landing, rocky footing or constant work on a hard surface can bruise the soft tissues between the sole and the bones. The bruising can be extensive – subsolar bleeding that extends across the whole back of the foot - and deep enough to damage cartilage and produce microfractures in bone, too subtle to see on X-rays. Weeks later, a reddish stain may appear on the sole, remnants of the pooled blood.

Abscess. Abscesses develop when bacteria get into the living tissues of the foot and start an infection. A pocket of pus builds up and with it, pressure - and pain. Usually a horse is very lame, very suddenly. Left to fester, the infection may spread to deep structures like the coffin bone.

Rest, soaking the foot in warm water and Epsom salts, and poulticing are time-honored treatments for bruising. But an abscess won't clear up until it drains. Your veterinarian can locate the site and carefully pare away the sole over it to let the foul matter escape. Poulticing and soaking the foot in a warm solution of Betadine-R and Epsom salts once or twice a day for three or four days helps it finish draining. Your vet also may prescribe an anti-inflammatory, such as phenylbutazone or Banamine-R, and sometimes an antibiotic. Any severe lameness warrants a call to your vet. Even if your horse is not so sore, it's time to look for a deeper cause if he's still off after a week of rest. More serious foot injuries include a **torn tendon**. The DDFT comes under tremendous stress as your horse pushes off a front foot at speed or after landing from a jump. Within the foot, the DDFT may separate from the coffin bone or fibers in the tendon may tear.

Torn ligament. Any of the ligaments that lash the bones of the foot together - the collateral ligaments at the sides, and the supporting and impar ligaments, which hold the navicular bone above and below - may be strained or torn. The ligaments undergo severe stress when your horse pushes off, makes sharp turns or lands on uneven ground.

Fracture. Any of the bones can fracture, but coffin bone fractures are probably most common. They can occur in the bone's wings (sides), body (center), extensor process (a lip of bone that curves over the lower edge of P2) or bottom edges.

Tendon and ligament injuries can be hard to identify behind the hoof wall, but they can be spotted with high-tech techniques such as magnetic resonance imaging (MRI), available at some major clinics. These injuries are slow to heal and can lay up your horse for varying amounts of time - think months, not weeks. A coffin bone fracture calls for three to four months of stall rest, followed by four months or more of turnout. The hoof itself, helped by a bar shoe to keep the wall from expanding, acts as a cast for these fractures. If the break is in a place where it affects the working of the joint, it can be a source of ongoing problems if it's not completely stabilized.

Chronically Sore

Incomplete healing, repeated injuries and general wear and tear can lead to chronic foot problems. Many of these problems occur in the back half of the foot and produce similar signs - intermittent lameness; short, toe-stabbing strides; "lolling" a foot (resting it with the heel cocked up off the ground), soreness to hoof testers over the frog. For many years they were lumped into a single category: navicular syndrome. But the navicular bone is just one of the structures that can be involved.

Just as it can higher in the leg, the section of the DDFT in the foot can become chronically inflamed and thickened from repeated stress. Other ligaments may heal incompletely after a tear and become chronically inflamed. Arthritis - joint inflammation - can develop in the foot in any number of ways. In one scenario, bone cysts develop after a subtle bone or cartilage injury. These small cavities, filled with fluid and scar tissue, cause painful irritation in the bone and leak debris into the joint, creating inflammation. Whether from bone cysts or another cause, the inflammation produces pain and, over time, degrades the joint.

True navicular disease is marked by inflammation and degeneration of the navicular bone. There's little agreement about the cause, but



Photo Credit: Flashpoint Photography

compression - the bone is squeezed with every step - is a factor. Also, as supporting ligaments are stretched and pulled, they yank against the membranes that surround the bone. The bone responds to this irritation by remodeling and developing lumps of new growth. Exactly how this relates to navicular disease isn't clear, but it can be a source of heel pain.

Sorting out exactly what's wrong is challenging, especially because several things can be going on at once. But identifying what structure is involved, and how, may lead to more effective treatment. For example, true navicular disease can't be reversed and doesn't heal with rest. Treatment focuses on managing the condition to slow its progression and keeping your horse as comfortable as possible. Shoes that support the heels and allow the foot to break over easily (bar shoes with rolled toes, for instance) are a big part of the plan. Because they reduce stress on the area, those shoes can help other heel problems, too. But if the real problem is tendinitis, your horse might have a better chance of recovery with rest and, perhaps, injection of anti-inflammatory medications into the sheath (covering) of the tendon.

Risk Boosters

Conformation can make a horse's feet more prone to certain types of problems. Shoeing can help, but it can only do so much. **Long toes and low heels** delay breakover. That causes the joint in the foot to hyperextend, putting extra stress on the DDFT and the impar ligament. The delay also increases strain on the navicular bone, as the tendon and ligaments press and pull on it. Good trimming and shoeing (with rolled toes, for example) can help by allowing the foot to break over more easily.

Small, narrow and upright feet don't absorb shock well, so they're more stressed by concussion. That can contribute to navicular disease and similar problems. This conformation is also less stable in turns, putting more stress on the collateral ligaments. A farrier can lower high heels somewhat, but feet that are naturally upright can't be radically altered. Where your horse works, and how hard, makes a difference, too: **Work on hard footing** increases concussion. **Rough ground** can rock the foot this way and that, yanking ligaments and tendons. **Quick stops and sharp turns** cause sudden changes in inertial forces that can strain the collateral ligaments. **Galloping, jumping and work on steep hills** increase both impact and breakover stress. When a horse lands from a jump, his front feet withstand tremendous forces. The joints hyperextend, and the DDFT and impar ligaments are stretched to the maximum as he pushes off. The harder your horse works, then, the more important good foot conformation becomes.



Photo Credit: Julie Moses Photo

Risk Cutters

Many foot injuries are just bad luck. Your horse lets loose in his paddock or takes a bad step coming off the trailer and tweaks something in his foot. But many others might be prevented with good management. Here are eight ways to reduce your horse's risks:

Clean and check his feet daily. Make sure his stall and paddock are clean and dry, so that his feet aren't too soft or too dry. Healthy feet are more resistant to injury and infection.

Pay attention to footing and use good sense on rough trails. Pick up rocks in your paddock and ring. If your horse's feet bruise easily (as they may if he has thin soles), shoeing with pads may help - but don't rely on pads to prevent injury.

Keep on top of shoeing. Shoeing is important in all foot problems. If your horse is overdue for shoes or if a shoe is tweaked so that it's loose or slightly askew, and that's not noticed, it will affect the balance and support of the foot and make injuries more likely. Likewise, his feet need careful management if they are off balance or grow abnormally, so that his weight isn't evenly distributed on them.

Get him fit for what he's asked to do. For example, an event horse's feet have to handle sudden changes in inertia and direction caused by uneven cross-country ground. For that, they have to be conditioned slowly by doing the type of work, on the type of surface he'll face. This applies to any discipline and any activity, whether it's a grand prix jumpoff or a hunter pace. You need to know your horse's level of fitness and plan to have him ready for the task.

Don't overtrain - it's counterproductive. People tend to push horses right up to the last day before a big competition. (You never see human

athletes do this - the day before a marathon, you wouldn't run half a marathon just to be sure you could.) It's common sense to ease up, let tissues recover and let your horse get his spark back rather than go into the competition tired. Missteps come with fatigue, and injuries come with missteps.

Longe less. It's high risk, especially if you longe your horse for extended periods to work him down. You will never see a horse at liberty running in circles; yet at any show you can see horses cranked onto tight circles and longed for half an hour or more, often on poor footing. The repetitive circling tires muscles and tendons. Then a foot slips out, its opposite number catches the excess weight, and the stress exceeds tissue strength in the ligaments and tendons. If your horse is anxious at shows, the answer is to go earlier, ride him and give him a chance to settle into the strange surroundings. Often a horse just needs to relax, not be tired out.

Give him time to recover from stress. This may be easier in disciplines such as endurance and eventing, where there's more time between competitions, than in hunter and jumper classes, where people tend to show week after week. Add to the competition the stress of travel, stabling in a different environment and possibly a different shoer at a multiday show, and you have a recipe for trouble. You may need to do fewer classes so your horse isn't so tired, or fewer shows, and do less in between.

Be alert to "conditions of concern." Maybe he's not actually lame, but you sense something different in his way of going. The key then is to appreciate the problem. There's often pressure to get out and show, even when there are questions about your horse's readiness. But doing that can give a small problem a chance to develop into a big one.

The common denominator in all these steps is the need to know your horse, so you can have him physically and mentally ready for whatever it is you want to do and avoid pushing him past his limits. That will help you prevent injuries of all kinds, not just those in the feet.

Duncan Peters, DVM, MS, heads the Sport Horse Program at Hagyard Equine Medical Center in Lexington, Kentucky. An FEI-certified veterinarian, Dr. Peters previously practiced in Montana and California with an emphasis on performance horses. He is a lifelong horseman and a graduate of the University of California.

VIII. Riding

The Importance of Conditioning

(By Michael Ball, DVM. In *Stride*, Summer 2006)

Here's why and how you can improve your horse's training, performance and general well-being with proper conditioning.

Proper conditioning is an important part of your horse's training, happiness and well-being. In addition, adequate conditioning can enhance the performance of your horse and reduce the risk of musculoskeletal injury.

There is not a body system that does not respond and adapt to progressive physical conditioning. Bone responds by thickening and therefore strengthening in response to gradual stress. For example, the inside aspect of the cannon bone is considerably thicker on the "rail" side of a racehorse adapting to the stress of running in that particular direction. With conditioning, the cardiovascular and respiration system function with increased efficiency, as does the body's efficiency to utilize oxygen. The increase in heart rate in response to a standardized amount of exercise and the time it takes for the heart rate to return to lower resting levels can be an indication of cardiovascular fitness.

Muscle and ligament also strengthen with progressive conditioning, and this is an area that I find of particular importance to the hunter/jumper. Research sponsored by the Japanese Racing Association has shown that the size of the superficial digital flexor tendon in young horses significantly increases with progressive exercise on the treadmill compared to control horses, demonstrating the effect of exercise on tendon development. Such responses to exercise can be a factor in reducing the risk of soft-tissue injury.

In areas where the winter is less than perfect for riding and for horses that don't relocate to warmer parts, a considerable degree of conditioning can be lost despite best efforts to maintain midsummer levels of condition and exercise programs. The problem often comes at the first



Photo Credit: Flashpoint Photography

early spring horse shows. I recently finished working at one of our local spring shows here in upstate New York and there were numerous (more than I would consider typical for a midsummer show) strained suspensory ligaments and flexor tendons. I honestly believe that some of these injuries are related to loss of condition over the winter months and then doing a little too much, too fast and too soon in the season.

There are many factors involved and each horse very much needs to be treated as an individual. Some of these horses were particularly high spirited (spring fever) and came up sore while longeing excessively in smaller circles in some of the deeper footing in a crowded schooling area. Low-grade chronic repetitive stress, which can often build to a significant injury, can in most cases be “felt” before it can be seen as a swelling so a hands-on examination is important. Learning to palpate and evaluate these structures for pain and inflammation and making it a part of the daily routine can be of great benefit in determining if a conditioning program is pushing too hard and requires adjustment. The tendons and ligaments are best evaluated by holding the leg up off the ground and methodically applying a constant firm pressure to the various structures between your fingers looking for a response indicative of pain. Learn the contours of your horse’s normal leg and routinely monitor for changes such as increased filling in the joints or tendon sheaths (wind-puffs) that could be an indication of inflammation.

In addition, there are many times where the awareness and treatment of minor inflammation in ligaments, tendons and/or muscles can prevent minor problems from progressing. The proper use of cold therapy, warm therapy, massage, therapeutic ultrasound and other treatment methods can be a significant addition to any conditioning program. It should be noted that any such treatment should be used under veterinary supervision, as the incorrect treatment of a particular problem or during the wrong time frame (for example, warm therapy should never be used during the acute phase of inflammation) can cause more harm than good.

Conditioning is very subjective and can vary greatly from individual horse to individual horse. The horse’s age, breed, weight, previous training, diet and even his individual specific metabolism can all be factors in a horse developing musculoskeletal and cardiovascular/respiratory condition or stamina. The main goal, regardless of what your horse does for a living, is to create an equine athlete at his peak level of performance able to be competitive and to be at a level of condition to compete safely and minimize the risk of injury.

There are various methods of training that take a more objective approach, but with them all there is still a large degree of “human factor” in evaluating where a horse is in a given approach and how rapidly to move along. Much of the scientific research has involved looking at the horse’s use of oxygen and energy metabolism. The main difference is aerobic metabolism (energy using oxygen) and anaerobic metabolism (energy produced in absence of oxygen)—this is the use of energy at the cell level within the body.

The average resting heart rate and respiration for a normal horse is 32 beats per minute and 12 breaths per minute. As with humans, the normal resting heart rate lowers with cardio-vascular fitness; it is not uncommon for a fit racehorse to have a resting heart rate of 28 beats per minute. It has been reported that in order to develop maximal aerobic metabolic “power,” horses need to work at heart rates above 200 beats per minute. Care needs to be taken not to do too much too fast. A measure of developing fitness is how quickly the heart rate decreases after a period of sustained exercise. The “recovery” rate is typically considered to be 64 beats per minute or below and should be reached within 5 minutes.

The basic types of conditioning often used for the hunter/jumper are continuous training and intermittent training (interval training). Continuous training refers to exercise of prolonged duration and relatively low intensity. It is often used as a preparatory period for the unfit horse during which initial conditioning develops strength. Intermittent training is based on a series of intense exercise periods interspersed with periods of relief or complete recovery. The goal is to work at an intensity that maximally stresses aerobic capacity, thereby gradually building stamina. Great care must be taken as horses are more likely to suffer injury if they have insufficient base or background conditioning prior to experiencing an intensive workout.

The important fact here is that every horse is an individual, and the exercise program of each must be adjusted accordingly. Seek out the guidance of trainers who are experienced and successful with the goals you have for your horse. Horses can be over stressed and injured by any conditioning program if they are pushed too far too fast. It is important to be aware of your horse’s current level of condition and to monitor it carefully to ensure you are not moving too fast for an individual horse. There is also a common-sense factor to remember. I have seen many horses injured by activities that at the time were well-intentioned fun—a mock hunt on the trails or a winter ride in the snow that did not seem too deep or run in the sand along the beach or canals. The point is that a little can go a long way and can be very stressful for horses not used to such activities. Be aware of your horse’s condition, take it slowly, do it smartly and enjoy your horse.

Dr. Michael Ball and his wife, Dr. Christina Cable, operates the private practice “Early Winter Equine Medical & Surgery” in Ithaca, New York. He is also an FEI veterinarian and has traveled Extensively as a team vet with the USET.

Schooling

(By Geoff Teall. In Stride. June 2007)

When schooling your horse at a horse show, the most important consideration is his welfare. It is our responsibility to protect his soundness, both physical and mental, at all times and at all costs. I firmly believe that every horse has a finite number of jumps in his career. These jumps must be spread out over as long a time period as possible. This is not only our goal, but our responsibility. From the performance standpoint, there is also a finite number of jumps that any horse can jump well and with interest still intact. This number is considerably smaller than the first.

The true art of training horses is developing a system that produces horses performing at their highest levels using the very least amount of work and the absolute fewest jumps possible. I think it is critical to remember that the warm-up session for any class at any horse show is not really a training session, but exactly what we call it: a warm-up. This is the time to get your horse ready for the class at hand, not the moment to teach either the horse or the rider anything. It is too late for that. Your only goal should be to get your horse and rider loosened up, relaxed and confident in their abilities.

I have found over time that it really takes very little for a horse to be ready to go into the ring if he is, in fact, ready and qualified for the job. I have also found over time that the more I do with a horse and rider in the warm-up ring, the more likely that the results will diminish. Very often, I think we leave the horses' best jumps in the schooling area by doing too much. And I think we very often confuse our riders by telling them too many things in the schooling area.

With most of my hunters, I do a very brief warm-up on the flat. This includes a small amount of walking, trotting and cantering in each direction, and perhaps a lead change in both directions. I usually start with a low oxer, then perhaps two or three larger oxers, and finish with one vertical, or sometimes two. I start with the oxer to get my horses jumping across the fences with confidence, and end with the vertical to make sure they are paying attention and are careful at the jumps.

If I have a horse that is a little spooky, I might jump a fence with a cooler on it to see where he is. Beyond that, I think that most of what will happen in the ring will either have been addressed at home, in training, or not. If problems do come up on course, I always think it is best to just make note of them and work on them at home.

Remember, the warm-up for the class is only a warm-up, not a training session. Each horse has a finite number of good jumps in his life. Our responsibility is the welfare of the horse. I have found that if I concentrate on these ideas, the winning will come almost on its own.

IX. Shipping

Long Distance Shipping

(By Mark Baus, DVM and Steve Soule, DVM. In Stride. Spring 2006)

For many obvious reasons, shipping long distances is stressful for horses. For your horse, the stress of shipping comes from many sources:

- Standing on a moving platform for hours on end.
- Inability to lower his head to ground level.
- Poor ventilation with noxious fumes.
- Breathing air contaminated with fecal-origin bacteria and urine odor.
- Standing among horses with whom he is not compatible.

Here's how to help your horse deal with these challenges:

Before Shipping

All appropriate inoculations should be administered at least 10 days prior to shipping. Horses often receive joint injections and other therapies that involve the administration of corticosteroids. Corticosteroids should be administered at least seven days, and preferably 14 days, before shipping. Also, corticosteroids for orthopedic therapy should be avoided for seven days after shipping long distances. If you don't have a current one, a Coggin's test should be done no fewer than two weeks before shipping. This will also allow for timely completion of the necessary health certificates. Your veterinarian can advise you on any further regulatory requirements for your state and destination.

It is essential that your horse has been without fever or other serious illness for at least one week prior to shipping. If your horse was recently ill, your veterinarian might wish to perform blood work to insure that his health has returned to normal.

Avoiding abdominal disruption (colic) is a principle concern. Administering a laxative prior to shipping can be accomplished in several ways. A bran mash with up to one pint of mineral oil can be fed for two to four meals prior to departing. To insure good hydration for the long trip, electrolytes can be administered in the feed two to three days before shipping. Some horses may require additional hydration in the form of intravenous or nasogastric electrolyte-balanced fluids. Although commonly administered in past years, antibacterial and anti-inflammatory medications are usually not recommended prior to departure to prevent illnesses. Take your horse's temperature prior to departure.

During the Trip

Traveling on large vans is typically less stressful for your horse. Unnecessary movement is minimized, and ventilation is optimal. Feed amounts of hay similar to your horse's usual daily amount. Monitoring his manure production during the trip is essential. Also, take note of his water intake and urine production.

Most people will ship straight through for trips up to 24 hours. If it is reasonable, a break at the halfway point can offer several advantages: It allows for a rest from standing on a moving vehicle and allow you to check your horse's temperature. Hand grazing or monitored turn-out allows your horse to lower his head and drain phlegm from his trachea.

If your horse develops a fever or shows signs of poor appetite or depression during the trip, consult your regular veterinarian for advice. Alert a veterinarian at your destination to prepare for a possible examination of your horse.

Arrival

Take your horse's temperature. It is not uncommon for horses to have a significant fever after a long trip. If a veterinarian is within easy reach, it is reasonable to wait an hour or two to recheck his temperature. If it has returned to a normal range and your horse is acting well, no further action is necessary other than monitoring his temperature for the next couple of days. If your horse's temperature is significantly elevated on arrival, and he is depressed and not eating, immediately contact a veterinarian. Similarly, if the initial fever does not subside within several hours, an examination is in order.



X. Competing

Taking Care at the Show

(By Bill Moroney, Chronicle of the Horse, www.chronofhorse.com. "Horse show Issues on the Radar Screen." March 10, 2006)

Two of the most dangerous situations at competitions are the use of cellular telephones while riding and operating motor vehicles around horses. Many cell-phone-dependent riders pay no attention to anything or anyone around them in the schooling arenas, on the riding paths and when crossing automobile traffic areas. Some just expect that you will watch out for them, and they don't have any responsibility for the situation. If you need to talk on your phone and you're on a horse, get out of the schooling area so that you are not a hazard to the rest of the riders.

We all have heard of near misses and accidents involving golf-cart and motorbike use. Thankfully, USEF has approved a rule that requires one to be of driving age to operate a motorized vehicle at a competition. With the exception of some parents who think it is cute to let their little children on their laps operate these vehicles, at least now we don't have to deal with unlicensed and untrained drivers.

Lastly, there is a group of equestrians within our sport who continue to look for the negative and propagate it while never getting involved in creating solutions to our problems. While this is certainly a very small minority, they are a cancer in our sport, and it is a shame that these individuals continue to spread misinformation throughout our industry. All too often these people speak without getting the facts correct and are not doing anything beneficial to our sport by acting in this manner. If you have a question about rules, initiatives, programs and governance in our industry, go to your equestrian organizations to get the answer, or go to a responsible and upstanding member of

the equestrian community for help. If you hear a rumor, let the buck stop with you. Don't spread anything you cannot take personal responsibility for saying. This way you won't be used by these people to further their negative agenda.

Here are four areas of concern at our competitions. The USHJA Horse Welfare Committee has been instructed by the USEF Board of Directors to bring a rule change forward regarding the welfare of the horse, encompassing all breeds and disciplines. Right now, the longeing issue needs to be addressed at all levels of our sport by all of us involved. A philosophy on the practice of longeing must be developed, accepted and supported by all equestrians. The use of cellular phones and motorized vehicles is solved by common sense, responsibility and awareness on the part of all equestrians. The ability to stop the chain of false information is very easy: Before you say it, be sure you can defend it and that you are willing to take responsibility for your words and actions. Just as with any issue in our sport, if we close our eyes to it, eventually someone will deal with it for us, most likely in a form that will impose restrictions on equestrians. We have many issues on the horizon, and now is the time to be proactive in creating solutions to the problems in our sport in order to stay involved in making the necessary changes.

On Longeing, and More

(By Bill Moroney, The Chronicle of the Horse, www.chronofhorse.com. March 10, 2006)

Joe Fargis and I were recently talking about the training of horses and their preparation for showing. Joe is disappointed by the misuse of longeing and rightly so. Longeing can be a valuable training aid when done properly, but today, for a growing number, it has simply become a way to wear a horse down to the point that he will obey the rider's commands. This has happened for many reasons. Foremost in my mind is that we now have so many horse shows on the calendar that many trainers end up teaching students to ride in the show ring. It used to be in the good old days that you trained at home and went to the show when your instructor felt you were ready to test your abilities against yourself and others.

In a busy and hectic world where people are always looking to blame someone else for a problem, no one component can be held accountable for this situation. It is the fault of everyone involved in the hunter industry. Trainers are responding to pressure from clients to show, judging must allow for some expression within a horse's performance and clients need to be patient when they are feeling peer pressure to wait until they are ready to securely negotiate classes in the performance arena. We have all seen those riders who make you gasp and hold your breath when they are going around the ring. How often when you see these riders do you comment on what a saint the horse is? How did he get to be that saint? We all hope it's because he's a wonderful, naturally quiet, well-schooled, compliant and patient soul, but often he's just worn out. Over-longeing horses causes them to lose their personality, spirit, character and soul.

There are all levels of longeing and virtually every trainer uses them, including myself. I learned long ago from training partner Chuck Keller, however, that even though good longeing can facilitate the training of the horse, it does not take the place of riding and having the horse understand and accept the use of the legs, seat, hands and voice. Proper longeing to let a horse warm up, cool down or play freely, to train and school a horse, is a good thing, but the infamous "longeing till death" (LTD) is not. And who are we delegating the responsibility for these horses when they are out longeing? Are we training our grooms and assistants in the proper methods of longeing horses? Just drive past any horse-show exercise arena in the early morning and you will see that many horses are not longeing in a manner that contributes to their training, but just being chased around, often on the cross-canter, until they say "uncle." The pressure on a horse's body and bone structure by improper longeing techniques is unnecessary and abusive. How can we expect these athletes to continue performing for any length of time when they are subjected to this strain? The torque created by hours of tight circling in often less-than-adequate footing will eventually destroy the longevity of the horse. Some of the most common results related to the stresses of improper longeing include injuries to the stifles, splints, navicular, ringbone and sidebone, as well as damaged ankles and knees from high-speed longeing and tight circles. If the horse is that wild, then he really is not ready to be at the show, or perhaps he may need a change of career.

It should also be noted that one of the best creations for enhancing a horse's condition, performance and rehabilitation, the horse walker, has now turned into all-night walk-a-thons at some barns. The horse walker was designed to help keep a horse fit and help an injured horse with its recovery. As it requires very little human interaction and is cost efficient, for some barns, the horse walker has evolved into a virtual robot that performs the duty of wearing the horse out.



Equine Management for the Long Run

(By Rachelle Wilhelm. In Stride. August 2009)

Want to keep your equine partner in top shape for as many years as possible? There's no time like the present to ensure that his competitive future is a long and healthy one.

Treat each horse as an individual

Each horse comes with his own personality, work ethic, and physical and mental ability. Therefore, it is critical to establish realistic goals that the horse can meet in an appropriate timeframe. "The key is relating to the individual horse and letting him dictate what he can do and how fast he can do it," Colleen McQuay of McQuay Stables explains. "To me, the very early stages in a horse's career are crucial to the longevity of the horse." Colleen and her husband Tim operate a training and breeding center in Tioga, Texas, where the focus is on hunters, jumpers and reining horses. Many of the warmbloods Colleen has campaigned throughout her lifetime have led successful careers well into their late teens and early 20s.

At their facility, the McQuays make it a priority to learn each of their horses' personalities so that they can be handled accordingly. They share a strong belief that before a horse is capable of learning; he has to be comfortable in his environment. "We really try to let the horses tell us who they are and what they need in order to be successful," Colleen explains.

"Each horse is different and requires a separate schedule. We make it a priority to get to know our horses and decide what they're capable of and how we're going to reach our goals with them."

Like the McQuays, Shelby French, the riding director at Sweet Briar College in Virginia, also places importance on evaluating her horses and knowing their backgrounds before deciding their career paths. "We don't want to reinvent the wheel with our horses," she says. "Most of them come to us with successful careers and we want to follow through on what has been working." On the other hand, if the horse comes with an issue, Shelby wants to be aware of it so she and her staff can address it and work through it. Knowing a horse's past, including the good and bad, makes it easier to shape his future.

Longtime hunter rider and trainer Streett Moore adopts the same philosophy in his position as director of riding at the McDonogh School in Maryland. "The main thing is trying to find that something that the horses and ponies can do, because if you can, they'll be great," Streett says. "If you like your job, you're going to be more successful and do well at it. It's the same with horses."

Evaluate career moves. Often horses are unable to fulfill the high expectations of their owners and trainers. Colleen points out that just because a horse doesn't fit into the program laid out for him doesn't mean that he isn't capable of achieving success. "As trainers, we have to identify with our horses and then direct them to a career or level [at which] they can be successful," she says. "It may be as simple as going to a lower height division, but it's important to find a level at which the horse can be mentally and physically comfortable performing. Some horses can't handle a lot of pressure mentally, even though physically they can handle it fine. In other horses, it's just the opposite. You have to really make sure you treat each horse as an individual," she continues. "If you identify the horse's personality and ability early on in his training, you'll be able to develop a program that will give him longevity. When he's comfortable and confident in himself, then he'll be successful," she notes.

Renowned hunter rider and trainer Peter Pletcher of Magnolia, Texas, also firmly believes in evaluating career moves based on the horse's capability. Peter currently has a successful barn of show horses ranging from pre-green horses to finished hunters preparing to compete in the United States Hunter Jumper Association International Hunter Derby Finals. "Every horse is different and their work ethic varies. Each horse wants to learn, but it's a bit of a game for us as trainers to decide how much they want and how far they can go," Peter says.

Make responsible decisions

Deciding the number of competitions in which the horse should be entered plays a vital role in managing his athletic career. While factors to consider vary, the points below should always be taken into account:

- The physical condition of the horse. Is he at peak performance, or is he just coming off a break? The more physically fit the horse is, the better equipped he'll be to handle the stresses of competition.
- The elements in which the horse will be competing, including temperature and humidity. The higher the temperature and humidity, the



Photo Credit: Whitney Allen

more of a strain the horse will feel.

- The type and condition of footing. Soft footing is more forgiving on a horse's legs and joints than hard ground.
- The height of the fences. The higher the jumps, the more effort the horse will have to put forth.

For Peter, the decision regarding the numbers of competitions in which to enter a horse depends on the individual. At his facility, he works closely with many amateur owners and riders. He often starts and shows young horses in the pre-green division and, once a horse is comfortable with his job, allows the amateur to show him as well. "I'm not at all against double divisions. I think a lot of horses do very well in them because allowing a professional to ride first sets the horse up to go nicely for the amateur," Peter says.

Colleen also shows her horses in double divisions, but only when the horse is ready to take on the extra workload. "When I reach a comfortable place in the horse's training, meaning that I know what he's capable of and what he can handle, I have no problem doing double divisions," she says. "I make certain that I adjust his fitness program and am careful in the schooling area to jump as few jumps as possible."

How much can a horse handle? Veterinarian Steve Soule says there isn't an exact answer, but the larger issue that owners and trainers should consider is the preparation each horse undergoes before competing in a class. "For example, while the typical hunter round might consist of eight jumps and take a total of a minute and 30 seconds to complete, the time leading up to the class is much more involved," Steve explains.

If conditions are favorable, it is recommended in the FarmVet USHJA Horse Welfare Guide to set a limit of four jumping classes of 3' or lower and three jumping classes at higher heights per day. "You just have to balance your show schedule," Peter adds. "The key is not to burn the horse out. Don't show week after week. Learn to balance your show schedule and your horse will have a long career."

School smart

Juggling the demands of a busy lesson program with a full horse-showing calendar, Shelby knows the importance of developing a schooling program that keeps her horses fit both physically and mentally without burning them out. "The majority of the horses that come to us have had a fairly significant amount of experience in the show ring and are generally in their prime or moving past that stage in their life," she explains. "So by the time they reach us, they have had some pretty significant wear and tear on their bodies."

Despite this mileage, Shelby and her staff are able to keep these horses in the lesson program and showing well into their teens and 20s. Along with nutrition and a proactive wellness program, she attributes her horses' longevity to a conscious effort not to overdo it in the schooling ring. "We manage their workload and keep them fit without jumping their legs off," she says. Even though they may show at a higher height, the college's horses only jump 2'6" or 2'9" at home. "You can do a lot of the work you need to using ground poles and cavalletti without putting the stress of jumping on the joints and ligaments," Shelby explains.

Peter incorporates the same philosophy into his training program. "I try to keep my horses on the flat as much as I possibly can," he says. "But it really depends on the individual horse and where he is in his training." A green horse might be schooled over fences three or four times a week, for example, whereas a "made" horse with a good mind will be hacked the majority of the week and spend one day going over fences. "No matter where the horse is in his training, it's important to me that I try and give him a day off," Peter adds.

Putting the horse first is what makes the difference between short careers and long ones, Steve points out. "Prolonging a horse's athletic career is very dependent on the trainer, the training methods used and the sensitivity to any issues the horse has in terms of medical problems and veterinary care," he explains.

Practice proper longeing

When done correctly, longeing to warm a horse up, cool him down or train him is beneficial. However, at horse shows across the country, it's not uncommon to see horses being chased around in circles until they're worn out so that a rider can control them under saddle. When regard for the horse's welfare is forgotten, longeing can easily turn into a dangerous exercise.

"Unfortunately, most of the grooms that are sent out to lounge horses are [not] knowledgeable," Steve says. "They're sent out there to whip the horse into a gallop, work him into a lather and then bring him back to the barn to tack up for the rider. Over the years, I think the definition of longeing has changed. There was a time when it was a training method, but now it is a means to run a horse to fatigue. Therein lies an abuse and a significant contribution to shortening a horse's career."

To make matters worse, at many venues across the country, the footing in longeing areas isn't up to par. "There's tremendous discussion about the footing in the grand prix ring, but the longeing areas where the horses are asked to gallop in tight circles have some of the worst footing," Steve comments. "From a mechanical standpoint, galloping around in small circles is very stressful on various parts of the horse's body and limbs. The horse is put into an asymmetrical exercise frame and his outside limbs are stretched while his inside limbs are com-

pressed. That's very stressful to the body. There's no doubt that a horse has to be able to travel in balanced circles in order to perform his job, but doing so for prolonged periods of time in one direction disturbs his body and stresses his limbs."

Prevention is the best cure

Barns that keep horses competing successfully for years develop a nutrition plan and wellness program that fit each individual horse's needs, also abiding by safe medication practices. To keep a horse competing at peak condition, Steve recommends developing a detailed wellness program with the help of a veterinarian. A typical wellness program includes the following:

- Semi-annual physical examination
- Vaccinations
- Deworming program
- Nutritional counseling

A semi-annual physical examination allows the veterinarian to identify health issues before they become serious. Horses at McQuay Stables receive a minimum of two physical examinations a year. "All of my horses see the veterinarian before going on the winter circuit and then are checked again in June or July," Colleen says. "I don't want to be caught with any surprises while on the road."

The owners and trainers who keep their horses going the longest are proactive, Steve says. "The bottom line is, if your horse broke yesterday and you call me out tomorrow, it's too late," he explains. "You need to be conscientious about your horse, his way of going, his personality [and] his body, and be in tune to any subtle change. It's the owners' and trainers' obligation to notice any irregularity in their horses and have a veterinarian examine them."

To go along with the semi-annual physical examination is the administration of vaccinations. Vaccination requirements are dependent on locality, how often the horse travels and the venues to which he's shipped. "Your local veterinarian will be able to assist you in laying out a vaccination schedule," Steve says. For horses that are actively showing, inoculations for equine influenza and equine herpes virus are essential. Vaccinations for West Nile virus, Eastern and Western encephalitis, tetanus and rabies are also a priority.

Establishing an effective deworming program also varies depending on the management and set-up of a facility. "A horse living with 10 other horses on a 20-acre field will need to be wormed more frequently than a horse sharing a 150-acre field with 10 horses," Steve explains. One way to customize a deworming program is to do periodical fecal counts, and when egg counts appear high, deworm the horses.

"When it comes to designing vaccination and worming programs, it's important to look at your own personal situation and devise a plan that best suits your horse's needs," Steve says.

As an athlete, the horse's nutritional needs play an important role in keeping him at peak performance. While there are many products on the market that offer to keep a horse at the highest level of competition or take him there, Steve cautions against feeding a horse just anything off the shelf. "The way our nutraceutical industry works in this country is that what a company says is in the package and how much they say is in it, doesn't have to be true," he says. The companies that produce these products aren't monitored by our government's Food and Drug Administration. "We feed our horses all of this stuff, and we don't know what it is or even how it works," Steve says. "If a healthy horse receives good-quality hay and grain, and perhaps in hot environments, electrolytes, and, in places deficient in vitamins, some supplementation and a good-quality joint supplement, he shouldn't need anything else."

If a decision to supplement a horse's diet is made, the best choice is to go with a reputable company that has voluntarily done its own research so that the label on the product matches its contents. Joint supplements are often the most popular in the sport, and one supplement on the market has been tested to show improvements in the horse. "A good-quality glucosamine supplement has definite research to support that it does in fact help the horse's joints," Steve says. "But again, the caveat is that you don't always know what you're buying and you may unknowingly buy supplements that put you in violation of our federation's rules."

Another area of concern related to a horse's athletic career is the rampant use of medications. Currently, horses are allowed to compete with two nonsteroidal anti-inflammatory drugs and one steroidal medication such as dexamethasone. Steve cautions against using too much medication and states that two NSAIDs aren't better than one. "One NSAID can decrease inflammation and improve soundness, but two doesn't double the effect," he says. "We need to be careful that we're not using drugs to manipulate the horse, because all of these medications have detrimental effects on the horse's career. They're masking pain and suppressing the immune system, causing gastrointestinal ulcers—and the steroidal drug dexamethasone has the potential to cause laminitis."

Over the years, Colleen has learned how to maintain her show horses without overusing medication. She has found a variety of alternative therapies to keep her horses sound enough and fit enough to perform at the top level. These include Back on Track equipment and Niagara Equissage to promote blood flow and soothe muscles, and a form of hydrotherapy to keep the horse's neck and back muscles loose and work-

ing properly. “I’ve had junior and amateur jumpers that were 17 and 18 years old. When I got them at age 12, people thought their career was done,” she says. “I’ve dealt with horses that have flunked veterinary exams or came with soundness issues, but by keeping them fit and being consistent in your practices, you can keep them happy and sound in their job for years.”

Let the horse be a horse

Providing adequate downtime for a horse to regroup mentally and physically plays a vital role in prolonging his career. Each horse requires a different schedule to balance the demanding workload of competing with appropriate rest periods. “As a culture, I think we’ve gotten into the mentality that just because there’s a horse show every week, we have to be there,” Steve comments. There’s no argument that providing a break in a horse’s schedule is beneficial. “Their stresses are multifold. There’s the stress of transportation to and from events, medications, schooling and competing, to name a few. Having a real vacation for a couple of weeks is certainly a stress alleviator,” he explains.

Setting aside time for breaks in his horses’ schedules is important to Peter. His horses receive a six-week break each year, starting in December, and get additional time off during the show season, as well. “The horses that are showing heavily and go to the most shows are forced to skip a couple of shows throughout the season,” Peter says. The veteran horseman explains that the time off lets the horses come back to their work with a fresh perspective.

While the McQuays also provide breaks for their horses throughout the year, they never take the horses completely out of work. “Consistency and fitness are crucial to soundness and mental health,” Colleen says. When her horses receive a break in their schedule, they’re still ridden but stay on the farm and receive more turnout time. “We try to keep the horses physically fit to create that longevity, even though we’re not taxing them mentally. We just spend 20 minutes going over our ABCs and making sure they’re fit.”

Peter attributes his horses’ wellbeing to breaks and ample turnout time. “Turnout has so much to do with the horse’s mental health. Horses are wild animals and need to be able to put their heads down and roll,” he says. “I’m a firm believer in letting horses be horses.” Keeping that mentality in mind will go a long way towards ensuring that a horse is happy and successful in his career.

How Many Classes

(By Glenna Wirtanen)

Things to consider when filling out your horse’s entry blanks:

- What kind of condition is your horse in? Is this his first show of the season, or has he been showing regularly?
- What will the expected temperature be? How high will the humidity be?
- What about the footing? Is it in good shape or rock hard?
- Will the horse be ridden by a professional, or a novice who will be banging on his back and hitting him in the mouth?
- How high will the horse be jumping? 2’6” or 3’6” or higher?
- Will your horse be standing on a trailer all day, or will he be in a stall where he can better relax?

You may wish to think about a limit of four jumping classes of 3’ or lower and three jumping classes for higher height classes if conditions are favorable for one day.

Try to take these things into consideration when entering your horse and just don’t put him in just any class because he’s eligible.

The Measure of Success: Looking to improve the system? Keep equine needs in mind.

(By Whitney Allen, In Stride. June 2008)

It is probably safe to say that playing a word association game with an equestrian would render different results than playing one with a non-equestrian. If I said “boots,” you might say “breeches.” “Leather” might lead to “chaps,” and “mane” to “tail.”

What if I said “horse welfare”? Chances are you would not say “success.” However, for people who make their living in the horse industry, “success” should be one of the first things that comes to mind when they hear the words “horse welfare.”

Announcers, judges, stewards, show secretaries, exhibitors, owners, trainers, veterinarians and managers are all part of an intricate production setting the stage for success. Success is the driving force that keeps us motivated. So the question becomes: “How do we measure the success of our sport if success is synonymous with horse welfare?”

Thirty years ago, competitors traveled circuits in their respective areas. On the East Coast, there were particular competitions that were considered special, such as Devon, Upperville, Chagrin Valley and Bloomfield Hills. These shows were important due to the level of competition, the show standards, respected officials and organizers. How well a horse performed at these competitions was its measure of success, not how many points it earned by the end of the year. Times have changed, and so has our sport.

The Bottom Line

Today, success seems to be rooted in the bottom line: How much money a show manager earns, the number of competitions at which a judge officiates, how many points a horse earns, how many clients a trainer has and how much money an owner received for his or her horse. These are all achievements used to determine the success of each of the players in our sport. In order to ensure a successful bottom line, you need to have a balanced budget. Looking at all these examples, there is something missing in the equation: the welfare of the horse. It goes without saying that the omission of the horse would leave us all in the red. So why are we creating a new culture without first considering our most valuable commodity?

The answer to this is simple. Each aspect of our sport has found a way to make money, which is how society measures success. In so doing, the needs of the horse have been shortchanged. This sport has evolved to a place where the checks and balances we find in each other are on the brink of extinction and the victim is the horse's welfare. The solutions to our problems are neither easy nor clear. Our industry has gone through a cultural change and the result is a competition system diluted by point chasing and financial gain.

As United States Hunter Jumper Association President Bill Moroney comments, "Our sport is driven by a series of factors. One factor is the amount of shows we attend. The owners spend a considerable amount of money to participate in this sport and expect to get the opportunity to show, especially during the circuits comprised of a series of shows. By showing horses every week, nobody gets a break, whether it's horse or human.

"Another factor is the amount of money showing brings in for the trainers and competition managers," he notes. "They're excited because the profit margin increases. Our shows now offer a wide range of classes that allow trainers to bring all their customers to the same competition. This sounds great from the standpoint of consolidation, until you add the aspect of qualifying for major competitions into the mix. Qualifying keeps horses and humans on the road week after week with little down time to refresh, retrain and stay sound. Riders can never be exactly sure of how many points or how much money it will take to participate in these major competitions, so they feel compelled to stay on the road.

"I don't think the exhibitors are aware that they were active participants in creating our current system," he continues. "I remember attending annual conventions where exhibitors wanted more classes to be offered at 'AA' shows than at 'A' shows because they wanted to be able to get more points at the then-relatively few 'AA' shows. It wasn't managers who pushed this; it was exhibitors. Today, we have many more 'AA' competitions and we haven't thought about what this means with regard to the number of classes in which we show and how much we are driven by points to show our horses. We have not kept pace with the changing culture of our equestrian community, and the subsequent effects to horse welfare rest on everyone's shoulders."

A Two-fold Problem

Andrew Ellis, show manager and chairman of the United States Equestrian Federation Safety Committee, weighs in on the issue: "I think sometimes the prize money requirements force managers to offer more and more classes to carry the weight of the lighter divisions," he says. "Under the current competition requirements, in order to be financially sustainable, a show has no choice but to fill the schedule with as many choices as possible. I find this very frustrating. I can provide a nice, well-run competition, but at times I am forced to offer more classes or to cut corners in order to try to offset the loss on divisions such as the regular working hunters. The real moneymakers are going to be the children's and adult amateurs, and I have always felt that the children's and adult-amateur prize money should be allowed to count towards the 'A' rating.

"It is a two-fold problem, and show managers are a part of the equation," he goes on to say. "One of the reasons some show managers are having problems is [the] current rating system and the expense of producing a competition. The other issue we need to address is our competition calendar, so that when there are bad horse shows, competitors actually have a choice. The mileage system is too restrictive in many states and people are forced to go to horse shows with bad footing or bad accommodations for their horses. There are several horse shows that have perfected their dates so that the competitor has no choice but to chase points at horse shows where they jeopardize their welfare and their horse's welfare with substandard conditions. There are definitely competitions that I would consider substandard, where they don't even drag the ring all day.

"I think the whole system is flawed," Andrew maintains. "Look at the very real issue of the mileage rule and horse welfare. If you are a customer choosing to eat at a restaurant and Jack's Café is the only option in town, you have to eat there. But every time you eat at Jack's, you get food poisoning. Is this fair to the consumer? No, it's a monopoly. I believe the mileage and license restrictions are important, but there has to

be some relaxation in the mileage rule simply for the benefit of improving show standards. Otherwise, we need stricter rules and enforcement at the horse shows to protect the competitors and animals.”

Outgrowing Itself?

Our current system of measuring success and the paths competitors must take to achieve their goals are flawed. Mindy Darst, ‘R’ USEF judge and chairman of both the USHJA Pony Hunter Task Force and Zone 5, feels we must find a way to overcome these flaws. “My pet peeve with the system is the number of horse shows trainers are obliged to go to in order to qualify for equitation finals, indoors and Devon,” she begins. “Time doesn’t allow us to be trainers anymore. I think there is a huge flaw in our system because we don’t stop horse showing long enough to teach riding anymore. I see more and more trainers over-preparing horses for inexperienced or unskilled riders, and fewer and fewer teaching.

“The problems in our competition system and the ways it has affected horse welfare appear to be deeply rooted,” she continues. “However, when you look closely, it may just be a matter of our sport outgrowing itself. It is good that our sport is flourishing. Horse show managers offer more and more classes and open more and more rings to meet the growing demand and growing numbers of horses at the competitions.”

Which brings us back to the mileage rules. Mindy agrees with Andrew Ellis that there is a need for some relaxation of these rules; she also sees these rules as outdated. “We need to get back to competitions that are spectator and exhibitor friendly, like Chagrin Valley Hunter Jumper, a delightful one-week show with only three rings, tons of history and special events for spectators, and reasonable days,” she remarks. “I’m tired of feeling pressured to do back-to-back shows or endless circuits or face the consequences of stalls in bad locations or no stalls at all. We get pressured into circuits for stabling, for points and for circuit awards. Before you know it, the horses are showing weeks on end without a break. Without competition, horse show managers can accept a ridiculous number of horses and run too many rings over too [many long] days. Everyone is tired and frustrated. Is anyone having fun?

“When the mileage rule started, I don’t think there were enough horses to go around,” she explains. “Now we have horse shows with 700 or 800 horses that used to thrive with 300-400, and we spread ourselves thin and compromise the quality of our training because we spend our days running back and forth to five or 10 or 15 rings. We used to be able to offer more quality to our horses and owners when we only had to train at two or three rings. When quantity overtakes quality, ultimately everyone suffers.”

Taking Responsibility

It is easy to blame managers, governance or even exhibitors for those problems in our system that ultimately places our horses in harm’s way. What needs to be understood is that everyone plays a role and everyone has a responsibility to make improvements. Trainers are no exception; we place our trust in our trainers to educate owners and riders.

Mindy believes that regardless of the pressures, trainers need to make a choice. Unfortunately, a lot of trainers are being forced into making bad decisions. “We are living in a time when a lot of people want to show horses and win ribbons and succeed without really putting in the necessary time and work,” she says. “I feel that if we don’t go to every show our clients want to attend, or if we expect to work through a horse on a fresh day, if we push riders to be top athletes, chances are they’ll go ride somewhere else.

“So you have to make a decision. Either you are going to give in and just be a cheerleader or you are going to be teacher, set perimeters and face the consequences. Nobody wants to lose a customer, because that’s our livelihood. But when stroking the customer replaces teaching the rider, oftentimes the one that pays is the horse. When the rider has unrealistic goals or is incapable [of] or unwilling to deal with any imperfections in the horse’s performance, trainers must resort to over-longeing, overmedicating or over-training the horse. Then clients add fuel to the fire by insisting on participating in too many shows and in too many classes.”

Finding a Balance

Exhibitors, owners, trainers and managers must find a balance. In reality, our system has evolved into a factory-like environment, which ultimately harms the animal. Dr. Stephen Soule, Federation Equestre Internationale veterinarian and member of the USHJA Horse Welfare Committee, has some thoughts on how the seemingly endless cycle affects our equine partners.

“There are a whole lot of horses, whether at the grand prix level or otherwise, [that] see the tack coming and know they are going to the ring for the 12th or 14th week straight,” he says. “One thing that we know is how horses express themselves. In recent years, we have become increasingly aware of the development of gastric ulceration in horses. We do not know if it was as prevalent a decade ago, but it probably was. One study showed that 45% of horses [that] presented with a complaint of alteration in performance had gastric ulceration seen on gastroscopy. It was not colic, it was not weight loss; it was just that their performance had changed. “Forty-five percent is a significant number; it’s real and has been proven in studies and noted in veterinary literature. They didn’t bow tendons, they didn’t get vascular disease; they just got very sour or performed badly because their stomachs hurt.”

The system failures with which we are faced are a vicious cycle with no clear beginning or end, and equine suffering at each pass. How do we break this cycle of over-prepared and over-shown horses, point chasing, too many classes and too many competitions? Each aspect of the problem needs a readjustment. As much of the problem starts at home, we need to provide trainers with a formal education. The USHJA will be launching a Trainers Certification Program that offers three levels of certification using a detailed and defined curriculum. This will provide owners and riders with a means of measuring the education of their trainers, as well as providing trainers with a unified front in educating their clients.

Also, the system in which our horses qualify for national championships and qualifying events needs review and adjustment. We need to take a long, hard look at the way our industry measures success in the show ring. If a horse goes to 40 shows a year, chances are it will be in the Horse of the Year standings; but is that horse really a true “horse of the year”? Sometimes, yes, the best horse wins. However, often it is the horse with the most points that wins and not the better horse that was ridden and trained by a true horseman who is conscious of the horse’s needs as an athlete.

An examination of our HOTY awards must occur. Perhaps a new system that provides true head-to-head competition at one national hunter and jumper championship is warranted. This event would crown national champions who would wear this title for the entire year. Qualifying for the national championship might be weighted using the quality of the horse show, the number of exhibitors in a class and the amount of top-placing ribbons a horse earns.

Time for Change

The USHJA has formed a Hunter Restructure Committee to examine the flaws in our current system and present possible solutions. Altering our system would not be too difficult, but it would require some changes in the way we look at how success is measured. The way competitions earn their ratings would need to change, requiring stricter standards. It would be necessary to revamp how prize money relates to division and show ratings, as well as to restructure the current mileage rules in certain areas.

Another area where change might be considered is the way in which we determine the divisions for which our horses and riders are eligible. A novice rider should not be able to win a national championship in the Regular Working division just because the horse is prepared to “point and go.” The need for a return to horsemanship in our sport should be incorporated into this new system.

This system change would also require a change in the way managers are granted competitions and how they manage a horse show. Currently, there are relatively few actual standards a manager has to meet other than being a USEF member and applying for dates. Managers hire our judges, stewards, course designers and veterinarians, all of whom are required to be licensed in their fields. So why not require managers to be licensed? This license should require a manager to have fundamental knowledge about horses and what affects their welfare.

A manager that only hires one steward because that is all that is required neglects to see that if his or her one steward is in the show office checking entry blanks, no one is monitoring the grounds and being a steward for our horses. One could argue that this particular example is the fault of governance for only requiring one steward. This is true, and just another example of how interwoven our system is and how deep the need for change.

While there is no expectation that all this change will happen at once, there should be the expectation that everyone in this industry needs to look beyond his or her own back yard to find the solution. The saying “think globally and act locally” is not just for politics and the environment; it holds true for the horse industry as well. Our sport is growing rapidly and each day we reach more and more equestrians working towards common goals.

This is an exciting time for our sport, and the idea of changing our system while maintaining core values of horsemanship and tradition should be at the forefront of everyone’s mind. Now is the time to take action and embrace education at all levels. This industry as a whole needs to take responsibility and choose the right path, as it stands at a crossroads.

With every step we take towards a better future, the first and last question we need to ask ourselves is: “How can we make our industry better for our horses?” If each person involved in our sport did that every day, the solutions to our problems would reveal themselves. We have to remember that in order to balance our budgets and to achieve success, we must factor in our most valuable asset: our horses.

Competing in the Heat

(By Mark Baus, DVM, In Stride. April 2007)

With the summer months approaching, it is useful to review some basic methods of dealing with the heat while competing at horse shows. The horse evolved over time to cope with the vast extremes of temperature that exist on the great plains of the world. If the horse is simply provided adequate nutrition, dealing with cold temperatures is not a problem. Dealing with summer heat, while performing as an athlete, is another story.

Horses generate huge amounts of heat from their muscles while undergoing physical exertion. Most of this heat is dissipated from the skin in the form of evaporative cooling [sweating] along with increasing circulation through the skin to provide further cooling. Although horses are well adapted for most activities during severe heat, it is important to consider several things to prevent and treat overheating and heat stroke.

The first consideration is determining activity levels based on temperature and humidity levels. By adding temperature and humidity, the heat index can be calculated and standards for activity can be set.

Most levels of activity for a heat index under 130 [e.g. 70 F & 50% humidity] are not a significant challenge to the horse's ability to regulate body temperature. As the heat index approaches 150, especially as humidity exceeds 75%, the horse's cooling mechanism becomes significantly limited and activity levels need to be monitored closely. As the heat index exceeds 180 [e.g. 95 F & 90% humidity] all activity should be significantly limited or even postponed.

Although electrolyte administration is widely used in the horse world, the need for them is minimal if a high quality hay and premium grain formulations are fed consistently. Most electrolyte supplements are high in sugars to enhance palatability and to allow them to be added to the drinking water. I am reluctant to add electrolytes to the water since it may inhibit water drinking and it is also difficult to determine the exact amount they ultimately receive. Electrolytes are best used at manufacture's recommendations and only during periods of added heat and activity.

At horse shows, it is important to provide your horse with shade, especially during periods of inactivity. Since most horse's skin is heavily pigmented, the sun's rays contribute significantly to heat build-up during hot weather. It is also important that horses have access to drinking water. If your horse has been significantly exerted it is okay to allow water drinking to avoid the complications of dehydration. In addition to drinking water, water for bathing and cooling should also be provided for added cooling when necessary. When at rest, each horse should have access to 2 buckets of clean water at all times. If electrolytes are added to the water, make sure it is added to only one of the two water buckets to give the horse a choice of drinking from either bucket.

Although it is important that our horse's performance be kept at optimum levels for competition purposes, protecting their health and well-being during hot weather is always the principle concern. Recognizing early signs of heat exhaustion and heat stroke is critical. Most riders and trainers are adept at monitoring their horse's response to exertion by watching respiration and overall vitality. As heat levels are rising during periods of activity, the horse's cooling mechanism is challenged and they will attempt to dissipate heat with increased respiration. This may be the first sign that the horse is no longer compensating for overheating.

Signs of impending heat stroke are critical to recognize:

- Body temperature in excess of 104 F.
- Rapid breathing and elevated pulse.
- Weakness and depression.
- Refusal to walk or eat.
- Dry skin.
- Total collapse.

If your horse is showing signs of heat stroke, it is important to take the body temperature as soon as possible. The normal body temperature ranges from 99.0 F. to 100.4 F. As the body temperature exceeds 102 F, it will become necessary to provide additional cooling quickly. Cold



Photo Credit: Mark Wyville Photo

hosing or ice packing at sites of major blood vessels will be helpful. This would include the jugular veins along with the blood vessels on the insides of each limb. If heat stroke is suspected, drenching the body with water will provide immediate cooling to lower the body temperature effectively.

It is important to call your veterinarian at the first sign of heat stroke. As heat stroke develops, blood flow is shunted away from the intestines and vital organs so the potential for catastrophic effects increases dramatically if the body temperature is not brought down to normal quickly.

Since sweating is the horse's primary method of shedding excess heat, it is important that your horse's ability to sweat is constantly monitored. Anhydrosis, a disease in horses that limits sweating, is seen fairly commonly in the southern states but it can affect any horse during hot weather. Veterinarians have tried many therapies to treat this disease but the key to dealing with anhydrosis is early recognition. Many of these horses are simply not able to compete during hot weather conditions.

If your horse is in a good health and good physical condition, it is unlikely you will encounter a significant problem with hot weather. The key factor avoiding heat related complications is simply using common sense to determine the proper level of activity for your horse. In my experience at all levels of horse shows, riders are more likely than horses to succumb to the effects of competing in hot weather. If conditions are too rigorous for the competitors, it is likely too much for our horses as well.

Mark R. Baus, DVM, graduated from veterinary school in 1981 and joined Dr. Rick Mitchell in practice in the Fairfield/Winchester Connecticut area. He is a member of the ethics committee for the American Association of Equine Practitioners. Steve Soule, DVM, is a 1973 graduate of the University of Pennsylvania School of Veterinary Medicine. His practice in Wellington, Florida, is limited to performance horses. He often officiates as a veterinary delegate at FEI dressage and show jumping competitions.





USHJA OWNER'S RESOURCE GUIDE

OWNER'S RESOURCE GUIDE

The USHJA Owners Committee created the Owner's Resource Guide, which is designed to help you, as a horse owner, make educated decisions and assist you in enjoying your experience with horses. This guide supports the vision that the welfare of the horse is paramount in our sport and an educated and engaged owner has a role in assuring this outcome.

TABLE OF CONTENTS

I. Horse Welfare Code of Conduct	1
II. Sales Integrity Program	1
III. Rewards of Horse Ownership	4
IV. Selecting Trainers and Other Professionals	5
V. Purchasing Your First Horse	5
VI. Owner's Show Expectations	6
VII. Organization Obligations	7
VIII. The Older Horse	8

I. HORSE WELFARE CODE OF CONDUCT

The USHJA expects that every person involved in showing horses adhere to the USHJA's Code of Conduct for the Welfare of the Horse:

Horses are one of only a few animals used as athletes, often required to undergo extensive training before reaching their physiological or psychological limits as competitive individuals. Under these circumstances, decisions about horse welfare may be strongly influenced by the potential benefits to the rider, the owner or trainer. Therefore:

- All equestrians must acknowledge and accept that at all times the welfare of the horse is the first priority and must never be second to competitive or personal commercial influences.
- The well-being of the horse takes precedence over the demands of trainers, riders, owners, organizers, sponsors or officials.
- Competition management must always consider the horses' welfare relative to the competition and schooling areas, ground surfaces, weather conditions, stabling, equipment and other related site safety issues.
- Adequate provisions must be made for ventilation, feeding, watering and maintaining a healthy environment when horses are stabled on competition grounds.
- In the interests of the horse, the competence of the rider is considered essential.
- The highest level of veterinary care available must be provided at all levels of competition.
- The USHJA will establish adequate controls in order that all persons and bodies respect the welfare of the horse.
- Emphasis will be placed on increasing education in training and equestrian practices and promoting scientific studies in equine health.
- The USHJA urges its membership to pursue the highest level of horsemanship by continued education through clinics at all levels. The USHJA Horse Welfare Committee is dedicated to bringing the best horsemanship ideas together, throughout the United States, in an effort to promote understanding and fair treatment of horses at every opportunity.

II. SALES INTEGRITY PROGRAM

The mission of the USHJA Owner's Committee Sales Integrity Program* is to educate and recommend standard practices for the sales and leasing of hunters and jumpers. The program is designed to help owners feel informed and confident in the sales process. The foundation of the program rests on owner's education concerning full disclosure, dual agency, and comprehensive documentation.

FULL DISCLOSURE

The intent of the USHJA Sales Integrity Program is to encourage the provision of full disclosure about the background of a horse, while at the same time recognizing and protecting the rights of both buyer and seller to privacy. At issue is the importance to some buyers to know all parties that might have an equity interest in the horse, commissions being paid in addition to the buyers or sellers agent and the identity of the seller. In the interest of full disclosure all sellers should encourage their agents to reveal all information about ownership or commissions being paid to other parties. The sample bill of sale in this guide supports this expectation.

DUAL AGENCY

“Dual Agency” refers to the practice of an agent accepting a commission from the buyer for purchasing a horse on the buyers behalf and also accepting a commission or other commercial benefit from any party involved in the selling of the same animal, without disclosing this practice. Any dual agency should be disclosed in your bill of sale.

DOCUMENTATION

1. AGENCY DISCLOSURE AGREEMENT

Use of an Agency Disclosure Agreement

If you use your trainer or another professional to help you purchase a horse you should have a signed agency agreement that specifies what each person is responsible for. This agreement protects both you and your trainer or the professional who acts as your agent.

2. WRITTEN VET REPORT

Owner should discuss firsthand and with their trainer the pre-purchase veterinarian's findings and the projected serviceability of the horse. Owner should also have a written vet report in their possession before transferring funds.

3. BILL OF SALE

The Owners Committee urges buyers, sellers and their agents to use a bill of sale including:

- A full description of the horse.
- A list of all commissions and agents involved in the sale.
- We would also urge buyers and sellers to understand the ramifications of the “as is” clause, insure that the seller can warrant that:

(a) he has full power to sell the horse;

(b) title to the horse is free and clear from liens and is unencumbered.

- We would also urge buyers and sellers to understand if other commissions or other remuneration have been paid.

Sample agreements are available for both the buyer and seller at www.ushja.org

MEMBERS ETHICS STATEMENT

Membership in USHJA is open to any individual having an interest in equestrian sport and to any organization that conducts equestrian competitions or other programs or events in the sport on a local, regional, or national level. As a condition of membership in the USHJA, members agree to comply with the USHJA Member Ethics Policy contained herein.

USHJA Member Ethics Policy

As members of the USHJA, we recognize our role in furthering the hunter and jumper sport by holding ourselves to the highest ethical standards. We further agree:

- To adhere to the rules and standards set forth by the USHJA and the USEF and to work to further their goals and objectives.
- To ensure that the welfare of the horse is the foremost consideration and that every horse shall be treated humanely, with dignity and compassion.

To conduct all business affairs with transparency and accuracy to promote confidence among all equestrians and the public in the hunter/jumper industry.

SALE SUPPORT COMPANIES

In addition to support from the professional trainer there are companies that provide comprehensive sales and leasing assistance. Their services include documentation, escrow accounts, due diligence research, legal and insurance assistance, and various other services to aid in the sales process. * In December of 2004, a task force from the Thoroughbred Owners and Breeders Association (TOBA) led by W. Cothran “Cot” Campbell presented their recommendations for a Code of Ethics to cover the sales and auction markets for thoroughbreds in the US. They incorporated this Code of Ethics in a package called the Sales Integrity Program (SIP). The USHJA Owner’s Committee would like to thank the Thoroughbred Owner’s and Breeders Association for their leadership and assistance in this Sales Integrity Program.

SAMPLE DOCUMENTS

BILL OF SALE

This BILL OF SALE is to certify that on the ____ day of _____, 20____, _____ (“Seller”) has sold the horse described below and called _____ - _____ to _____ (“Buyer”) for the consideration of the purchase price of \$ _____.

[Insert a full description of the horse, by including color, gender, height, markings, tattoos, or other distinguishing characteristics, and registration number(s), or by reference to and attachment of a copy of relevant passport pages or registry papers as an exhibit to the Bill of Sale.]

BUYER AND SELLER MUTUALLY AGREE AS FOLLOWS:

- 1) Seller warrants that (a) he has full power to sell the horse; (b) title to the horse is free and clear from liens and is unencumbered; and further, (c) he will defend the same against the claim or claims of persons whomsoever.
- 2) Seller makes no additional express or implicit representations as to the soundness, health, conformation or fitness for particular purpose of the horse and Buyer accepts the horse “as is.” Buyer has had the opportunity to have a pre-purchase exam performed by a veterinarian at Buyer’s option and expense.
- 3) The risks and responsibilities of ownership shall transfer to Buyer as of the signing of this Bill of Sale.
- 4) Transfer of title to the horse shall be conditioned upon, and effective as of the date of, receipt by Seller of funds in the amount of the total purchase price.
- 5) This Bill of Sale represents the entire agreement between the parties. No other agreements or promises, verbal or implied, are made or included unless specifically stated in writing and signed by both parties.
- 6) No commissions or other remuneration have been paid in connection with the sale described herein other than to agents listed below.
- 7) This Bill of Sale, the enforcement and interpretation hereof, and the transactions contemplated herein shall be governed by the law of the State of _____.

Date	Date
Signature of SELLER	Signature of BUYER
Address	Address
Phone	Phone

AGENT DISCLOSURE AGREEMENT

THIS AGENT DISCLOSURE AGREEMENT (“AGREEMENT”) is executed and made effective as of this ____ day of _____, 20____, by and between _____ (“AGENT”) and _____ (“BUYER”).

RECITALS:

- A. Buyer is a prospective buyers of a horse(s) at _____ suitable for _____.
- B. AGENT is an independent contractor who has expertise in the horse business, including the purchase and sale of horses and who desires to act as BUYER’S agent in the purchase of certain horse(s).
- C. BUYER is willing to retain the services of AGENT as a buyer’s agent, subject to the terms and conditions set forth herein;

NOW, THEREFORE, for good and valuable consideration set forth below, AGENT and BUYER hereby agree as follows:

1. AGENT acknowledges that AGENT acts as BUYER’S fiduciary with respect to its obligation under this AGREEMENT. The following acts or omissions, but not limited to these acts and omissions, shall constitute a breach of AGENTS fiduciary duties to BUYER: (a) communicating any false or misleading information to BUYER regarding any horse under BUYER’S consideration as recommended by AGENT; (b)

BUYER has been offered for sale; (c) entering into any other agreement with any person with respect to any transaction involving the sale of a horse to BUYER, other than an agreement which has been fully disclosed to BUYER and which BUYER has consented to in writing; or, (d) failing to disclose to BUYER any ownership interest of AGENT in any horse BUYER has under consideration; (f) otherwise acting in any manner contrary to the best interests of BUYER.

2. AGENT further acknowledges to BUYER that AGENT understands his duty to disclose to BUYER any adverse interests AGENT has in a transaction concerning the subject matter of this AGREEMENT, including but not limited to disclosing any other person AGENT is acting on behalf of and any compensation AGENT is being paid. Accordingly, AGENT hereby declares that: [INITIAL THE APPLICABLE PROVISIONS]

(i) AGENT is employed by the following person(s) in a transaction concerning the subject matter of this AGREEMENT and is being paid the following compensation \$ _____ : or _____

(ii) AGENT is not employed by any other person in a transaction concerning the subject matter of this AGREEMENT and is not being paid any additional compensation other than that expressly mentioned in this AGREEMENT; or

(iii) AGENT has a _____ % ownership in the horse.

3. AGENT remuneration, unless otherwise disclosed in this AGREEMENT, for AGENT'S services in connection with the purchase of any horse by BUYER during the term of this AGREEMENT shall be a commission of _____ percent of the purchase price of the horse, such commission to be paid by BUYER to AGENT upon completion of the purchase transaction as detailed in the conditions of sale by the auction company. Agent shall be paid _____ per day and up to _____ for expenses by BUYER for advice during the term of this Agreement, notwithstanding whether any horses are purchased by BUYER.

4. AGENT further acknowledges that failing to disclose and receive consent from BUYER for any adverse interest AGENT may have a transaction concerning the subject matter of this AGREEMENT, including but not limited to acting as a dual agent, may constitute fraud and subject AGENT to civil and criminal prosecution.

5. BUYER hereby retains the services of AGENT as buyer's agent for the purposes of locating a horse(s) meeting the specific requirements of BUYER and negotiating the terms of any purchase by BUYER.

6. AGENT shall use AGENT'S best efforts on behalf of BUYER to locate a horse(s) and to assist in the purchase of such horse(s) desired by BUYER at the lowest price that can be obtained at the lowest price offered by the seller(s) thereof.

IN WITNESS WHEREOF, the parties have executed this AGREEMENT, effective as of the date first written above.

AGENT: _____ BUYER: _____

III. THE REWARDS OF HORSE OWNERSHIP

To the casual observer, the rewards of owning a horse may not appear to be numerous. For those of us who have had the honor and privilege of ownership, we know differently. Whether you have owned one or 100 horses, know that the rewards of this great partnership between human and equine are often too great to list and often too moving to express.

For children the true rewards may not be seen until later in life when they look back on their youth and fondly remember the long hours at the barn grooming, bathing, feeding and spoiling their friend. They will look back on those times and see how much ownership of their horse or pony shaped their adult lives. Horse ownership will teach responsibility and priority management. Children will learn to appreciate the people around them that help make their dreams a reality.

For the adult owner the rewards are similar, but often felt more deeply. Between a career and often a family, it may seem to some adults that there is no time for anything else. When you own a horse you make the time. You make the time to ride, groom, and care for your new family member. Time with your horse is time that often cannot be explained to anyone who has never owned a horse. It is the serenity, challenge and reward of time spent with and showing your horse.

Horse ownership can also be a business venture. Time and money spent on your horse may increase the value of your horse. As you or your rider move through the levels of competition it is often necessary to sell your horse and buy another one that is more suited for new goals. Buying and selling horses can be personally and financially rewarding. The Owner's Resource Guide is designed to help you, as a horse owner, make educated decisions and assist you in enjoying your experiences with horses.

IV. SELECTING TRAINERS AND OTHER PROFESSIONALS

The sport of hunters, jumpers and equitation is a team sport. As with any good team, in addition to outstanding athletes, the team must have a group of trusted experts including veterinarians, farriers and support staff. Recognize early on that achieving your goals or the goals of your family will depend, to a significant extent, on the makeup of the team. With that in mind, exercise as much care in the selecting of your team as you would expect to exercise in the selection of your first horse.

SELECTING A TRAINER

Hunter, jumper and equitation horse ownership is like a business with responsibilities and obligations. Selecting a trainer is quite possibly the most important decision you will make. An honest relationship based on two-way communication is essential. Take your time and select the individual that fits your needs and personality. Be aware that as you interview the trainer, they may be evaluating you as an owner/client.

EVALUATE the various professionals as you would any other advisor. Go to local horse shows and talk to parents, riders and participants. Try to watch a trainer you may have heard about as they school a child or adult for the show ring. Then observe both the riders performance and the trainer's post-performance feedback. Is this the type of personality that compliments you or your child? Remember this person will be an integral part of you or your child's life.

Determine your GOALS, OBJECTIVES AND EXPECTATIONS from the start. Realistically evaluate the level at which you wish to participate in horse ownership, along with the resources necessary. Set a realistic BUDGET to accomplish your goals and stick to it. UNDERSTAND potential trainers fee structures. Ask to see a written fee schedule. PAY BILLS IN A TIMELY MANNER.

Once you have selected a trainer or riding program, allow the professionals to do their jobs. Stay involved, ask questions, but allow them to do what you have hired them to do; provide expert advice in areas in which you have little or no expertise.

V. PURCHASING YOUR FIRST OR YOUR NEXT HORSE

LEVEL OF INVOLVEMENT AND BUDGETS

Make sure you and your trainer are clear as to the amount you are willing to spend. It is not worth the time if you are not in agreement. Also, be sure you discuss commission fees and what, if any, costs are involved in the search process. An agency agreement will help clarify this step. The cost of horses varies depending on level of performance, innate talent, vet issues and age. Apparently similar horses may vary substantially in pricing.

The trial process (what to expect) what your trainer does for you in the trial process

Trainers bring years of experience and networking abilities when looking for your next horse. They will also have the ability to evaluate your goals and needs to find a suitable horse that works within your budget. Trainers should stand behind the horse they sell you to insure that the horse is a good fit for your needs.

Trying a horse can be a fun and somewhat scary experience. Look at it as a way to narrow down the type of horse that is comfortable for you. If this is your first horse you should rely heavily on a professional to help you determine your needs. Do your homework!

Sometimes you will have to travel to try the horse. The more you try the more you will be able to feel if it is a good fit for you. DON'T WASTE YOUR, YOUR TRAINER'S OR THE HORSE'S TIME BY TRYING HORSES THAT ARE OUT OF YOUR PRICE RANGE OR ABILITY LEVEL. But, also, do not refrain from riding one because he or she is not "cute" enough. You may be surprised. Depending on your level, the personality may be much more important!

In some situations you may be able to take the horse on trial for a few days or a week. ** You can find out a lot by having a trial period, but if you cannot, try to go back on another day to retry the horse. Ride in a different ring if possible. Again, this is a good reason to use a professional who has made inquiries about the horse and its experience.

** If you do take the horse on trial, be sure to understand the financial responsibilities you may incur:

- Are you responsible for taking out an insurance binder on the horse?
- Any vet or farrier bills?
- Transportation expenses to and from your farm?
- Boarding expenses?

The pre-purchase or pre-lease exam

Whether you are leasing or purchasing you should have a pre-purchase exam performed by a veterinarian. The depth of that exam will depend on the use, price and comfort level of you and your trainer. Each trainer and owner has a different “comfort zone” on problems that come up in a pre-purchase exam. Many vetting issues are able to be maintained. Very few, if any horses vet perfectly. The ideal “first horse” for a beginner rider may be able to live a comfortable and useful life with numerous vetting issues.

Talk to your vet, be there and be involved in the pre-purchase process. Some vets have a questionnaire for the owner and buyer so they are clear about what is expected in the purchase. This serves to help you and the vet be clear about your goals and help him assist you and your trainer evaluate the purchase.

Insurance

There is a complete explanation of the various types of equine insurance available on the Trainers Resource Guide. For more information, please visit www.usnja.org.

Leasing

Leasing a horse implies the same level of commitment to that animal as you would to a horse you have purchased. Simply because “it is not your horse” does not mean you can cut corners on any of his care or training. You are responsible for maintain the horse’s physical well-being as well as his level of performance. You should return the horse to his owner in the same or better condition then when you received him.

Necessary Documentation for Horse Ownership

Agency Agreement: Commission fees vary throughout the industry. Make sure you discuss this with your trainer before you begin the search process. A sample agreement can be found at www.usnja.org.

Written vet report

Ask to see the written vet report and go over it with your trainer and/or ask to have a consultation with the vet to explain their findings.

Bill of sale: Ask for a bill of sale that includes the buyer and seller’s signatures, the commissions paid and by whom, and the selling price.

Lease agreement: A sample lease agreement can be found at www.usnja.org. Make sure you are clear on all the points.

Boarding agreement: A sample agreement can be found at www.usnja.org.

VI. OWNER’S SHOW EXPECTATION

LEVELS OF COMPETITION

- a.) Unrated: local or schooling shows. Many are recognized and governed by your local organization (i.e. Ohio Hunter and Jumper \ organization) many shows count towards that organization’s year end awards.
- b.) Rated: These can be local or national. They are sanctioned by the United States Equestrian Federation and governed by their rules and regulations. Shows that are local may also be recognized by your local organization and count for their year-end awards. The points will count for National and Zone awards.
- c.) AA: They are the premier shows for the USEF and are held to higher regulations regarding prize money and number of classes per division.

HELPFUL SHOW TIPS

- Always put the welfare of the horse first.
- Be courteous and respectful in the schooling ring and to the horse show staff.
- Know your rights and responsibilities for entries and the drugs and medications rules.
- Discuss the paperwork and checks that are needed to enter a show.
- Show your appreciation to the support staff.

TRAINER EXPECTATIONS

- Respect the role the owner plays in the team surrounding each horse.
- Keep an absent owner promptly informed on the horse's performance.
- Keep the owner up to date on career strategies and health issues concerning the horse.

RIDING OWNER EXPECTATIONS

- The first priority is the horse. Always apply basic horsemanship. If you have a groom, bring your horse back to the groom to cool.
If it's a busy show day you may need to assist with your horse's care until the groom is free.
- Know when your class is scheduled and plan on warming up 15 minutes before you plan to show.
- Know your course.
- Be a courteous, demonstrate good sportsmanship and be clean in the barn. Showing should be fun.



Photo Credit: Whitney Allen

VII. ORGANIZATION OBLIGATIONS

To have your points and money won count for the year end awards, competitors must be current on all association dues.

USEF	United States Equestrian Federation (Owner, horse, rider) www.usef.org
USHJA	United States Hunter Jumper Association (Rider, horse, owner) www.ushja.org
WCHR	World Championship Hunter Rider Program (Rider, Owner) www.ushja.org
WIHS	Washington International Horse Show (Amateurs and junior riders) www.wihs.org
NAL	North American League (Rider) www.ryegate.com
ASPCA MEDAL MACLAY	(Equitation Class for Rider) www.nhs.org
MARSHALL AND STERLING LEAGUE	(Rider) www.hitsshows.com
LOCAL ORGANIZATION	(Rider and Horse)
YOUNG JUMPER CHAMPIONSHIPS	(Horses 4, 5,6,7,8 year old jumpers) www.youngjumpers.com

VIII. THE OLDER HORSE

BUYING THE OLDER HORSE

An older “schoolmaster” is an excellent choice for a novice rider. Such an animal is worth his weight in gold as he knows the ropes, has seen it all and does his job with minimal support from his rider! The maxim that “good horses make good riders” has a lot of merit to it. If a green rider is lucky enough to have such an equine teacher, she gains confidence and skill and can then be ready for the next step on a mount that demands more rider ability. The parent or novice adult rider needs to be aware that the aged equine athlete often has some soundness issues and during the vetting the purchaser should discuss with the veterinarian whether the horse can reasonably and comfortably perform the job he is expected to do. This is where the advice of a knowledgeable horseman can be of invaluable service. The price of an older horse (15 plus) is usually considerably less than a horse in his prime. The buyer should be aware that there is a good chance that the horse may have to be retired from the ring or may not be suitable for another career (some are) after he does his job for his owner. Which leads us to the next phase.

RETIRING THE OLDER HORSE

With the ownership of any horse comes the responsibility for his care and custody. If the owner is lucky enough to have a farm or access to one, a retiree provided with shelter, a paddock or field, good quality hay and feed and water, regular trimming and worming, can live out a comfortable well-deserved retirement. There are also farms that take in retirees. Other options are lending a horse to a "Handicapped Riding" program or to someone that wants to trail ride quietly. I strongly recommend lending rather than selling as too often a horse can end up falling into bad hands, selling for a cheap price and ending up at a sale where they may be destroyed.

To sum up: the older horse can lead to a lifetime enjoyment of horses and horse sports. The owner's end of the bargain is to accept responsibility and make sure the horse is well-cared for until the end of his life.

EQUINE RETIREMENT FACILITIES

For suggestions on retirement facilities in your area, the USHJA has listed some options at www.ushja.org or contact your local veterinary facility.

USHJA provides names for informational purposes only. USHJA does not endorse the facilities listed nor liable for any expenses or damages incurred if placed in a facility.



Photo Credit: Whitney Allen

USHJA TRAINER'S RESOURCE GUIDE



USHJA TRAINERS RESOURCE GUIDE

The USHJA Trainers Committee has created a Trainers Resource Guide as an educational and informational source for our hunter/jumper members. The information contained in the Trainers Resources Guide includes sample forms of recommended information and advice regarding insurance, taxes, financial assistance in a crisis, contracts and business ethics.

TABLE OF CONTENTS

I. Horse Insurance.....	1
II. Taxes.....	2
III. Financial Assistance.....	3
IV. Business and Ethical Questions.....	3

I. HORSE INSURANCE

EQUINE MORTALITY

Full Mortality coverage is provided for death as a result of injury, illness, humane destruction and transportation anywhere in the continental U.S.A or Canada (optional worldwide territories are available) and includes loss or death as a result of theft. Premium rate is simply based on the horse's use, breed and age.

MORTALITY ENDORSEMENTS (Optional Coverage's)

Major Medical & Surgical:

Coverage is provided for the cost of medical and surgical procedures performed by a veterinarian, including diagnosis as a result of an accident, illness or disease. Available for horses 30 days through 15 years of age. Annual aggregate limits range from \$7,500-\$10,000 per occurrence, with deductibles of \$250.

SURGICAL ONLY

Should your insured horse require surgery, this endorsement will cover specified costs. Companies will pay reasonable and customary charges for surgical treatment (including anesthesia) necessitated by accident, injury or illness.

LOSS OF USE INCLUDING ECONOMIC DESTRUCTION

If your horse (12 years and under) becomes totally and permanently incapable of fulfilling the functions for which it is used, as stated in your policy, but its condition does not necessitate destruction for humane reasons the Loss of Use extension will pay you a percentage of the animal's value as stated on the mortality policy. (Full X-ray reports and soundness exams are required for approval at the inception of this endorsement).

AIR TRANSIT/EXTENDED TERRITORIAL LIMITS

Mortality coverage may be extended to include international transportation to and from other approved countries. Prior notification of transit must be given.

FARM COVERAGE

Farm & Ranch Owner's Packages:

Equestrian facilities represent singular risks that require specific coverage's. The insurance carriers provide a package policy specifically designed for farm and ranch operations, from small pleasure farms to multi-location commercial farms. An insurance package allows you to insure the following items under one policy.

- Your home and/or employee tenant dwellings.
- All dwelling contents owned by you.
- All farm structures, including barns, arenas, run-in sheds, hay barns, workshops and other farm related buildings.
- All farm machinery and tools/equipment such as tractors, mowers, blades, saws, drills and bush hogs.
- Tack and related horse equipment.
- Specifically scheduled items such as jewelry, furs, guns, fine arts and stamp collections. You can also schedule computers and home entertainment systems.

- Barns and/or office contents such as furniture, fixtures and electronic equipment (typewriters, computers, fax, phone).
- Miscellaneous Farm Property including hay, shavings, feed, ATV's, entrance gates, fencing, pumps, well/wellhouses, signs and livestock (equine, cattle, and bovine, etc).
- Your personal liability for owning or operating the farm property, as well as the business liability for boarding, breaking, training, riding instruction, clinics, shows, etc.

LIABILITY INSURANCE

COMMERCIAL EQUINE LIABILITY

This coverage is very important if you perform any commercial equestrian activities such as boarding, instruction, training, breeding, horse sales, etc. Coverage is provided if you are sued by a third party who is injured or whose property is damaged (excluding horses: see Care, Custody and Control Liability). The policy covers defenses fees and pays claims for which you are legally liable up to the policy limits.

CARE, CUSTODY & CONTROL LIABILITY

Consider this coverage if you board, train or breed horses for others. Standard General Liability insurance excludes coverage for personal property (such as horses) in your Care, Custody or Control. This void can be filled if one of those horses is injured or dies while in your care and you are found negligent. This policy will provide for the medical care or replacement cost of the horse up to the policy limits. Trailering is automatically included for up to a 100-mile radius from your facility, with additional transit coverage for the continental U.S and Canada available. Defense costs are also covered. This coverage does not apply to horses that you own or lease. Policy limits are available up to \$2,500,000 per horse and \$5,000,000 maximum loss per year.

INDIVIDUAL HORSE OWNER LIABILITY

Horse owners are faced with unique liability exposures that may not be adequately covered under normal personal liability policies such as a homeowner policy. The insurance carriers have specifically designed an insurance policy to cover this horse owner's legal liability for both bodily injury and property damage to others resulting from horse ownership. Individual owners of personal or show horses that do not receive income or are not involved commercially are eligible. Liability coverage, including defense costs, is available with limits up to \$1,000,000.

HORSE SHOW AND EVENT COVERAGE

This liability coverage is for people or organizations putting on a one, two, or three day event such as schooling or rated horse show. It will cover you if someone is injured (participants are specifically excluded) or someone else's property is damaged and you are held responsible. Policies include both a set-up and break-down day.

WORKERS COMPENSATION

Workers Compensation insurance provides coverage for an "employee" (as defined by the applicable law of your state) who suffers an injury, illness or death on the job. Benefits can include reimbursement for medical expenses, doctor bills, hospital stays and rehabilitation costs. Benefits can also include reimbursement for a certain amount of the worker's lost income. Many state laws require all employers to purchase worker's compensation insurance.

II. TAXES

INCOME TAXES

Income tax resources include, the IRS Market Segment Specialization Program – Internal Revenue Service Section 183: Farm Hobby Losses with Horse Activities. This publication will explain what the IRS requires for accounting records along with how the IRS audits this industry. This can be found in under www.irs.gov.

Another tax resource includes the Tax Handbook provided by the American Horse Council. It can be found at www.horsecouncil.org.

PAYROLL TAXES

Employees are subject to social security, medicare and federal income tax withholdings, as well as state income tax withholdings. Employers are subject to matching the social security and medicare taxes along with unemployment taxes for certain employees. More information can be found at IRS Publication 15, Circular E, Employer's Tax Guide, found at www.irs.gov. It is very important that payroll taxes are reported and remitted timely. This includes the preparation and reporting of W-2 and 1099's at the end of the year.

PROPERTY TAXES

Certain tangible property may be subject to a property tax by your city or town. Contact your city or town to discuss the tax ramifications; however, in many areas property tax abatements are available for farms. Contact your city or town to discuss the tax ramifications.

SALES TAX

Certain farm transactions, purchases and sales, may be subject to state and local sales tax. The internet is a good resource as most states provide sales tax information online. Contact your state sales tax department to determine registration requirements; taxable transactions; and how to remit any taxes to the state in a timely manner. Certain sales tax exemptions are available for purchases used on farms so it is important to contact your sales tax department.

TAXES ON INDEPENDENT CONTRACTORS

This is an area that is highly scrutinized by the IRS along with your workers compensation company and your state unemployment department. Improper classification from an employee to an independent contractor could result in the payment of back taxes, interest and penalties. Information can be found under www.irs.gov/taxtopics/tc762.html. Form SS8, Determination of Worker Status for Purposes of Federal Employment Taxes and Income Tax Withholding.

ILLEGAL EMPLOYEES

You must verify that each new employee is legally eligible to work in the United States. This includes completing the U.S. Citizenship and Immigration Services (USCIS) Form I-9. This and other information can be found at www.uscis.gov.

III. FINANCIAL ASSISTANCE

THE USHJA FOUNDATION

The mission of the Foundation is to advance and promote the hunter and jumper disciplines of equestrian sport by supporting the programs of the USHJA and other activities consistent with the mission of the USHJA. The creation of the USHJA Foundation provides a non profit fundraising vehicle that will provide support to programs as well as develop funds for horses and horsemen in need. For more information please contact Whitney Allen at 859.225.6707 or wallen@ushja.org. You can also visit the USHJA Foundation website at www.ushjafoundation.org.

UNITED STATES DEPARTMENT OF AGRICULTURE

For more information on the various resources and aid provided by the U.S Department of Agriculture, please visit www.usda.gov.

THE EQUESTRIAN AID FOUNDATION

For more information, please visit the Equestrian Aid Foundation website at: www.equestrianaidfoundation.org.

IV. BUSINESS QUESTIONS/ETHICAL QUESTIONS

COMMISSIONS

- Publish your commission rate in your Rate Schedule (usually 10-15%).
- Be consistent with your practices regarding commissions.
- Always be honest and "act in the best interest of your customer."
- Use a full disclosure policy.
- If a horse is under valued, best practice is to buy the horse and re-sell it yourself.

BUSINESS PRACTICES FOR CUSTOMER LONGEVITY

- Treat your customers with respect.
- Command respect from customers.
- Be honest and fair.
- Maintain open communications.
- Follow a policy of full disclosure.
- Provide clear and easy to follow rules.
- Educate in all aspects of the business.

- Include them in the process.
- Teach appropriate skills.
- Show in appropriate divisions.
- Charge appropriate rates.
- Sell appropriate horses.
- Charge appropriate prices and commissions.
- Know your customer, understand their needs, expectations and objectives.

HORSE SHOW ETIQUETTE

- Show in proper and legal divisions.
- Be prompt and courteous.
- Show respect for all competition officials.
- Be clean, neat in personal appearance and stable area.
- Share schooling area and jumps.
- Humane/professional conduct towards clients and horses.

JUDGES CODE OF ETHICS

By: The USHJA Trainers Committee

- Judge and you shall be judged.
- Always place honesty and integrity above all else.
- Conduct yourself in accordance with the guidelines set by USEF and USHJA.
- Honor your contracts.
- Be professional in your judging.
- Your general conduct both inside and outside of the ring should be above reproach.
- When attending social functions where exhibitors are present, exercise particular discretion in discussing exhibitors or their horses.
- Refrain from attempting to influence the decisions of other judges or officials and respect their individual opinions and decisions.
- Refrain from conduct that may be considered prejudicial, to conduct yourself at all times in a manner that reflects positively upon the image of our sport.
- Cell phones may only be on and used outside the judges box.
- Video's have sound, you may be heard on tape.
- All judges should realize that the educational process is never ending and throughout one's career, seek new sources of knowledge and information, as well as dedicating time to refine and perfect a base of existing knowledge.
- Dress appropriately.

WHEN A CLIENT WANTS TO CHANGE TRAINERS

WHEN YOUR CLIENT LEAVES YOUR BARN

- Settle all financial responsibilities before client leaves.
- Be sure to send all of the horse and client's tack, clothing, etc... when the horse leaves.
- Provide a brief summary of the horse's eating and maintenance program.

WHEN SOMEONE ELSE'S CLIENT APPROACHES YOU

- To ensure the prospective client is serious about changing trainers, you may want to ask them the following to explore their interests:
- Who are you riding with at this time?
- Does he/she know you wish to make a change?
- If you choose to move to my barn then you should communicate with your trainer openly, settle up any open bills and matters, and coordinate the arrival date

Most times when a client changes trainers the opportunity to call the original trainer and courteously state: Mr./Mrs. "XYZ" have contacted me about coming to my barn. Have he/she spoken to you about this?

- If yes, then useful and honest information should be exchanged about the client.
- If no, then ask the other trainer to talk to the client and get the facts out in the open. Either way, the client is moving and it is worth maintaining your relationship with your professional colleagues by making the phone call.

DRUGS AND MEDICATION RULES

SOME IMPORTANT INFORMATION TO KNOW ABOUT DRUGS AND MEDICATIONS

- The drug rules can be found on the USEF website (www.usef.org)/hardcopy rulebook under Chapter 4.
- For more detailed information regarding forbidden substances, suggested withdrawal times, compliance with the drug rules, etc. you can visit via the website (www.usef.org) or by hardcopy information supplied by the USEF Drugs and Medication Department. The hardcopy can be requested from the USEF D&M office.
- Most breeds and disciplines that compete under USEF Rules are subject to the Therapeutic Substance Provisions.
- FEI recognized events are subject to the FEI Veterinary Regulations. This is a no foreign substance rule, which includes reporting requirements for the treatment of illness and injury.
- Under USEF Rules, the trainer is held responsible and accountable for the condition of the horse or pony and for compliance with the rules. A trainer is defined as any adult or adults who has or shares the responsibility for the care, training, custody, condition, or performance of a horse and/or pony. Said person must sign the entry blank of any Licensed Competition whether said person be a trainer, owner, rider, agent and/or coach.
- The Federation cautions against the use of so-called herbal and natural products, the ingredients and properties of which are not known.
- Cooperation with the drug testing veterinarian and/or his technician is paramount.
- Members can find medication report forms at the competition office or with the steward.
- A trainer of a horse/pony who is found to contain a forbidden substance/overage may be subject to whatever penalty is assessed by the Hearing Committee (except for administrative penalties issued by the Chairman of Drugs and Medication Committee).
- An owner of a horse/pony who is found to contain a forbidden substance/overage may be asked to forfeit all winnings at the subject competition and to pay a \$200 redistribution fee to the competition.
- Individuals who have questions about the drug rules may contact the USEF Drugs and Medication Department at 614-771-7707.

USHJA Member Benefits

- Inclusion and involvement in the governance of the hunter and jumper disciplines from the grass roots to the high performance level.
- Opportunities for election and/or appointment to USHJA committees.
- Member services provided by knowledgeable hunter and jumper staff members.
- An annual convention exclusively for the hunter and jumper disciplines including rule changes, educational seminars, clinics, and forums.
- Increased influence in the development, promotion, and management of the hunter and jumper industry.



- Bi-weekly emails of USHJA E-Update providing important news, reminders, resources, and information
- Educational DVD's
- Discounted magazine subscriptions to *Practical Horseman*, *EQUUS*, *Horse & Rider*, and *Dressage Today*, books, DVDs and other equine related merchandise
- Discounts through Educational Partners.

PARTICIPATION IN:

- Stirrup Cup Awards
- Jumper Club Awards
- National Hunter Derby
- Member's Choice Awards
- Dash For Cash Award
- Owner Recognition Award
- Rider Recognition Awards
- Zone Awards and Programs
- International Hunter Derby
- Emerging Athlete's Program
- Horsemanship Quiz Challenge
- USHJA Outreach Competitions
- World Championship Hunter Rider
- Trainers Certification Program
- Hunterdon Cup Equitation Class
- Amateur Sportsmanship Award
- Affiliate Equitation Awards Program
- Presidents Distinguished Service Awards
- Affiliate Sportsmanship Awards Program
- Collegiate Equestrian Lettering Program

ACCESS TO:

- Equine Retirement Facilities
- Resource Guide
- Subscription to the USHJA In Stride bi-monthly magazine
- Show Secretaries Guide
- College and Scholarship Listing





**UNITED STATES HUNTER JUMPER ASSOCIATION • 3870 CIGAR LANE, LEXINGTON, KY 40511
PHONE 859.225.6700 • FAX 859.258.9033 • WWW.USHJA.ORG**