

BUSTING THE "LEAD MARE" MYTH NEW CLUE TO COLIC PROGNOSIS

EQUUS

THE HORSE OWNER'S RESOURCE

SEPTEMBER 2014
ISSUE 444

15 WAYS TO
PREPARE FOR
EXTREME
WEATHER

VACCINES:
THE **FOUR** YOUR
HORSE **MUST** HAVE

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TO **SAND**
PREVENT **COLIC**

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BOB LANGRISH

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EQ LETTERS |

The possibility of pain

In "Reluctant to Jump" (Consultants, EQUUS 442), the author asked for help with her 2-year-old who suddenly started refusing to jump. While trainer Phyllis Dawson offered good advice, I was surprised she didn't suggest starting with a physical workup by a veterinarian. My first thought was that maybe the colt had started refusing because something hurt. Either his joints are not yet developed enough to take the pounding of landing a jump, or maybe he pulled something while playing in the pasture with his brother. When our horses change their behavior suddenly, it is always good to first rule out any physical problems, and then to work on training issues.

*Stephanie Cantrell
Louisburg, Kansas*

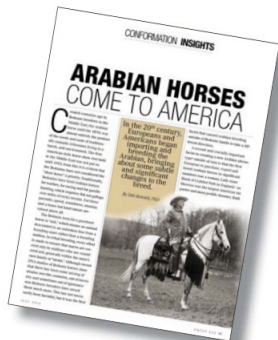
On Arabians in America

Thank you for "Arabian Horses Come to America" (Conformation Insights, EQUUS 442), by Deb Bennett, PhD. I especially appreciated her historical note on the actual origins of the Thoroughbred foundation sires—many are probably unaware of this information. This article helps us appreciate that the history of any breed is a difficult and complex issue.

*Jane Duran
Goleta, California*

I cringed as I read about the current trend of breeding Arabian horses primarily for looks rather than based on the traditional Bedouin criteria of temperament, character, soundness, athleticism and conformation.

I was reminded of the words of a rancher, when I told him I was considering buying either a colt from his ranch herd or another of a popular "color" breed. He told me, "I don't care



if you buy my horse, but stay away from that other kind. Horses like the one I have are bred to work; that other kind is bred because they're pretty."

Perusing the breed magazine for the "other" horse vindicated his advice. One article in particular was about "saving" a stallion with very bad feet—an unsound animal who probably shouldn't be used for breeding—"because he threw good color and made such beautiful babies."

I bought the rancher's horse, and he is sound, strong, brave and level-headed. I'll never purchase any breed whose main criteria for selection is color or "looks." If I were buying an Arabian, I would seek out an Arab "biaban" horse and avoid the "khiaban" type common in the West.

*Jeffrey Coley
Walnut Cove, North Carolina*

I was disappointed the article didn't include more about the incredible Arabian horse Witez II. *And Miles to Go*, by Linell Smith, tells the story of General Patton's involvement with getting Witez II through enemy lines and back here to the United States. I owned a Witez II mare, and she was fabulous. I wrote a book about her called *Star's Miracles and More*.

*Rosemary Gustafson
Ferndale, Washington*

I just wanted to say I love the conformation and breed articles written by Deb Bennett, PhD. I look forward to reading them every month. Dr. Bennett's style of writing makes potentially confusing information easy to understand without "dumbing" it down. I have gained so much knowledge from reading her series.

Julia Zatezalo

New Cumberland, West Virginia

I live in an area of Northern Michigan where sand colic is very common, and so the idea of purposely feeding my horses even more dirt is unfathomable. In fact, I knew someone whose colicking horse had an incredible amount of dirt in his fecal sample. Then I found out she fed DE to her horse every day for worms. The horse almost died of sand colic instead!

Leigh Kuhn

Kalkaska, Michigan

Tell us what you think

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An abundance of "learning"

As soon as I saw the words "Use Mistakes to Improve Your Riding" on the EQUUS cover (EQUUS 442), I thought of the British cartoonist Norman Thelwell and his drawing of two little girls at a horse show:

"You shouldn't be upset because you got 48 jumping faults. We learn from our mistakes."

"My brain can't cope with that much knowledge!"

Tina Rhea

Greenbelt, Maryland

Another reason to avoid DE

I have another comment to add to the advice offered for "Diatomaceous Earth As a Dewormer?" (Consultants, EQUUS 439). Aside from the fact that diatomaceous earth (DE) is not effective as a dewormer, there's another, very important reason I wouldn't suggest feeding it to a horse: sand colic.

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BUSTING THE “LEAD MARE” MYTH

The idea that a single high-ranking alpha mare initiates the movement of the entire herd may be nothing more than a pervasive myth, say researchers from Germany.

Since the 1970s, prevailing theories of equine behavior held that, while the stallion was the ultimate leader and defender of the herd, the top-ranked female directed the movement of the group to different grazing areas or water sources. “The ‘lead mare’ theory is a common assumption among natural horsemanship trainers,” says Konstanze Krueger, PhD, of the University of Regensburg. “The theory is broadly used in training sessions, in which people are told to take over the ‘lead mare’ role.” After observing her own horses closely, however, Krueger was not convinced that the highest ranking mare was initiating movement for the entire herd.

To test the lead mare theory, Krueger organized a study in which she and three assistants observed movement of three groups of feral horses roaming the mountains near Frosinone, Italy. The herds, which were made up of horses ranging in age from 1 to 23 years old, had well-established hierarchies. Two herds had a single alpha stallion and one had an alpha stallion plus two lower-ranking younger bachelor males. “The groups were fairly stable,” says Krueger. “The alpha males have not been removed for years, and they still hold their harems this year.”

The researchers observed the groups during two different study periods, one year apart. The total observation time, spread over several days, was 15 hours per group. As they observed the herds, the researchers noted each member’s rank and documented two specific types of movements made by any

member of the group: “herding” behavior, identified as one member driving others from behind, and “departures,” defined as occurring when one member moves away from the group in a particular direction with others following.

The data showed that only alpha stallions exhibited herding behavior, and in each instance, the entire group moved. But, surprisingly, mares of all ranks showed departure behavior, successfully getting others to follow when they left the herd. Krueger acknowledges that lower ranking herd members were more likely to follow a departing horse, but mares of any rank would initiate the movement.

“It is true that higher ranking horses can lead others more easily, and that lower ranking horses are inclined to follow higher ranking animals,” says Krueger. “But the theory of ‘individual lead mare’ roles is not true. There is no particular lead mare in a group. Higher ranking mares lead more often altogether, but which one of the mares takes the lead depends on the situation.”

These results, says Krueger, suggest that leadership is shared within a herd, which may prompt some trainers to revise their thinking. “While the

hierarchy [of a herd] may be largely stable, the minute-to-minute decisions may be governed by other factors, and being a ‘boss’ does not necessarily mean that you become a leader your horse would choose to follow.”

Reference:
“Movement
initiation in groups
of feral horses,”
*Behavioural
Processes*,
March 2014



BLOOD PROTEIN SIGNALS COLIC PROGNOSIS

The presence of a particular cardiac protein in a colicking horse's blood may reveal important information about his condition and prognosis, according to a new study.

Researchers at the University of Pennsylvania tracked 111 horses admitted to the clinic for colic, drawing blood when the horses arrived and again 12 and 24 hours later—or 12 and 24 hours after surgery if that was required. The researchers also performed a 24-hour electrocardiogram (ECG) on each horse, either the day after admission or the day after surgery, to detect any arrhythmia (irregular heartbeats).

The data showed that horses admitted for colic with elevated levels of the protein cardiac troponin I (cTnI) were 24 times more likely to require surgical treatment, 3.86 times more likely to have irregular heartbeats and 4.17 times more likely to die or be euthanized. "cTnI is a protein released from damaged myocardial cells, so it should be detected in circulating plasma/serum only in the face of cardiac damage," explains Olga Seco, LV. "It has been a useful marker to detect cardiac damage in emergency situations in humans, as it can be detected in blood very early."

The researchers believe this finding points to a possible chain of physiological events: "We know horses with colic frequently sustain cardiac arrhythmias," says Seco. "[The arrhythmias] could be due simply to electrolyte imbalances, to endotoxemia⁸, or to cardiac damage, so we tried to determine which was

BENEFITS OF FRAGMENT REMOVAL STUDIED

A new study casts doubt on the benefits of a type of orthopedic surgery commonly performed on trotting horses.

Many trotters undergo a surgical procedure to remove ossified cartilage fragments from the upper end of the long pastern bone, within the fetlock joint. The procedure is often done before horses begin their racing careers, but it is sometimes performed on veteran racehorses as well. Although there is some evidence of the surgery's benefits, there was no research supporting this intervention in young horses, where it was presumed to protect long-term soundness and reduce the risk of arthritis.

To determine the effect of the surgery on performance, researchers at Hallands Djursjukhus in Sloinge, Sweden, and the University of Saskatchewan in Canada examined the medical records, radiographs and racing histories of 163 Swedish Standardbred trotters.

They found that the procedure did not have an impact on trotting speeds (average speed per 1,000 meters). Horses who underwent the surgery before beginning to race posted speeds comparable to horses who had not had the procedure. Horses who had raced prior to surgery appeared to achieve the same speeds afterward, but their times did not improve. The only

variable that had any effect on racing speeds was the number of limbs affected—horses with fragments in three legs posted slower race times than did other horses.

Noting that they found no relationship between the timing of surgery and race speed or career longevity, the researchers conclude that "the potential benefits of this surgical intervention should be critically examined."

Reference: "Racing performance in Standardbred trotting horses with proximal palmar/plantar first phalangeal fragments relative to the timing of surgery," *Equine Veterinary Journal*, June 2014

more likely." Given the fact that cTnI is released only by damaged myocardial cells and that a high percentage of horses in the study had a high cTnI detected, the researchers concluded that a high percentage of horses with colic sustain myocardial injury that can be the cause of the

Reference: "Cardiac troponin I concentrations in horses with colic," *Journal of the American Veterinary Medical Association*, July 2014

arrhythmias. The study wasn't designed to determine if the arrhythmias were present prior to colic, but the two conditions have been closely associated in other studies.

Seco says that blood tests for cTnI could provide valuable clues to the prognosis of colicking horses, particularly those with detected arrhythmias: "I don't think we should be checking the heart in all colicky horses, but we need to be aware that certain severe diseases are causing cardiac damage and will also affect the prognosis."



RISKY BUSINESS: New research suggests that horses who crib—biting an object and gulping air—are 10 times more likely to have repeated colic episodes.

LINKS BETWEEN RECURRENT COLIC AND STABLE VICES EXPLORED

A new study from England provides further evidence that horses who crib are at greater risk of recurrent colic and also identified weaving as another habitual behavior associated with digestive upset.

University of Liverpool researchers collected data on 127 horses with a history of medical colic, interviewing the owners at four-month intervals. The information collected included each horse's health status, behavior and management routine.

"We asked owners to inform us about any further colic episodes occurring during the year," says Claire Scantlebury, BVSc. "During the course of the year, some horses had colic more

than once, and these episodes occurred at different times during the follow-up period. For some horses this happened quickly; for others, colic recurred up to a year or more later. This cohort study was able to examine the risk factors involved in a horse having a further episode of colic."

The data showed that horses who cribbed were 10 times more likely to have repeated episodes of colic. "This supports the growing evidence that horses who exhibit crib biting or wind-sucking behavior may be at greater risk of colic," says Scantlebury, who cautions that the study does not indicate that cribbing causes colic, simply that there may be a link. "The reasons for



CELIA STRAIN

ISTOCKPHOTO

this possible link are likely to be complex and may include a combination of particular aspects of a horse's management, his behavioral or personality traits, or physiological reasons, to name a few examples."

The study also revealed a previously unidentified link between weaving and recurrent colic. Horses who weaved—shifting weight from one forefoot to the other with a swaying motion of the head and neck—were four times more likely to colic repeatedly.

"Although weaving is classified as a behavioral stereotypy, it may have several underlying causes, some of which may be similar to crib-biting," says Scantlebury. "Previous studies have suggested a number of possible factors that may lead to the development of weaving, including confinement within a stable, reduced social contact with other horses, anticipatory behavior or management factors. Some of these have already been identified as risk factors for colic."

Not surprisingly, the researchers found that increased turnout time reduced the risk of colic: Horses turned out for 12 hours a day had almost half the colic risk than did those who were kept in stalls. The researchers advised that any changes be introduced slowly and pasture management and access to grazing be appropriately balanced to minimize colic risk while considering laminitis risks and other health concerns.

Reference: "Management and horse-level risk factors for recurrent colic in the UK general equine practice population," *Equine Veterinary Journal*, April 2014

POSSIBLE NEW WAY TO GAUGE PARASITE LOAD

A new study suggests that it may one day be possible to use a simple stall-side blood test to screen horses for parasite burdens.

Working at the University of Glasgow, researchers used a test currently available through veterinarians called "Succeed Equine Fecal Blood Test" to look for the presence of the blood protein albumin in fresh manure samples from 20 horses. "A small amount of albumin is always lost into the intestine," says Nicola Kerbyson, BVMS, Cert AVP (EM), MRCVS. "But this is increased in cases of intestinal inflammation, which would occur in response to a parasite burden."

The horses' manure was collected for testing twice, once before deworming and once afterward. In addition to testing for albumin, the preliminary sample was analyzed for the presence of parasite eggs. The data showed that higher albumin levels were significantly more likely to be detected prior to anthelmintic treatment, but a direct correlation

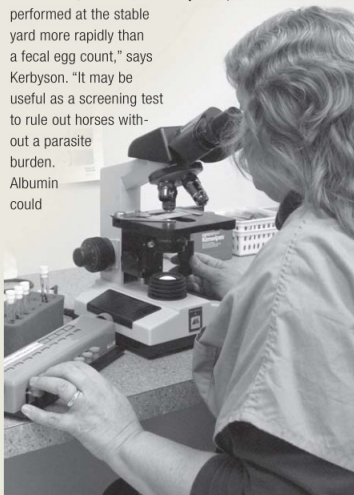
to parasite burden was not established.

"We think there may be an association [between albumin level and parasite burden] but our numbers did not have enough power to represent this," says Kerbyson, who adds that the group is currently undertaking a much larger study in the hopes of making a more definitive connection.

"This test may be of use in the future to be an early predictor of parasite burden, which can be performed at the stable yard more rapidly than a fecal egg count," says Kerbyson. "It may be useful as a screening test to rule out horses without a parasite burden. Albumin could

appear in the feces with any cause of colonic inflammation, such as ulceration or colitis. Therefore, it is more likely to be used as a screening test to rule out a high parasite burden than as a specific indicator of the intensity of an individual's burden." 🐾

Reference: "The effect of parasite burden on faecally excreted albumin in horses," American College of Veterinary Internal Medicine Forum poster, June 2014



DUSTY PERIN

LONGEING SMART

A longe line can be a valuable training tool. Longeing may help an anxious horse "settle" before a ride and provides a controlled way for a rider to learn to post or improve her seat. But as useful as longeing can be, it's important not to overdo it.

It takes some effort for a horse to maintain balance while moving in tight circles, so if you ask him to longe for extended periods of time you risk straining his muscles, tendons and ligaments. Young or out-of-shape horses are the most susceptible to acute and chronic injuries related to longeing.

To make longeing safer for your horse, remember that it is an athletic effort rather than simply a training technique. That means you may need to condition your horse to repeatedly turn tight circles. If you're working with a young, out-of-shape or infrequently longed horse, limit initial sessions to eight or 10 minutes. Then, over several weeks, slowly increase the length of

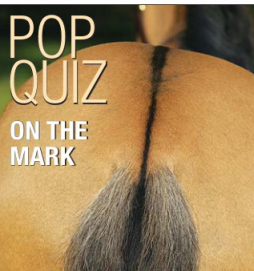


your longeing sessions. If your horse appears to be out of breath, straining to keep his balance or otherwise stressed, it's time to stop and return to work on the straightaway. Keep in mind that the same guidelines apply for work in a round pen. In terms of physiology, it is the same as longeing.

A horse who is properly conditioned to longe and does so regularly is much less likely to be hurt than one who is put on the

line only occasionally. That's why an older lesson horse may be able to handle daily longe work just fine while a younger horse longed only once in a while to "buck it out" can pull up lame.

Of course, no matter how well your horse is conditioned for longeing, doing circles on slippery, hard or excessively deep footing can lead to injuries. If you wouldn't ride on the footing, don't longe on it either.



POP QUIZ
ON THE MARK

Q: This marking appears on nearly every dun, some buckskins, and a few bays and chestnuts. It's obscured by a saddle and completely hidden by a blanket. What is it?

For the answer, see page 15.

VET-CALL CRASHING

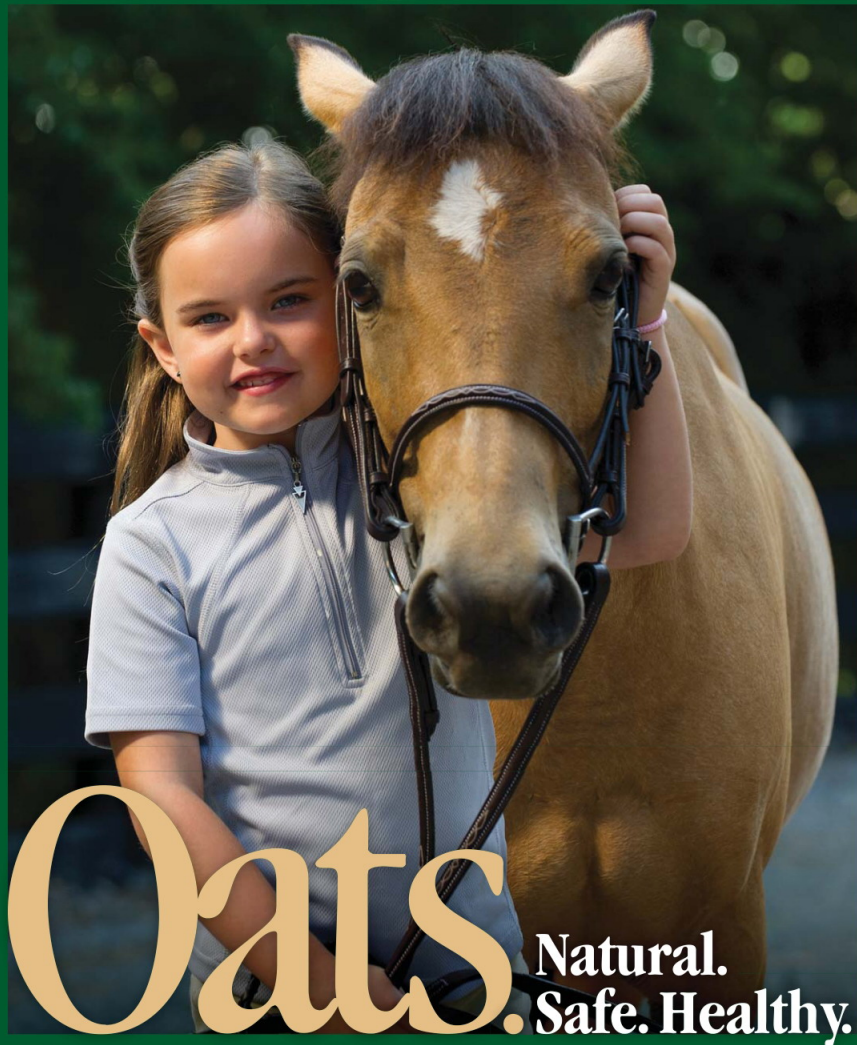
When the veterinarian visits a fellow boarder's horse, it's tempting to hang around and listen. No one is going to fault you for wanting to help out or learn more. Make sure, however, that your presence is wanted, or at least not distracting.

The person who called out the veterinarian is paying for his or her time, so every question you ask or conversation you begin may end up costing your fellow boarder money. Not to mention the nature of the visit might not be something the boarder wants to be public knowledge—not everyone is interested in sharing all the details of their horse's health and care.

If you'd like to linger around a veterinary call for someone else's horse,



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HANDS ON TIP BOOT UP

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strip of Velcro to the wall of my tack room. After I ride, I stick my horse's exercise boots on the strip. I just press the Velcro on the boot to the strip. Not only do the boots dry out faster this way, but they are easier to find than when they are tossed in a bucket or tack box.—Meg Stenzel, Wayne, Illinois

Send your suggestions for inexpensive horse-care substitutes as well as hints for saving effort and time to Hands On, EQUUS, 656 Quince Orchard Road, #600, Gaithersburg, MD 20878; Fax: 301-990-9015; E-mail: EQLetters@EquiNetwork.com. Senders of published items will receive selected EQUUS merchandise.

the best policy is to ask both the owner and veterinarian if you may. Then be prepared to leave if either says no. If they say yes, make any questions quick and on-topic and keep your opinions on the diagnosis and treatment plan to yourself.

PREPARING OLD HORSES FOR WINTER

Cold weather may still be weeks away, but now's the time to look ahead and predict how your older horse might fare through the season. Here are the key points to consider:

- **His weight.** An older horse may have trouble holding his weight during cold weather. If he's on the thin side already, now's the time to up his ration—starting by adding forage first—to ensure he goes into winter in a healthy condition.
- **His teeth.** Digesting forage helps a horse stay warm during the winter months, but an older horse who can't

sufficiently chew hay won't get that benefit and may be more prone to choke. If he hasn't had one recently, schedule a dental checkup for your horse to address any issues now.

• **His parasite burden.** A fecal[®] egg count before winter arrives is a good idea to check that your deworming program worked well through the summer. In cold climates, parasites are not active over the winter months, so you will likely be able to take a break from monitoring or treatment. In milder climates, however, you'll want to stay vigilant against parasites throughout the season. Your veterinarian can help you devise a plan based on your horse's needs and environment.

• **His mobility.** Colder weather can make sore, arthritic[®] joints that much more achy. An older horse might move slowly or even have trouble rising during the cold months. If your horse has a history of arthritis and isn't on a joint supplement already, now might

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BEFORE THE SNOW FLIES:

Autumn is the time to prepare your aged horse for the challenges of cold weather.



be the time to start him on one. If you think he needs more help staying mobile, talk to your veterinarian about trying injections of hyaluronic[®] acid or polysulfated[®] glycosaminoglycans in troublesome joints.

• **His hooves.** Winter is not the ideal time to address serious hoof issues. Not only do hooves grow more slowly in the colder months—meaning it will take longer to make any adjustments in their shape or angle—but frozen footing, mud, ice and snow present extra challenges to hoof health. Have a chat with your farrier about what you can do now to send your horse into winter on solid, healthy hooves.

AVOID FALL LAMINITIS

The return of autumn brings with it an increased risk of laminitis[®] related to Cushing's disease, which is technically known as pituitary[®] pars intermedia dysfunction (PPID). Each fall, the blood levels of ACTH, the hormone involved in

POP QUIZ *Answer*

A dorsal stripe. This dark brown stripe, running along the spine from poll to tail or any length in between, is a characteristic feature of dun horses but can appear on some other colors. The dorsal stripe, along with stripes on the legs and shoulders, are often collectively called "primitive markings." Stripes are also found with equine coat colors other than dun, but they tend to be less pronounced and shorter.

Cushing's, increase as a horse's body prepares for winter, compounding the hormonal imbalances already found in the condition. In fact, if the risk of laminitis doubles for healthy horses in the fall, it quadruples for those with Cushing's. So protect your horse just as you would in the spring, using a muzzle or putting him on dry lot to limit his intake of lush pasture. ●

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PREVENTION

By Laurie Bonner with
Melinda Freckleton, DVM

SAND COLIC

When sand accumulates in a horse's intestines, serious digestive upset can result.

Horses who graze on loose, sandy soil are at risk of sand colic, which can occur if they ingest too much dirt with their forage. The consequences can range from very mild, transient digestive upsets, when the particles irritate the gut wall, to impactions or twists (volvulus), which can occur if large amounts of sand settle out of the ingesta and accumulate in the large intestine.

One simple test you can do to determine if your horse is ingesting sand with his forage is the "fecal sand test." Take six to eight manure balls from the middle of a fresh pile (to make sure it's not contaminated with sand from the ground) and place them in a plastic bag, jar or bucket of water. Shake or stir to break up the balls, and let the mixture sit for about 15 minutes. If more than a teaspoon of sand has settled on the bottom, your horse is probably consuming dangerous amounts. But be aware that the absence of sand does not mean your horse is not in danger: If the sand has settled down in his gut, it may simply not be moving out with the manure. In one 2012 survey of 62 horses referred to university hospitals for sand colic, only 48 percent had significant

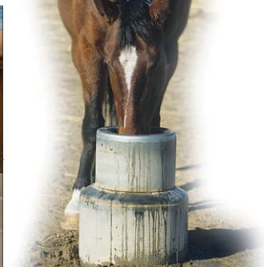
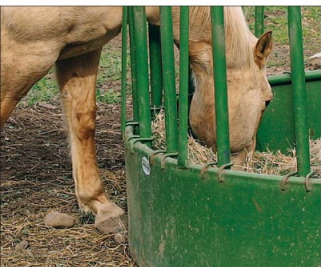


amounts of sand in their manure.

Short of exploratory surgery, radiographs are the best way to detect large accumulations of sand in a horse's gut. Rectal exams may be ineffective because the sand often settles too low in the abdomen for the veterinarian to reach. Periodic radiographs may be a good idea for horses who are especially at risk for sand colic.

But a better strategy is to take steps to prevent horses from ingesting and accumulating too much sand in the first place. Here's what to do:

1. Don't place hay or feed directly on the ground. A head-down grazing position may be best for a horse's respiratory health, but you don't want him picking up dirt with his feed, either. Buckets, tubs and a variety of commercial or homemade feeders can keep hay and grain off of the dirt. Also be careful of spilled hay and feed. Pouring a concrete pad or laying down rubber mats under feeders can help keep even dropped feed clean. Keep in mind that a horse can ingest sand when fed in a riding ring or some dry lots, too.



JANIS TREMPER

2. Keep your pastures healthy. Horses turned out on pastures with sandy soils are also prone to picking up grit as they graze. The risk is greater when the grasses are cropped too short—the horses are more likely to consume the plants roots and all. If your pasture is thin or overgrazed, consult a local extension agent for advice on how to help it recover. For example, rotational grazing—moving horses among different turnout areas to give the grass time to recover—can help keep pastures healthy. Offering supplemental hay can also reduce pressure on the grazing.

3. Feed ample forage. A hay- and grass-based diet is healthiest for a horse for many reasons, one of which is that a steady supply of roughage moving through the intestine helps push any ingested sand out with the manure before it can settle. Allowing free-choice hay helps keep things

moving around the clock. A slow feeder or hay net can reduce waste and make a hay or feed ration last longer.

4. Add psyllium to your horse's ration. Psyllium is a high-fiber dietary laxative made from the husk of seeds from a shrub-like herb called *Plantago ovata*. It is the active ingredient in Metamucil and other human laxatives, as well as a number of products formulated for horses. When psyllium is mixed with water, each particle swells with a gel-like coating. It is believed that the psyllium gel sticks to the sand particles as it moves through the intestine, trapping them and helping to carry them out with the manure. One 2008 study did show that psyllium mixed with mineral oil removed significantly more sand from a horse's gut than did mineral oil alone. Data from other studies has been less conclusive, but one thing is clear: Psyllium alone won't avert a serious colic if a horse has

already accumulated a large amount of sand. That said, however, routine use of psyllium may help to prevent any ingested sand from building up to dangerous levels. If you choose to add psyllium to your horse's regimen, read the label carefully and follow the dosage directions. It's important to feed psyllium only periodically when the goal is to move sand—if fed daily over a long period of time, the horse's gut will adapt to digest the psyllium in a way that makes it ineffective for that purpose.

5. Encourage your horse to drink lots of water. We all know that our horses need access to ample amounts of fresh, clean water at all times. But good hydration, along with a forage-based diet, also helps keep the intestinal contents moving. When the ingesta loses moisture and slows down, the sand can settle out more readily.

CENTER: DUSTY FENN; RIGHT: BOB LANGRISH

IN FOCUS: Sand colic

► **Definition:** abdominal pain resulting from an accumulation of sand in the large intestine

► **Causes:** long-term ingestion of gritty dirt along with a horse's feed and/or forage

► **Signs:** range from very mild, stemming from irritation of the gut wall, to severe, if the sand has totally obstructed or

caused a torsion in the intestine. Signs of mild discomfort include pawing the ground, restlessness, and looking or biting at the abdomen on the milder side. Horses in more severe pain may start sweating, rolling, and have an increased respiratory rate and pulse.

A few horses will have mild, chronic diarrhea with or without overtly colicky behavior.

► **Diagnosis:** Radiography

is the most effective way to determine whether a horse has a significant amount of sand in his intestine. A fecal sand test, which looks for gritty particles passed in manure, can detect sand accumulation in about half of all cases. A rectal exam is even less effective, because the heavy sand can pull the intestine down out of the veterinarian's reach.

► **Treatment:** Analgesic and

nonsteroidal anti-inflammatory drugs will be administered to ease pain as well as inflammation in the gut wall irritated by the grains of sand. Fluids and laxatives, including psyllium and mineral oil, may be administered in an attempt to flush out the sand. Horses who do not respond promptly to medical treatment may require surgery to remove the foreign material. ●

Leadership, tradition—and fun

In this question-and-answer session, former Olympian and current Olympic team coach David O'Connor shares his views on horses, horsemanship and the keys to success.

By Kerry Tkacik

David O'Connor says that just about everything he thinks about people, he learned from horses. And that's not surprising. The current chef d'équipe of the U.S. eventing team has been riding all of his life. The son of dressage rider and judge Sally O'Connor, David made his eventing debut at the age of 8. Only a few years later, Sally led David and his brother on a three-month trek

on horseback from Maryland to Oregon ("A Cross-Country Ride Like No Other," EQUUS 355).

Soon thereafter, O'Connor embarked on the career that would make him famous. He won the Rolex Kentucky Three-Day Event in Lexington three times, once when it was a four-star event. In addition, he is a five-time winner of the Fair Hill International CCI*** in Fair Hill, Maryland. In 1997, O'Connor became the second American in history to win the Badminton Horse Trials CCI**** in England.

O'Connor's first Olympic experience came in 1988 when he was named the U.S. eventing team's alternate for the Games in South Korea. Five years later, he married fellow eventer Karen Lende, and at the 1996 Summer Games in Atlanta they became the first couple to compete together on the same U.S. Olympic equestrian team. O'Connor won a team silver medal in three-day-eventing that year, and a team bronze and an individual gold medal at the 2000 Olympics in Sydney, Australia.

After retiring from competition in 2004, O'Connor became president of the U.S. Equestrian Federation and continued in that post until 2012. He has also served as a coach for the U.S. and Canadian national eventing teams. He and his wife now operate training facilities in Virginia and Florida.

► *You retired from competitive riding in 2004 and then spent almost a decade focusing more on other aspects of the horse world. What made you*



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-Julie Goodnight, Internationally renowned horse trainer, clinician and TV personality



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*Source: Survey conducted in April 2012 of equine veterinarians who recommended oral joint health supplements.

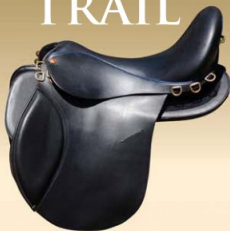
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— Jenna, Auburn, California

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decide to go back to the saddle?

Well, after I decided to retire independently in 2004, I didn't ride as much as I had before—I was doing all these other things. But eventually I decided that I couldn't do that anymore because I really wanted to ride. I wanted to be a part of what I liked best about the horse world.

► *What makes you want to teach others to ride?*

I think it's a responsibility. Horsemanship has been our heritage for hundreds of years. It has always been about passing on what other people have taught you. I enjoy that, and I always get a real kick out of it. People have shared their knowledge with me, and I don't see how you couldn't pass that on.

► *What has had the biggest influence on your training style and philosophy?*

The one thing is empathy. You have to have empathy for the horses and understand that they don't know what your end goal is. When you are teaching a horse something, you have to make it understandable. You need to think about the skills you're going to need and incorporate them into a sort of game that you will play with your horse. The idea is to make it fun for him so that he will want to play. In the eventing world, you cannot make the horse jump these fences through intimidation. The horse has to choose to do it.

► *So, they need to enjoy their training.*

Yes. They don't know why they're being made to do a certain task. They don't know why they need to build muscle to carry me at a different weight. So it has to become a little bit of a game.

► *If you could teach a rider just three fundamental skills, what would they be?*

Learn the language of horses. The first part of that is looking into their eye and starting to understand what they are thinking.

The second aspect is to learn to control your own body language. Horses learn by body language and touch. So your ability to convey your wishes with your own body, whether you're on the ground or on the horse, is very important.

Finally, learn to be a leader. There will be a leader in all aspects of your work with your horse, and it is either going to be you or the horse. So I think it's important to take note of your own personality type. Then you have to project leadership clearly, without punishing, and communicate very simply the things that you want to have happen.

When the horse finds the right answer and you reward him, it builds trust between the two of you. It strengthens the feeling that you're in it together.

► *In your opinion, what is the most challenging aspect of horse training?*

I think it's the long-range patience it requires. You have to realize that working in little increments is going to pay off. That is especially challenging for different people: There's some goal that they have in mind that day, but it's their goal, not the horse's goal. And the short-term skipping of steps in order to make that goal happen is a very common mistake that people make.

► *What do you find to be the most enjoyable about training?*

When the horse gets it—when he understands what you're asking. When the horse finds the right answer and you reward him, it builds trust between the two of you. It strengthens the feeling that you're in it together. That's when the horse's personality starts to come out. He ends up feeling more confident and more outgoing.

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► *How do you approach behavioral problems in the horses you work with?*

That's the horsemanship side of it, and it boils down to realizing why. Is it a physical thing? Are they challenging your leadership? Are you being unclear? You spend your lifetime trying to understand their language, what they're actually telling you. You have to learn to tell the difference between disobedience, a physical problem or your own miscommunication.

► *What have horses taught you?*

I have learned a lot about leadership, a lot about being very clear and also very compassionate about helping them understand things. And being very clear doesn't mean using punishment. You can't ever punish a horse because he doesn't understand. It's about clear aids and communicating your intent. I had to have a lot of patience to find that road, but it leads to the best-trained horses. They certainly love that process, they love the intensity and they love the intellectual engagement.

► *What natural qualities do you look for in an equine athlete, or any horse you plan to ride?*

In our sport the gallop is really important, the way they cover the ground. In that case you're looking for a Thoroughbred type of mold. I think that's a major thing.

And the other thing is for a horse to be naturally inquisitive. They can't look at something and immediately want to run away scared. It can take a long time to get through that. It's a good sign when a horse will actually stop and stare at something and try to figure it out, instead of just running away. That's an important quality, especially for an event horse.

On the other hand, horses that are emotionally crippled or that come from an emotionally troubled background—you can always make them better. I think you can always make the world more comfortable for them.

They may not be cut out to be top-level eventers, but that doesn't mean they're not good horses.

► *How have you changed as a trainer and a coach over the years?*

Now that I'm more of a coach, I'm trying to establish a structure where people can reach their goals. Obviously when you're young, your goals are a little impetuous, because your patience isn't as great. I think there's no question I'm so much more patient now, particularly with horses, for a longer term.

It's a good sign when a horse will actually stop and stare at something and try to figure it out instead of running away. That's an important quality, especially for an event horse.

► *As a horseperson so immersed in eventing, how do you relate to the rest of the equestrian world?*

I think that all horse sports truly are the same. The horse basically speaks one language. We all speak lots of languages ourselves, all around the world. The horses don't. They speak one language. So it really doesn't matter what the game is.

Obviously, horses that are bred for a particular sport will have an easier time meeting its physical and mental demands. A long, leggy, race-bred Thoroughbred is not likely to excel in top-level cutting competition, and you won't see a 14-hand Quarter Horse bred for cutting in the highest levels of dressage competition. But that doesn't mean that they can't do those sports and improve with training.

So I think the games are very similar. When it comes to what we're doing with our horses, I think the similarities are more important than the differences. ●



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15 WAYS TO PREPARE FOR

By Karen
Elizabeth Baril

When rain, drought or snow dominate the headlines, caring for horses can present some extra challenges. Here's how to meet them.

EXTREME WEATHER

Some weather we've been having, huh? Whether in the form of tropical storms, back-to-back blizzards or prolonged droughts, bad weather can make toting buckets, slogging out to pastures and other routine horse-keeping tasks a little—or a lot—harder. Of course, if you live in one geographic area long enough, you learn how to cope with its typical weather patterns. A horse owner in Minnesota can handle a two-foot winter snowfall just as easily as one in Florida can take in stride daily thunderstorms during the summer. But when unusually harsh or otherwise unexpected weather occurs, horsekeepers can end up scrambling.

Jenifer Nadeau, equine extension specialist with the University of Connecticut, has seen this firsthand. "Over the past few years," she says, "many horse owners in Connecticut

have struggled with extended power outages. They've had to buy back-up generators, haul water long distances, or lay in extra supplies prior to a big storm." These are hard-earned lessons that take an emotional, financial and sometimes physical toll.

So take a few minutes to consider how you might handle the onset and aftermath of a severe weather event. How would you cope if you ran out of hay or were cut off from the main road for days on end? What if you lost power for several weeks? Simply asking these questions can foster creative thinking that may lead to a few changes in your current property and management routine that will pay off in a crisis.

To help you get started, here's a quick look at three extreme weather scenarios and some suggestions for preparing to cope with them:





TROPICAL STORMS

The appearance of a tropical storm on weather maps makes every horse owner in its path worry, and rightfully so. Even if it never reaches hurricane strength, a tropical storm can be destructive and deadly. Begin your preparations when skies are clear so that when the weather turns dicey you'll have less to worry about. Most of the following steps are good management practices in general:

1. Tend to your trees. Trim overhanging limbs and cut down unhealthy and weak trees that could damage structures and fences or block access to your driveway if they were to fall.

2. Repair hinges and gate latches. Worn hardware can break in high winds, allowing horses to escape. Periodically inspect all of the closures on your property and repair or replace

faulty ones promptly. Likewise, try to get to repairs to fences, roofs and buildings without delay.

3. Organize your barn aisle. Keep the aisle clear of anything that could become a missile in high winds or impede an evacuation. This includes stall mucking tools, saddle racks and grooming kits.

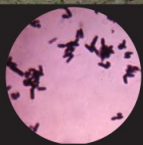
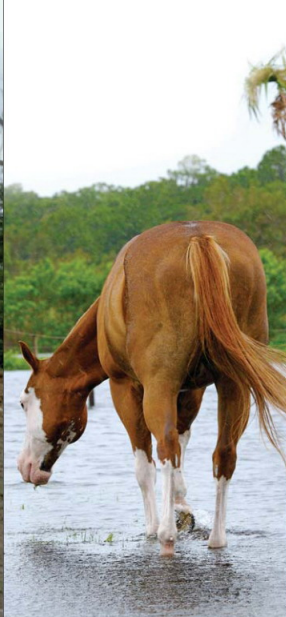
4. Prepare for power outages. Headlamps offer a hands-free alternative to flashlights when working in the dark with horses. But it's important to desensitize your horses to them ahead of time—some horses are spooked by a moving light. Also, consider installing a generator or at least acquiring a portable model so you can pump well water if the power goes out.

5. Establish an evacuation plan. Lay out how you will transport your



Consider adding a little Gatorade to your horse's water from time to time: In the event of a disaster or drought, he may hesitate to drink unfamiliar water. But if he is accustomed to the flavor of Gatorade, it can be used to encourage him to drink water regardless of its source.

horses and where you will take them. Be sure to account for contingencies, such as traffic or blocked routes. Keep an extra set of supplies in your trailer, including a first-aid kit, extra buckets, halters and lead ropes, along with copies of health papers and proof of ownership, such as photographic documentation of your horses and property.



*Corynebacterium
pseudotuberculosis*

DISEASE THREATS

If you're in an area with warming weather trends, diseases that were previously considered rare may suddenly appear on your radar. Recently, a pigeon fever outbreak in Missouri had veterinarians and disease specialists more than a little concerned.

Previously, cases of pigeon fever had been few and far between in the state, which has a continental climate—cold winters and hot and humid summers. Not ideal for pigeon fever.

"Before the summer of 2012, I personally had seen only two confirmed cases in Missouri," says Philip Johnson, BVSc, MS, MRCVS, DACVM,

of the University of Missouri. "That summer we saw a handful of cases at the university teaching hospital and heard about many more in the field in Missouri."

Pigeon fever, caused by *Corynebacterium pseudotuberculosis*, is most often seen in hot, dry climates like that of California, New Mexico, Colorado and Texas. Signs of the disease include painful swelling, abscesses and inflammation in the legs, chest and abdominal cavities. But the outbreak in Missouri wasn't entirely a mystery.

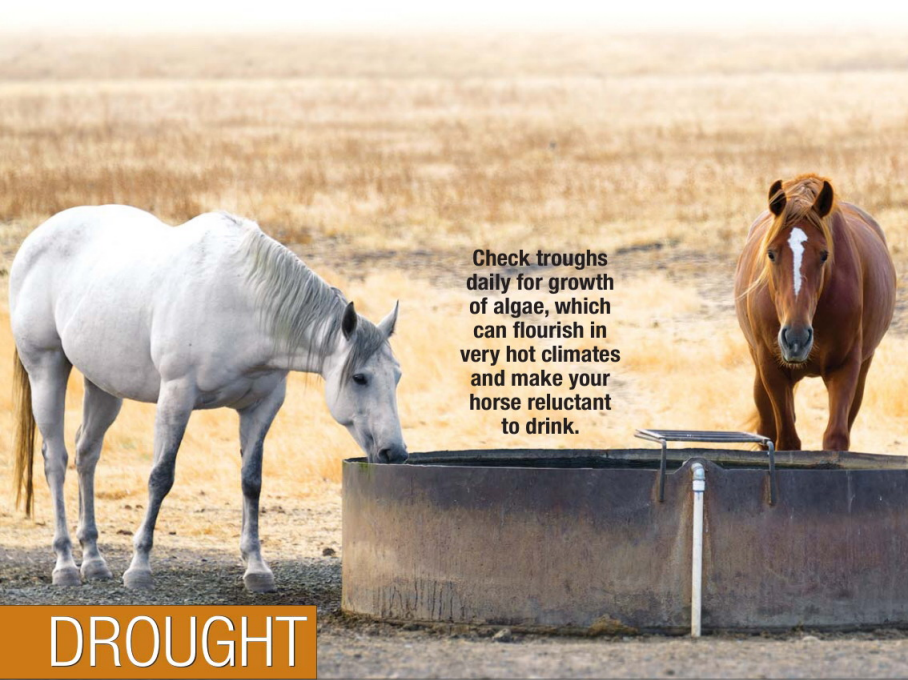
"There was a severe drought that summer," says Johnson, "followed by wet weather in the

fall—these weather conditions are favorable to pigeon fever. I suspect this disease will be more common in Missouri and other Midwestern states from here on out."

There is no vaccine for pigeon fever, but if spring and summer are becoming warmer in your area and mosquitoes and other disease-carrying insects enjoy a longer active season, don't be surprised if your veterinarian suggests adding one or two vaccines to your horse's regimen. In addition to the "core" vaccinations—against tetanus, eastern/western equine encephalomyelitis, West Nile virus and rabies—that are

recommended for all horses, your veterinarian may determine that your horse now needs protection against other viral or bacterial diseases.

And, of course, your veterinarian is your first and best resource when it comes to disease outbreaks in your area. Don't rely on the rumor mill or social media for information. Consider bookmarking your state veterinarian's office or your state department of agriculture to get accurate and up-to-date information. Another good resource is the U.S. Department of Agriculture's Animal and Plant Health Inspection Service at www.aphis.usda.gov.



Check troughs daily for growth of algae, which can flourish in very hot climates and make your horse reluctant to drink.

DROUGHT

Virtually every part of the country experiences a dry spell now and then, but droughts—a persistent shortage of precipitation or other water that lasts for weeks, months and even years—pose significant horsekeeping challenges. The shift in your priorities and the resulting changes in your management routine are likely to become the “new normal.” Here’s what that includes:

6. Protect the purity of the water you have. Check troughs daily to make sure your horse’s water is fresh and palatable. Algae can flourish in hot conditions and make your horse reluctant to drink. In particular, be on the lookout for blue-green algae, which can be toxic to horses and bloom in warm, shallow, stagnant water. Empty and scrub any tank that looks questionable.

7. Be on watch for weeds. When pastures are stressed by drought,

opportunistic weeds can flourish. Not only will they crowd out any grass that may be attempting to grow during a drought, but they can be a toxic hazard to hungry horses looking for something to chew on. Mow pastures regularly, even when growth of grass is slow, to keep weeds in check. And familiarize yourself with toxic plants in your area so you’ll recognize them if they appear.

8. Arrange for alternative forage. When pasture is sparse or nonexistent, you’ll need to provide the calories and “chew time” of roughage from another source. The easiest solution is to feed hay, although it can be difficult and pricey to find during a drought (see “When Hay Supplies Dwindle,” next page). Alternatives include a “complete feed” that provides nutritional roughage in a pellet form and alfalfa cubes, but these may not

fulfill the urge to graze and chew, so your fences and trees might be targeted for gnawing. Talk with your veterinarian before making any significant changes in your horse’s diet.

9. Remain vigilant about dehydration. The unavailability of water—for any reason—is a significant risk factor for colic. Checking horses for dehydration is a good habit to have in general, but during drought conditions it becomes even more important. Young and old horses are especially susceptible to dehydration, as are pregnant mares. To check your horse’s hydration status, pinch a small fold of skin on the point of his shoulder and pull it away from his body slightly. Then release the skin; it should flatten out within two seconds. Any longer suggests dehydration and the need to immediately take steps to get your horse to drink.



who supplies good-quality hay and stay loyal to him.

If supplies run short, growers tend to take care of their most loyal customers first. And if your regular source does run out, he's more likely to put you in touch with another grower who can get you by in the short term.

• **Store more hay than you think you need.** Providing you store and stack hay properly, it'll retain most of its nutritional value for a year or more.

• **Use slow feeders to stretch your hay supply.** Horses consume anywhere from 15 to 25 pounds of roughage per day, depending on their size, activity level, age and breeding status. But slowing them down a little can satisfy their nutritional needs with less waste.

• **Consider alternative forages if supplies run short.** One option is complete feed pellets, which are formulated to meet a horse's roughage needs. Hay cubes—either alfalfa or a timothy/alfalfa mix—are also worth considering. But horses with dental issues may have trouble chewing them, so be prepared to soak them in water to prevent choke.

• **Keep track of hay supplies and shortages.** Your state department of agriculture is a good source for what's going on. Other options include your county extension office or the U.S. Department of Agriculture-sponsored www.fsa.usda.gov/haynet when local sources run low.

WHEN HAY SUPPLIES DWINDLE

If you grow your own hay you already know that crops are sensitive to any type of extreme weather conditions. Too much rainfall and a crop rots on the ground. Too little rain stunts seed and leaf production, resulting in hay that is long-stemmed, coarse and has little nutritional value.

That's what happened in the southern plains during the summer of 2011. A widespread drought left horse owners and livestock operations scrambling to find quality forage. But even those outside of the region felt the pinch.

"The drought in the southern

plains pulled hay from other areas of the country," says Katelyn McCulloch, dairy and forage economist with the Livestock Marketing Information Center, an organization that provides economic analysis for the livestock industry. "That left many states, even those not in the drought zone, with lower stocks than in previous years. Then again, the following summer, a more widespread drought centralized over the Midwest devastated hay production numbers and continued to pull hay from other areas of the country."

But transporting hay across

the country is expensive, and that created a secondary problem—sky-high prices. "As anyone who has ever moved a few hundred bales into the hayloft knows, hay is heavy, bulky and difficult to handle," says McCulloch. "The cost of transportation is a huge problem, and prices were much higher for even lower quality grades." As McCulloch points out, "it was the perfect storm for record high hay prices."

Here are a few guidelines that can help you minimize your own risk of running short on hay in the aftermath of drought:

• **Find a local farmer**



**Heavy
snows wreak
havoc on
transportation,
and getting
more feed to
your farm may
be difficult or
impossible for
weeks.**

BLIZZARDS

With modern forecasting technology, heavy snowfalls and blizzards rarely surprise anyone. Typically, you'll have at least a day or two to prepare for the event. If your barn has been sufficiently winterized and you're used to cold weather, you might be in good shape already. If you're unaccustomed to large snowfalls or if you haven't had the opportunity to prepare for the season yet, you'll need to spend that time making quick preparations. Here's where to focus your efforts:

10. Evaluate the integrity of your farm buildings. Accumulated snow is extremely heavy, and some of the greatest losses to livestock from winter storms come from roofs collapsing in

the days that follow. If you have any doubts about the strength of your structures, plan to have the horses weather the snowfall outdoors. With blankets, hay and the shelter offered by trees or a run-in shed, most horses will do just fine outdoors, even in the bitter cold.

11. Assess your feed and hay stock. Heavy snows wreak havoc on transportation, and getting more feed to your farm may be difficult or impossible for weeks. Make sure you have enough feed to last for at least two weeks and head to the feed store if you don't. If your hayloft isn't well stocked, start working the phones to see where you may be able to purchase a few bales. Be concerned about quality,

however—moldy hay is worse than none at all. If you can't find hay, check at the local feed store for alfalfa cubes or other forage substitutes. It will likely be more expensive, but a horse who goes without any roughage has a higher risk of colic and other health problems.

12. Have a plan for water. Horses can't eat enough snow to stay hydrated, so you'll need to be able to provide water, even through waist-deep drifts and when the power is out. Are your pipes insulated? Will you need a generator to keep your well water running? Can you store water in troughs, buckets or barrels and keep it from freezing? Develop a plan for ensuring your horses will never go without water. Many winter



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colics result from dehydration.

13. Stock up on kitty litter. The nonclumping clay type is useful for traction on ice that forms around the barn. Rock salt works also but may burn animal paws, and the runoff can kill pasture plants.

14. Check your tractor. Make sure it is fully fueled and in good working order. You'll need it as soon as the snow stops for clearing paths to and around the barn and possibly delivering hay and water to pasture-bound horses.

15. Identify a "turnout" space. If your horses will be kept in stalls during

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AND LAMINITIS RISK

The warming trends of the past decades don't just mean unusual weather events. There's another consequence that is more subtle but has significant implications for equine health: a change in the growing seasons.

The latest version of the U.S. Department of Agriculture plant hardiness zone map, released in 2012, shows that all the plant zones have shifted north.

Based on average annual minimum winter temperatures, the map helps gardeners and

other growers determine which plants will grow well in their region. The 2012 edition was based on an analysis of winter temperatures for the period 1976 to 2005, updating a 1990 version of the map, which covered 1974 to 1986.

This change in zones means that some northern areas now have longer growing seasons, which in turn extends the risk period for pasture-induced laminitis.

Many grasses grow as long as the temperature stays above about 50

degrees Fahrenheit. If your horse is prone to pasture laminitis, it's no longer enough to judge your horse's risk based solely on the calendar. Instead, pay close attention to the weather patterns and growth of your fields. Growth that used to be expected in late April, for instance, may occur in mid-March under warmer conditions. Similarly, grasses may grow later into the fall.

This warming trend doesn't appear to be reversing itself anytime soon, so these adjusted risk periods for laminitis are probably here to stay.

a large snowfall, you'll want a space where you can turn them out or even just hand-walk them several times a day. Being cooped up in a stall isn't good for a horse mentally or physically. Your blizzard "turnout" space might be an indoor arena with a structurally sound roof or simply the barn aisle, where you can lead the horse back and forth and do some simple groundwork until you are able to plow a path to his regular pasture.

For horsepeople, the weather is more than a universal conversation topic—it's a constantly changing variable that has a direct influence on our daily routines. When the forecast calls for some clouds or light rain, we don't need to change much, but when things take a turn for the extreme, we need to be prepared to take action. The payoff comes when sunny skies return and we are all safe and sound. 🍎

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A number of dreadful diseases are now very rare among horses—thanks to some of the simplest and cheapest preventive measures we have.

By Heidi Furseth

THE CORE

EEE/WEE RABIES WEST



Vaccination easily ranks as one of the single most important things you do to protect your horse's health. In fact, vaccines have been so successful that it's rare to even hear of horses contracting several dreadful diseases that once loomed as a constant threat.

It is worthwhile, though, to remember what those injections are doing—especially the four “core” vaccines the American Association of Equine Practitioners (AAEP) recommends for every horse. The AAEP guidelines distinguish between two categories of equine vaccines: Nine are included in the “risk-based” group, which your veterinarian might recommend only for those horses most in need of protection against certain illnesses (anthrax, botulism, equine herpesvirus, equine viral arteritis, equine influenza, Potomac horse fever, rotaviral diarrhea, snakebite and strangles). Risk may be based on diseases endemic to a particular region, an outbreak or epidemic in a specific area, and/or whether a horse’s “lifestyle”—as a breeding animal or equine athlete—increases the risk of

exposure to particular pathogens.

In contrast, the four core vaccines—eastern/western equine encephalomyelitis (EEE/WEE), rabies, tetanus and West Nile virus (WNV)—have several characteristics:

- They protect against diseases that occur year after year—by way of disease carriers in the soil, carried by insects or local wildlife—so that every horse is at risk, regardless of location or lifestyle.
- They prevent diseases that have a high mortality rate and/or have no effective treatment.
- They are safe, effective and widely available.
- In the case of rabies, the vaccine protects human health and lives.

Here is a brief overview of the four diseases the core vaccines protect against.

VACCINES

NILE VIRUS TETANUS

OPPOSITE: DARLENE WOLHART; LEFT: DUSTY PERIN

EEE/WEE

► **Definition:** Eastern and western equine encephalomyelitis are a pair of closely related viral diseases that affect the horse's central nervous system. Eastern equine encephalomyelitis (EEE) is more deadly than western equine encephalomyelitis (WEE). (A related disease, Venezuelan equine encephalomyelitis [VEE], occurs in Central and South America. The last recorded cases in the United States occurred in southern Texas in 1971.)

► **Transmission:** EEE and WEE are caused by alphaviruses of the family *Togaviridae*. The two forms are separated by geography. EEE occurs in the Southern and Eastern United States, and WEE

in the West.

However, outbreaks of both viruses have occurred outside of their normal ranges. The viruses that cause EEE and WEE are carried by birds and spread by mosquitoes. Birds that carry the viruses do not become seriously ill. However, a mosquito who feeds on an infected bird can transmit the virus to its next host. Horses are considered dead-end hosts, meaning that they cannot pass the virus on to mosquitoes or other animals once infected.

► **Signs:** Five to 10 days after a horse is bitten by an infected mosquito, the virus passes through the blood-brain barrier to infect the central nervous system—the brain and spinal cord—where it multiplies and begins to kill nerve cells. The earliest signs of EEE are listlessness, fever and loss of appetite, but within the next 24 hours the horse will develop more significant neurological

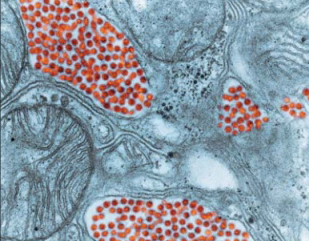
signs, including incoordination, sensitivity to sound and touch, muscle twitching in the shoulder and flank, head pressing and seizures. Within another day the horse will develop paralysis and become recumbent; coma and death follow.

The signs of WEE are similar—including fever, depression, ataxia^a and head pressing—but tend to be milder.

► **Treatment:** The only treatment is supportive therapy. The horse might receive intravenous fluids and corticosteroids to help reduce edema in the brain. Even with treatment, about 90 percent of horses who develop EEE will die within two to four days; those who survive are likely to have lifelong neurological impairment. The mortality rate for WEE is estimated to range from 20 to 40 percent if the case progresses to full-blown encephalomyelitis, but milder cases may never even be diagnosed if the horse recovers before developing serious signs of infection.

DUSTY PERIN





EASTERN EQUINE ENCEPHALOMYELITIS

ADDITIONAL PREVENTIVE MEASURES:

EEE, WEE AND WNV

• Limit mosquito populations.

Mosquitoes lay their eggs in calm, stagnant water, so take steps to close the breeding grounds. That means picking up old tires and other debris that can catch rainwater, overturning unused wheelbarrows, and keeping drainage ditches and rain gutters flowing freely. Also repair dripping faucets, and clean water troughs and buckets regularly.

• Maintain healthy ponds and streams.

Fish and other predators will feed on mosquitoes and their larvae and help to keep their numbers down. Your local extension agent can advise you on how to properly manage natural water sources on your property.

• **Use fly sprays.** Check that your fly sprays are also effective against mosquitoes, and apply them to your horses prior to turnout and before riding on trails that go near wetlands.

• **Bring horses inside at dawn and dusk, the hours when mosquitoes are most active.** Mosquitoes are weak fliers and avoid breezes, so a few well-placed fans will also deter them from approaching your horses.



► **The vaccine:** A single bivalent vaccine protects against both EEE and WEE (and provides some immunity against VEE as well). The vaccine is an inactivated adjuvanted whole virus product—that is, it contains both whole viruses, which have been rendered inactive by mixing them with a formaldehyde solution called formalin, combined with an adjuvant—a substance that stimulates a greater immune response to encourage the production of more antibodies against the viruses.

The first time a mature horse is vaccinated, or for a horse whose history is unknown, the recommended schedule is two doses of vaccine spaced four to six weeks apart. Thereafter, mature horses can be vaccinated once per year, prior to the start of mosquito season. In areas where the mosquitoes remain active year-round, your veterinarian may recommend booster vaccines every six months, especially for horses with compromised immunity.

The AAEP also suggests that pregnant mares receive a booster four to six weeks before they are scheduled to deliver, and that foals of vaccinated mares receive a three-dose series at four- to six-week intervals, beginning at 4 to 6 months of age. Your veterinarian will be able to make more specific recommendations based on your local climate and conditions and your horse's own health needs and risks.

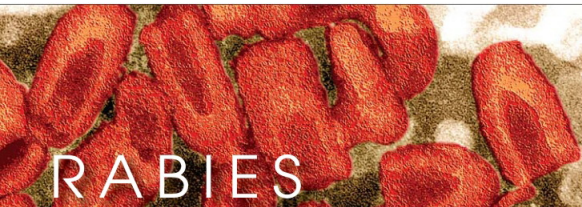
RABIES

► **Definition:** an acute viral disease that affects the central nervous system.

► **Transmission:** Rabies is caused by a lyssavirus, a neurotropic rhabdovirus that infects neural tissue. Transmitted via the saliva of an infected animal, the virus does not travel through the bloodstream; instead, it enters the neural tissue at the site of the bite and then migrates from nerve cell to nerve cell until it reaches the spinal cord and brain. Upon entering the central nervous system, the rabies virus reproduces rapidly, spreading back out through the peripheral nerves and into the salivary glands ready to be passed to a new host.

Raccoons, bats, foxes and skunks are the most common carriers of rabies in North America, but other mammals can transmit the disease as well. Horses are most often bitten on the lower legs or muzzle. A horse shows no outward signs of illness during the incubation period—the days, weeks or months it takes for the virus to migrate from the bite wound to the brain. The length of the incubation period depends on the location of the bite on the horse's body. After a bite to the hind leg, it can take weeks or months for the virus to reach the brain, but if a horse is bitten on the muzzle or head, the incubation period can be as short as a few days.

► **Signs:** Rabies is difficult to diagnose because the signs are variable and can mimic those of other diseases or problems. After the virus reaches the brain, a horse may have a low-grade fever, mild depression, loss of appetite and slight weakness or incoordination. Within four or five days, however,



RABIES

DR. FRED MURPHY/UNLIMITED.COM

the signs can progress rapidly to convulsions, excessive salivation and more severe neurological impairment. Pain and sensitivity can recur at the initial site of infection; if the horse was bitten in the leg he may violently gnaw at the affected limb.

Acute rabies develops into two forms: The furious form (mad dog syndrome) is the type most often dramatized in books and movies, characterized by agitation, aggression, hyperactivity and paralysis of the face and tongue. This form is more commonly seen in horses who were bitten on the head. The paralytic (dumb) form causes depression, excessive salivation, ataxia, paralysis and eventually recumbency. Some horses may even show a combination of signs from both forms of the disease.

A definitive diagnosis of rabies

can be made only with a postmortem examination of the brain tissue.

► **Treatment:** There is no treatment, and rabies is invariably fatal, usually within one to five days after the first signs of illness appear. Because of the public health risk, any horse suspected of having rabies must be quarantined or destroyed, and everyone who had been in contact with that animal must seek immediate medical care—they may need to receive a series of shots to protect them against the disease. The current postexposure prophylaxis (PEP) for people exposed to rabies is a series of five shots given over a 14-day period.

If a horse had been inoculated against rabies and then is bitten by a rabid animal, the current protocol is to revaccinate him immediately and then observe him for 45 days for clinical signs of disease.

► **The vaccine:** Three rabies vaccines are available for horses. All are inactivated tissue-culture-derived products where the virus is grown in cell cultures and then killed to make the vaccine. A single dose is enough to induce strong immunity, and the current recommendation is that mature horses be vaccinated once a year.

According to the AAEP, mares vaccinated prior to breeding develop enough immunity to produce sufficient levels of antibodies in their colostrum to protect the newborn. Alternatively, a pregnant mare can be vaccinated four to six weeks prior to foaling. If the mare was vaccinated, a foal won't need his first rabies shot until he is 6 months old. Foals get a two-dose series, spaced four to six weeks apart, and thereafter are vaccinated once annually as mature horses.

ADDITIONAL PREVENTIVE MEASURES: RABIES

• Learn which wild species pose the greatest threat in your area.

Any mammal can host rabies, but only a few species are both highly susceptible to the disease and likely to bite a horse. In 2010 (the last year for which data is available), 6,154 cases of rabid animals were reported to the Centers for Disease Control and Prevention. The most common wild species reported were raccoons (36.5 percent), skunks (23.5 percent), bats (23.2 percent) and foxes (6.9 percent). But the occurrences

were not evenly distributed: Raccoons were the most frequent carriers of rabies on the East Coast; skunks in the middle portions of the country from the Dakotas to Texas plus California; and foxes in Alaska and the Southwest. Cases reported in bats were scattered all around the country.

• **Discourage wild animals from hanging around your farm.** You can't, of course, avoid all encounters with local wildlife, but do take measures to avoid attracting high-risk species. That may

mean storing grains and feeds in tightly fastened bins, blocking off access to crawlspaces under storage sheds and other buildings, and keeping your garbage in sealed cans.

• **Avoid and report ill wildlife.** If you notice unusual behavior in wild animals—a nocturnal animal ranging about in daylight, for example, or acting unusually aggressive—call Animal Control or your local police. Do not approach the animal or allow it to come near you or your animals.

• **Vaccinate all your**

domestic animals. In 2010, 8 percent of rabies cases reported were among domestic animals, mainly cats (4.9 percent) but also dogs (1.1 percent) and cattle (1.1 percent). Vaccinate all dogs and cats on your property, including any feral or semi-feral barn cats. Currently, approved rabies vaccines are also available for cattle and sheep. Talk to your veterinarian about the risks of off-label use to vaccinate goats or other species if rabies poses a significant threat in your region.



CLOSTRIDIUM TETANI

TETANUS

► **Definition:** a paralytic disease caused by toxins of the bacterium *Clostridium tetani*

► **Transmission:** *C. tetani* is an anaerobic bacterium that normally inhabits the equine digestive tract. But when the bacteria pass into the soil, they form spores that can survive for years. When the spores encounter an anaerobic environment—such as a puncture wound that heals over on the surface—the bacteria reactivate, grow and multiply, producing a potent neurotoxin.

The toxins enter the motor nerves and travel through them to the spinal cord. As they spread through the nervous system, the toxins interfere with the release of neurotransmitters, causing the skeletal muscles to lock into rigid spasms. In some cases, the spasms may be strong enough to fracture bones. Paralysis of the muscles of the head and mouth (called “lockjaw”) make it impossible for the horse to eat or drink. If the spasms affect the larynx and diaphragm, the horse will suffocate. The incubation period may vary, but tetanus usually develops within 10 to 14 days after the initial wound, which can be so

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ADDITIONAL PREVENTIVE MEASURES: TETANUS

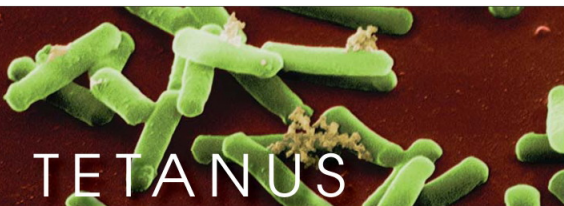
- **Watch for puncture wounds.** Deep wounds that close over, trapping dirt and bacteria under the skin, are perfect incubators for tetanus. Inspect wounds carefully to determine how deep they go, and call your veterinarian if you're unsure. Be especially

attentive to wounds on the hooves and lower legs, which are more likely to be exposed to manure and dirt.

- **Clean all wounds.** The bacteria that cause tetanus can take hold even in small wounds. Cleanse and disinfect any wound you find on your horse. A

quick rinse with a topical antiseptic will suffice for most minor wounds.

- **Clear up clutter.** Be vigilant about cleaning up broken glass, loose nails, abandoned farm tools, barbed wire and other debris that can injure horses.



TETANUS

minor it was never even noticed.

► **Signs:** The first sign of tetanus is localized muscle stiffness in the vicinity of the wound where the bacteria entered as well as in the jaw, neck and hind limbs. The horse's tail will be rigidly elevated and he will move with a stiff gait. Within another day, the horse will experience generalized stiffness throughout his body as well as hyperesthesia—a hypersensitivity to sensory stimuli—which causes him to be extremely reactive to sounds and touches. He may be unable to walk and will stand with a characteristic “sawhorse” stance with stiff legs, an arched back and a backwardly arched neck. The horse may develop the characteristic facial expression, called “risus sardonicus” or the “sardonic grin,” which consists of drawn back lips exposing the teeth, nostrils rigidly flared, erect ears and prolapse of the third eyelid.

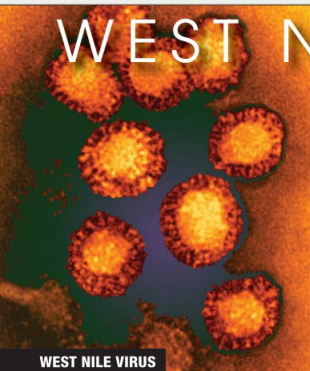
► **Treatment:** Early intervention is critical to successful treatment of tetanus. An antitoxin is available, which is injected directly into the fluid surrounding the brain, but it neutralizes only those toxins that have not yet bonded to neural tissue. Other treatments include the administration of antibiotics and various muscle-relaxing drugs and pain medications, along with intravenous fluids. Infected wounds also need to be drained and cleaned. If the affected horse cannot eat he needs to be fed via nasogastric tube. Even with aggressive treatment, the mortality rate of tetanus is 50 to 75 percent.

► **The vaccine:** The vaccine against tetanus is a formalin-inactivated adjuvanted toxoid—the toxin is chemically rendered harmless, mixed with an agent that stimulates the immune system and injected into the horse. Unvaccinated mature

horses receive a two-dose series, spaced four to six weeks apart. Thereafter, a single annual booster is recommended for all mature horses. An additional booster is recommended if a horse sustains a wound or undergoes surgery more than six months after his last vaccination.

The AAEP recommends vaccinating a pregnant mare four to six weeks prior to delivery, both to increase the antibodies in her colostrum and to protect her if the delivery is difficult. Foals get a three-dose series starting at 4 to 6 months of age, with four to six weeks between the first and second inoculation, and then a third administered at 10 to 12 months.

Because *C. tetani* spores are present in soils, especially on farms with large animals, it's a good idea for you to stay up-to-date on your tetanus shots, too.



WEST NILE VIRUS

► **Definition:** viral disease that affects the central nervous system. Technically, “West Nile virus” (WNV) is the agent that causes the disease “West Nile encephalomyelitis,” but people commonly use the name of the virus to refer to the illness.

► **Transmission:** WNV is a flavivirus carried by birds and spread by mosquitoes. Most wild birds are asymptomatic carriers of the virus with the exception of ravens, crows and other corvids, for which WNV is often

fatal. Dead ravens and crows are often an indicator of an outbreak in a local area. Horses are considered dead-end hosts; that is, once infected they do not directly infect others.

WNV is a relative newcomer among U.S. diseases. The virus was first identified in the West Nile river region of Uganda in 1937, and for more than 50 years its range seemed to be limited to Africa, the Middle East and parts of Europe and western Asia as well as Australia. In 1999, however, the first

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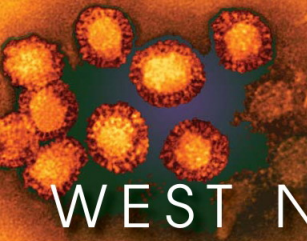


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WEST NILE VIRUS

North American cases appeared in the New York City metropolitan area, and by 2002, the virus had reached California. WNV is now well established in all 48 contiguous states as well as Canada, Mexico and several Central and South American countries.

► **Signs:** Most horses bitten by mosquitoes carrying WNV will show few, if any, signs of any illness. Horses newly exposed to the virus might develop a low fever and listlessness for a few days, but most are able to fight off the infection and recover fully.

However, in roughly 10 percent of cases, WNV crosses the blood-brain barrier to infect the central nervous system. In those cases, within five to 15 days horses will begin to show a number of more serious signs of illness, including elevated fever, muscle weakness and incoordination, loss of appetite, muscle twitching of the face, behavioral changes and paralysis and recumbency. The most striking signs are incoordination, constant waves of muscle twitching and major changes in personality—most often with

exaggerated fear responses.

► **Treatment:** The only treatment is supportive therapy, including intravenous fluids and anti-inflammatory medications. Recumbent horses may benefit from being supported in a sling until they recover well enough to stand. Neurological impairment will generally begin to diminish after five to seven days, but some cases may last for several weeks. Roughly a third of horses who develop neurological disease from WNV will die or be put down. Those who recover may take up to a year to return to their previous level of work.

► **The vaccine:** Currently, three types of WNV vaccines are available:

- One is an inactivated whole virus formula with an adjuvant. To produce the vaccine the manufacturer grows the virus in culture, kills it so it can no longer cause disease, and then mixes it with a substance that encourages an immune response to the virus. The recommended protocol for this type of vaccine is a primary dose followed by a second dose three to six weeks later and then a yearly booster.

- Another WNV vaccine type is a nonreplicating live canary pox recombinant vector vaccine. More simply put, bits of the WNV DNA are spliced into a carrier virus that does not cause disease in horses. When this combined virus is injected into the horse, he develops antibodies to the WNV without risk of infection. This vaccine requires a primary series of two injections four to six weeks apart and then a revaccination every 12 months.

- The third type is an inactivated flavivirus chimera vaccine. For this one, a hybrid of WNV and another flavivirus, yellow fever, is created, killed and mixed with an adjuvant to stimulate the production of antibodies against WNV antigens⁴. This vaccine requires a series of two injections three to four weeks apart with yearly boosters thereafter.

None of the WNV vaccines are labeled for use in pregnant mares; however, experience has shown the vaccine to be safe for pregnant mares. Foals can receive any of the vaccinations, which are administered in a three-dose series—two at 4 to 6 months of age, with a four- to six-week interval, and then the third at 10 to 12 months of age.

The AAEP recommends that mature horses be vaccinated against WNV each spring, prior to the start of mosquito season. Your veterinarian may recommend more frequent boosters if your horse is at high risk of exposure or has compromised immunity. ●



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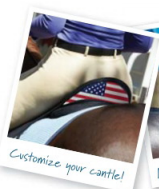
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By Kerry Tkacik



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The **SMx VenTech Combo English Girth** (suggested retail, \$89.95), from Professional's Choice, features a ventilated, nonslip neoprene liner designed to conform to the horse's body while allowing moisture

and heat to escape. A fleece border adds comfort with a traditional look. The neoprene liner is detachable for hand washing. Call 1-800-331-9421 or go to www.profchoice.com.



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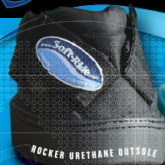
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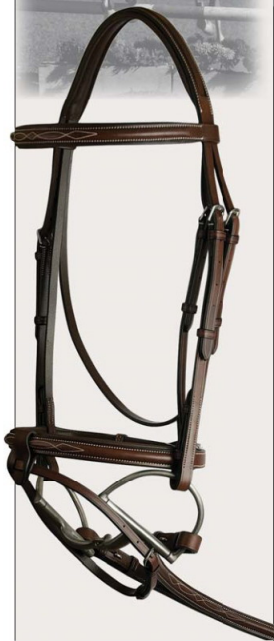
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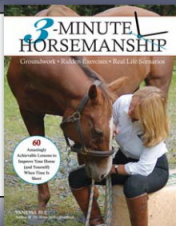
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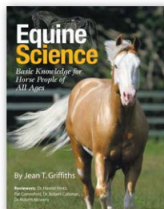
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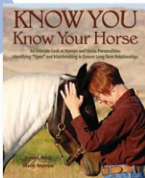
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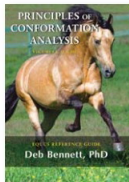
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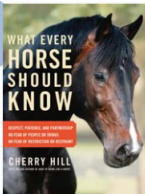
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ARABIANS FOR EVERYONE



From a founding population of less than 400 horses have come thousands of useful and beautiful Arabians in America.

By Deb Bennett, PhD

Through two previous installments, we have traced the fascinating history of the Arabian horse in its Asian homeland and in America. This called for presenting photos of many famous stallions and mares, the “foundational” individuals who were often also champions in show and performance. Your letters tell us that you’re interested in this information as a valuable resource, for

the Arabian horse is one of the most popular and influential of horse breeds. Nonetheless, what most people own is neither the champion horse nor the foundational sire or dam but rather geldings and mares not needed at the big breeding farms.

By no means does this indicate, however, that horses owned by “ordinary” people and “backyard” breeders are of poor quality. One of the most amazing facts about the Arabian

horse in America is that despite a founding population of far less than 400 individuals—this number being considered the minimum necessary for the permanent establishment of any animal bloodline that “breeds true”—we have produced thousands of useful and beautiful individuals. Over more than 25 years, EQUUS readers have sent in many photos of such interesting Arabian horses. Let’s take a look at a sample of the best, along with a

selection of their ancestors from the 19th century to the present.

I've included pedigree information for the horses presented in this article to demonstrate both relatedness and unrelatedness. Many different names in a pedigree indicate unrelatedness and a low degree of inbreeding; when names are repeated, the degree of inbreeding rises. As explained in the two previous installments in this series, there are six major sources of Arabian horses in America:

(1) What can be called "old American" sources, generally diplomatic gifts which predate the 20th century, including the horses *Leopard (an undoubted purebred) and *Linden Tree (either a Barb or an Arabian, but accepted as Arabian).

(2) The Hamidie Society horses presented at the World's Columbian Exposition of 1893 and the subsequent Davenport importations of 1906. These animals were imported primarily from Syria.

(3) The Crabbet Stud in England, whose bloodstock originally came from breeders in Egypt and the Negev in what is now Israel, but later included Skowronek and other influential stallions bred in Poland from stock

REAL HORSES AND INTRIGUING



1 Firebolt CF
• (Clarion CF x
Anthesis CF). 6-year-
old stallion. Photo by
Anita Westfall. Bred by

Charles Craver; owned
by Kirby Drennan. The
five-generation pedigree
of this beautiful stallion
contains no fewer than 16

crosses to a single Davenport stallion, five of them through a horse born in the United States in 1943. *Can you name these two horses?* Definitely the product of inbreeding, this stallion is exactly the "spice in the stew" that can improve bloodlines other than his own. An important consideration in Arabian breeding is the tail-female bloodline. In this horse it traces to a mare that is represented in at least five of the other lines leading to Firebolt CF. *Who is this mare?*



2 MM Juliana Bey
(SA Hudson Bey x
Juwel). 8-year-old mare.

Submitted by owner Carrie Waters. This horse's pedigree contains crosses to three different bloodlines who present—as she does—powerful, sloping hindquarters as well as good bone substance and correctly made hind limbs. *Can you pick out the three stallions with the most powerful hindquarters?*



3 SK Cosmopolitan (Desi
• x Arabacres Rena).

13-year-old gelding. Submitted by owner Sue Fisher, who characterizes this gelding as a great companion with whom she enjoyed many different forms of outdoor riding. He presents very correct conformation with a particularly nice cut of withers and long, sloping shoulder, a back that is easily fitted to saddle, and powerful

hindquarters. This is the sort of horse once especially valued by the U.S. military. His five-generation pedigree presents about a 50-50 blend of Crabbet and Egyptian breeding, in which the name of a single early 20th-century individual stands out. *Which horse is that likely to be?* His pedigree also contains five crosses to the same Crabbet foundation stallion as Horse 6. *Which is this stallion?*

QUESTIONS

FOR ANSWERS, SEE PAGE 63.



4. Strut (On Strike x Sanga). 3-year-old stallion. Submitted by owner Robert Anderson. Bred entirely from established American bloodlines, this young stallion harks back in eight lines to the fabulous early-day Egyptian-bred stallion Mesaoud. He also goes back in three lines

to the Polish-bred stallion used to establish the modern warmblood breed called the Trakehner. *Can you name this horse? Strut's conformation resembles that of another famous Polish sire pictured in this installment. Can you pick this horse out?*

5. Mishma Too (Na Marid x Na Thelos). 15-year-old gelding. Submitted by owner Janet Dreiling. Carrying on a regional tradition up through the 1980s, the Cross-U-Bar Ranch in Wyoming produced many purebred and half-bred Arabians specifically for use as working cowhorses. This substantial, strong, and smoothly conformed gelding carried his owner to many ribbons in endurance

competition. Good-minded, intelligent and brave, he was long lived and always sound. Not surprisingly, his five-generation pedigree contains 12 crosses to the great stallion Mesaoud. It also contains in total six crosses to two great foundation broodmares—*can you name them?* Be sure also to study the look-alike photo of Mishma Too's eponymous grandsire.



6. Jubifix (Witezfix x Jubilee). 17-year-old gelding. Submitted by owner Elizabeth Patton. This gelding, with his refined head, big soft eye, long neck, high withers, deep chest, and long sloping shoulder, is the kind of horse most favored for three-gaited competition (English pleasure and Arabian park). Like his grandsire *Serafix and certain other horses of Crabbet breeding, this horse also has a relatively long back, near-level pelvis, open hind angles and rump-high conformation. Trainers

of three-gaited horses favor this combination as tending to assist high action in front and sharp hock action behind. I knew this horse to be a comfortable, elegant ride and so gentle that both children and very timid riders could enjoy him. Although his pedigree also contains horses going back to Skowronek, Jubifix much more resembles his grandsire *Serafix. *Can you pick out the family resemblance in an even more distant ancestor—one of the Crabbet foundation horses—pictured in this installment?*



REAL HORSES AND INTRIGUING QUESTIONS (CONT.)



7. Sabareka (Lamolin x PR Tigresszona). 22-year-old mare.

Submitted by Tia Saletta.

This mare works as a school horse for children and adult beginners. A very elegant mover at all three gaits, her conformation is smooth, correct and substantial. Her pedigree is a blend of Egyptian, Polish and

Davenport breeding with, in addition, several crosses to Roger Selby's "original" Arabian stallion, born in about 1919 and imported in 1928. *Can you name this influential foundation horse?* An important Davenport stallion, born in 1904, also appears multiple times in her pedigree. *Which horse is this?*

8. Blue Mound Sultan (*Ansata Ibn Halima x Misty Star). 17-year-old gelding.

Submitted by breeder and owner Sue Cranston. I had the privilege in the 1970s of helping to introduce this horse to saddle, bridle and rider. Blind in one eye due to an encounter as a foal with the long, sharp thorn of an Osage orange, the injury never affected this horse's rideability or usefulness. Even for an inexperienced "colt starter" such as I was, this gelding proved to be a fair-minded ride who objected only when my demands were excessively



brusque or clumsy; in short, Sultan was a good teacher. He became a reliable companion on the trail and provided his owner some experience riding a good-moving horse in the arena as well. The Egyptian breeding of *Ansata Ibn Halima includes multiple

crosses to an 1897 stallion. *Can you identify this animal?* Sultan's dam's "domestic" pedigree includes three crosses to a very handsome desert-bred stallion born in 1898 who stood at Crabbet Park in England. *Can you guess this stallion's identity?*



9. Monie Talks
• (Monogram x
MHF Cashel). 15-year-

old gelding. Submitted by owner Barbara Janesick. This gelding, a one-time champion

in reining, descends from a famous Polish-bred horse who, after his importation in 1963, became U.S. national champion in both halter and park. *Can you identify this horse?* The pedigree of Monie Talks also contains nine crosses to a single Polish stallion born in 1933. *What is the name of this substantial, fast and correctly conformed horse?*



10. Summer Blush
• WA (Persuasion
x Modesty Blaise).
15-year-old mare.

Submitted by owner Mary Gills. This mare exemplifies both beauty and substance. Although considered "straight Davenport,"

she is not as inbred as stallion no. 1 but instead represents a nice blend of inheritance from more than five of the original Davenport group. The most frequently represented individual in her five-generation pedigree was

the longtime star of the Kellogg Ranch at Pomona, California. *Can you name this horse?* Her pedigree also contains 10 crosses to another handsome and good-minded horse from the Davenport importation. *Can you identify him?*

imported to Poland and Russia from Turkey. Major importations of Crabbet-bred horses to the United States came with the dispersal of the Crabbet herd in the late 1940s.

(4) Direct importations of small numbers of horses by various individuals from breeding farms in Egypt. These include the Babson importation of 1932 and Judith and Donald Forbis' importation of "Ansata Ibn Halima" in 1959.

(5) Importations from breeding farms in Poland and Russia. Almost all of these date after 1960.

(6) Importations from Spain and France, again almost all dating after 1960.

As the pedigrees of the horses presented in this article show, American breeders have often crossed

As the pedigrees of the horses presented in this article show, American breeders have often crossed unrelated bloodlines.

unrelated bloodlines. This is wise—especially where the number of unrelated founding individuals is small—because it tends to ensure a high percentage of healthy foals that grow into useful horses of good size and substance. A small number of American breeders follow the opposite philosophy in the belief that inbreeding creates "purity"—a relic of World War II-era thinking that in the view of geneticists is truly a chimerical quest. While inbreeding—the deliberate mating of related individuals—can increase the frequency with which desirable qualities such as endurance capability,

FAMOUS ANCESTORS

These photos are presented in chronological order by date of the horse's birth. Besides offering specific comments on breeding and conformation, this ordering allows a kind of "real time snapshot" of the direction of Arabian breeding in America from the 19th century to the present.



FEYSUL

A. Hadban (born 1878; by a desert-bred stallion out of a Hadbah-Enzahiyyah mare). Imported to England by Lady Anne and Wilfrid Blunt, this tough and handsome stallion was one of the founders of the Crabbet bloodlines.



HADBAN

B. Feysul (born 1894; Ibn Nura X El Argaa). A Kuhailan Jellabi bred by Ali Pasha Sherif, Feysul was one of Crabbet Park's foundation stallions. Six generations later, his descendant Jubifex resembles him in the shape of head and neck, back, loins, pelvis, forelimbs and overall body balance.

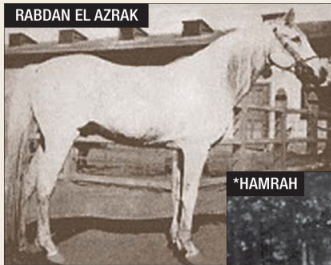


*RESHAN

D. Rabdan El Azrak (born 1897; Dahman El Azrak x Rabda).

Bred by Prince Ahmed Pasha Kemal, this horse died in 1923 after siring Ibn Rabdan, sire of the influential 1932 Henry Babson importation *Fadl. Note especially the substantial and correct limbs, with wide knees and hocks.

RABDAN EL AZRAK



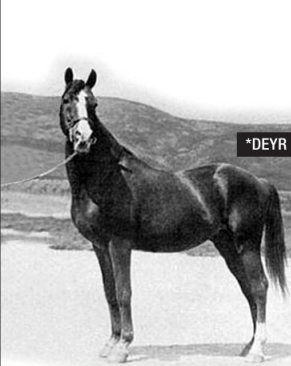
E. *Hamrah (born 1904; by a Hamdani-Simri stallion out of Urfa, a desert-bred mare of Saqlawiyah strain). Imported by Davenport, the handsome and smoothly conformed stallion is ridden in this turn-of-the-century photo by Said Abdallah at one of the lawn parties that were once a frequent occurrence at the Davenport farm. Note the spectacular shoulder and breast, deep chest, short back, low-set hocks and knees, and long forearms. The expression is "soft" and kind.

*HAMRAH



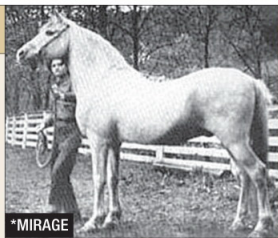
C. *Reshan (born 1896; desert-bred by a Kuhailan-Ajuz of Ibn-Kardush x a Kuhailan-Haifiyah of Ibn Huraymis of the Fidan). This substantial yet feminine broodmare was imported by Davenport and registered by the Arabian Horse Association as no. 38. The foal at foot may be Hasiker, sired by *Hamrah and born in 1914. Hasiker is the grandsire of Sir (1958), an

important stallion in the so-called "second foundation" of Davenport horses spurred by Charles Craver and other fanciers when, after World War II, the old bloodlines had nearly died out.



F. *Deyr (born 1904; by a Kuhailan-Ajuz stallion out of an Abbayyah-Sharrakiyah mare). Imported by Davenport in 1906, "Deyr's" name appears many times in modern pedigrees—more often than any other horse of the Davenport importation or the Hamidie Society. According to breed historian Gladys Brown Edwards, this horse was destroyed at the age of 18 for having "coarse" conformation, and yet he sired not only Hanad and Harara but many other very handsome and useful horses.

G. Moliah (born 1911; *Hamrah x *Wadduda). No conformation photograph of Davenport's original war mare, "Wadduda," has been located, but this photo of her daughter by the handsome and good-minded stallion "Hamrah" gives a good idea of what her conformation must have been. Her best features are the beautiful neck and deep shoulder, topped by a refined head with chiseled bone structure.



H. *Mirage (born about 1919; desert-bred by a Kuhailan-Ajuz of the Anazeh x a Seglawieh-Jedran of Dalia). Imported in 1928 by Roger Selby, this substantial and beautiful stallion helped to establish quality Arabian bloodlines in the United States. Criticized by breed historian Gladys Brown Edwards for having "crooked" (over-angulated) hind limbs, breeders corrected this fault in many of his get by judicious choice of mares. Good examples are Rifage (see page 62), and Bay Abi (see page 61), both bred from mares tracing to Skowronek.



I. Antez (born 1921; Harara x Moliah). Star of the old Kellogg Ranch program and an amazingly talented horse who could rack as well as race, Antez also possessed a red-gold coat with iridescent sheen (enhanced here in a hand-colored postcard). With

a gentle temperament, he was ridden by children and trained for tricks as well as pleasure riding. He spent time on loan to the Polish national stud and at the Hearst breeding facility. Antez's influence today is primarily seen in Davenport-related pedigrees.



J. Ofir (born 1933; by a desert-bred stallion of Kuhailan-Haifi strain, out of Dziwa, who traces to Mlech, Gazella, Sahara and other 19th-century exports from Turkey to Russia and Poland).

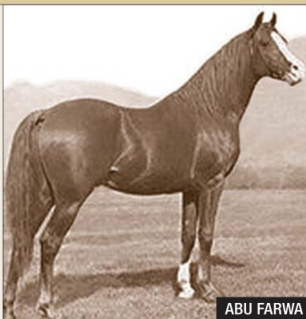
This horse influences recent American pedigrees through his sons Witez II and Witraz and his daughter Mammona, who figures importantly in Russian-Arabian breeding.

FAMOUS ANCESTORS (CONT.)



TRYPOLIS

K. Trypolis (born 1937; Enwer Bey x Kahira). Tracing within three generations in all lines to 19th-century Polish bloodstock purchased from the Ottoman Empire, Trypolis represents the very stout conformation favored by the Polish. This is a balanced horse with good hocks, open hind-limb angles, and a well-shaped neck that is nonetheless set on slightly low—a conformation most adapted for racing. Trypolis's influence is felt primarily in so-called "pure Polish" breeding.



ABU FARWA

L. Abu Farwa (born 1940; Rabiya x Rissletta). This horse in many ways improves upon his grandsire Gulastra, through shortening the back, strengthening the coupling, improving the overall body balance, and increasing the size of the hindquarter. A champion in both halter and park competition, Abu Farwa was most impressive under saddle. His is still the most prolific American bloodline in terms of the number of champion sons who are themselves sires of champions—and of many others owned by ordinary folks who are "merely" good-looking, good-minded, useful and athletic.



EL ALAMEIN

M. El Alamein (born 1943; Dhareb x Antarah). Handled in this photo by breeder and Davenport fancier Charles Craver, El Alamein was central to Craver's efforts after World War II to revive "straight Davenport" breeding. Carrying the blood of five of the original Davenport importation—

*Deyr, *Hamrah, *Muson, *Reshan and *Wadduda—the horse is conformed similarly to *Haleb. Davenport horses are typically broad-headed and substantial, with good shoulders and hindquarters, broad backs, correct legs, and powerful but well-shaped necks. They're also so intelligent they can almost talk, and so personable they can almost tell a joke. Such horses—which go to "extremes" only in those qualities which less-than-expert riders ought to want most—are certainly worth preserving and perpetuating.



*SERAFIX

N. *Serafix (born 1949; Raktha x Serafina). Bred at Crabbet Park during its last days, *Serafix was imported to the United States by John Rogers of Walnut Creek, California, in 1954. He earned show championships but is primarily known through the achievements of his numerous progeny. Note the

head shape, which harks directly back to his great-grandsire Feysul. The conformation description given for *Serafix's gelded grandson Jubifix applies to both horses, demonstrating that body proportions certainly do carry on from generation to generation—"what you see is what you get."

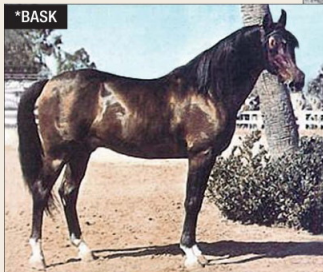
O. Mishma I (born 1951; Rapture x Mlecha). Like W. L. Van Vleet's Big Horn Ranch in Colorado, S. Watts Smyth's Cross-U-Bar Ranch in Big Horn, Wyoming, also produced champion-quality purebred and half-Arabians. Like many other Arabian ranch horses of the 1940s through the 1970s, Mishma I was a working cowhorse who took weekends off to win championships at horse shows. With a tail-female line tracing to old Polish lines, Mishma's pedigree represents about the best blend with "Raffles blood that this author has seen.



MISHMA I



GAZON

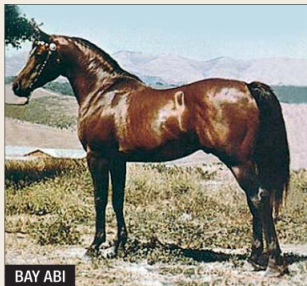


***BASK**

Q. *Bask (born 1956; Witraz x Balalajka). Carrying the blood of numerous good horses bred from original Turkish importations, like other Polish-bred Arabians *Bask began by being tested for racing speed. Imported to the United States in 1963 by Dr. E. E. LaCroix, he was

subsequently shown to "top ten" honors in both Canada and the United States. He continues to be influential through hundreds of offspring. Note the broad, well-chiseled head, short back, strong coupling, broad hocks and knees, and deep shoulder.

R. Bay Abi (born 1957; Errabi x Angyl). Probably the most outstanding descendant of Roger Selby's *Mirage, the pedigree of this horse blends Crabbet stars including Skowronek and Rijm with Davenport names such as *Hamrah and *Wadduda, adding a dash of *Astrald and an old Polish tail-female line for good measure. The result is a powerful horse with essentially flawless conformation, a model of all-American breeding.



BAY ABI

P. Gazon (born 1955; Ferzon x Scheraff). An American-bred stallion with powerful, correct and attractive conformation. Although he sired one national champion stallion, Gazon is today known as a "sire of broodmares" who carry on this line of useful and good-minded horses.

S. *Ansata Ibn Halima (born 1958; Nazeer x Halima). Bred by the Egyptian Agricultural Organization (EAO), this stallion was sold to Donald and Judith Forbis and imported to the United States by them in 1959. He was awarded "top ten" honors in 1966, 1967 and 1969. Carrying the blood of Mansour, Sotamm, Ibn Rabdan and Rabdan El Azrak, he continues to influence American breeding through numerous progeny.

***ANSATA IBN HALIMA**

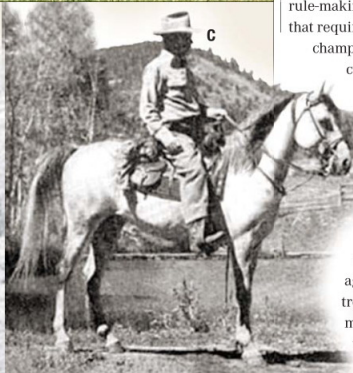
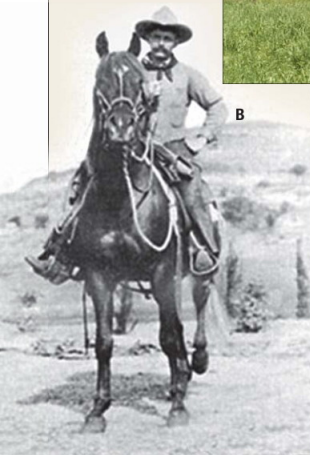


FASHION VERSUS "USING ABILITY"

By the remarkable generosity of her owner and breeder who sent in the photo (A), we are permitted to present a 6-year-old Arabian mare with conformation that is not only dangerous to the ongoing viability of the Arabian breed, but unfortunately increasingly popular. Highly inbred and selected for what is now commonly called "type"—long neck, pretty head, high tail "set"—her owner reports that she has used the mare to produce show horses even though she is aware that the animal's usefulness is limited under saddle due to the long, weak back

and lack of bone substance below the knees. An almost exclusive emphasis on long necks topped by "dished" and "refined" heads has likewise, especially in the last three decades, resulted in championships being conferred upon horses with noticeably crooked forelimbs or long, weak backs—pretty "pasture ornaments" unsuited to any real work. By contrast, the old photos show Arabian

horses being used on Western range under climatic and work conditions closely resembling those found in the breed's Asian homeland. Here are two examples: **Harara (B)**, with an unknown cowhand up (born 1912; entirely Davenport-bred, Harara is by "Deyr out of "Haffiah), and **Rifage (C)**, with W. L. Van Vleet up (born 1936; Rifage is by "Mirage out of "Rifala, she a descendant of Skowronek, "Berk and Mesaoud).



beautiful heads and tractability are passed to offspring, it equally increases the frequency of undesirable qualities such as crooked legs, lack of substance and persistent diminution in size. With intense inbreeding comes what biologists term "genetic load"—a much higher frequency of genetic disease, including various gene combinations that are lethal before birth; genetic diseases such as hydrocephalus, spinal stenosis and achondroplasia; and birth defects including cleft palate, wry nose and "windswept" hind limbs.

The presence of a few inbred individuals in a larger population can be a good thing—when such horses are used like spice in a tasty stew—one little pinch at a time. The most consistently successful breeding philosophy is linebreeding, in which a relatively inbred stallion is put to a variety of unrelated mares. In a day when there are very few real jobs for horses, breeders must always be encouraged to produce horses useful for work; this is the reason for repeated rule-making in the Arabian show world that requires national and regional

champions to present performance credentials. In recent decades,

Arabian marketing has swung strongly toward promotion of horses with "extreme" appearance—ultra-refined heads, long and superfine necks, very fine limbs, long rubbery backs, and touchy or aggressive temperaments—a trend which alarms older and more knowledgeable fans of the breed, who remember the Arabian as a tough,

substantial horse of great intelligence and gentleness (see "Fashion Versus 'Using Ability,'" opposite page). Our reader-submitted sample underlines the desire of most buyers for horses that meet exactly this description. Indeed, those just beginning in the wonderful hobby of horseback riding and horse ownership have no business with any other description of horse!

In this article, I present 19 images of famous Arabian ancestors, both mares and stallions. This is in addition to many more foundational individuals presented in the first two installments of this series. You'll want to have those articles on hand as you do this month's "homework": See if you can match the famous horses to some of their less-famous (but no less beloved) descendants. Be forewarned: It is not always easy to "see the sire or dam in the foal," and therefore this is a test of fairly great difficulty. Please don't let this discourage you, because the real purpose is to tease you into careful study of all the images in order to improve your eye for conformation, while you hone your familiarity with various well-known Arabian bloodlines. ●

Coming Next: The Unknown Hobby

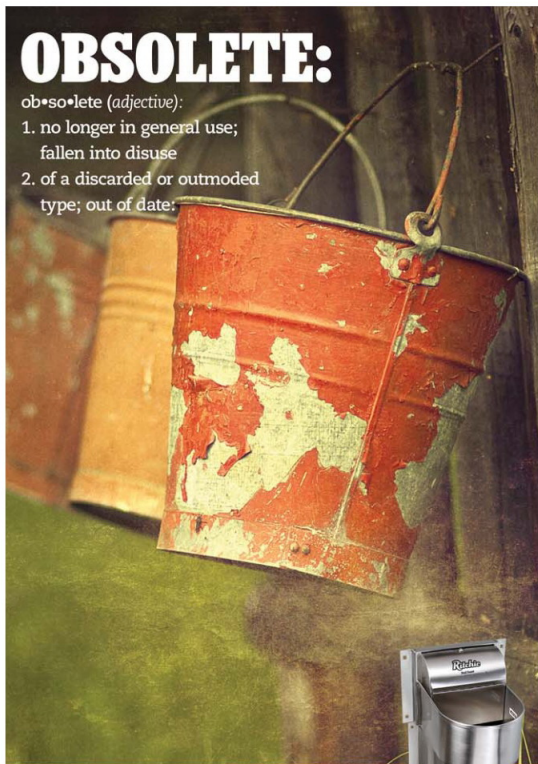
ANSWERS:

1. *Deyr, El Alamein; *Reshan
2. Gazon; Bay Abi; Abu Farwa
3. Mesaoud; Feysul
4. Fetyisz; Trypolis
5. Queen of Sheba; *Wadduda
(represented here by her daughter Moliah)
6. Feysul
7. *Mirage; *Deyr
8. Rabdan El Azrak; Hadban
9. *Bask; Ofir
10. Antez; *Hamrah

OBSOLETE:

ob•so•lete (adjective):

1. no longer in general use; fallen into disuse
2. of a discarded or outmoded type; out of date:



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The demands of modern life may take you away from the barn, but it is possible to make your way back to the saddle.

By Mari Passananti



For 27 years, my life revolved around horses. I went from a kid who raced home from school for a gallop in the woods, to one of those lucky girls who brings her horse to college, to that career woman who slips out through the back stairwell in boots and breeches to meet the other Night Riders before the barn closes. I'd drive 45 minutes each way to ride for an hour after work, and return home to flip omelets or toss salads at 10:30 at night.

Horses were sacred. The barn was my temple; dressage lessons provided structure, long weekend trail rides, therapy. When Jenda, my childhood mare, grew too old even to amble through the woods, I retired her to a friend's farm an hour from my home. Undaunted, I kept up my four- to five-day-a-week schedule, sometimes waking before dawn to go see my old friend and then to ride a warmblood called Max who was boarded at the same barn.

When I got pregnant, I ordered maternity riding pants, assuming that Max and I could enjoy many more rides before my center of gravity went completely off kilter. I wore those breeches five times before rare and painful complications of pregnancy forced me to pack them away.

I had a rotten pregnancy, followed by a surgery immediately after my C-section, a long recovery and a

newborn son who needed surgery at 4 months. My hiatus from riding dragged ever longer. Then the stable became my son's first non-medical outing.

Three or four times per week we made the trip to groom and coddle Jenda. (Max now had a new exercise rider.) My son would hang out in the bucket car seat and watch the proceedings. He rarely complained. I suppose he didn't know this pastime fell outside the normal infant purview of new moms' groups and sing-alongs at the library.

When my son was about a year old and we were both finally healthy, it was time to say goodbye to my old mare. Jenda was pushing 33, sick with a stubborn and painful infection, and had no reasonable hope of recovery. I am grateful the decision was easy. I stroked her head and neck, my veterinarian pushed in the drugs and my old friend slipped away.

For a week I moped in bed as much as the mother of a 1-year-old could manage.

And I stopped riding. Because after grief came a foreign, unwelcome, almost shameful sort of relief.

I was no longer devoting 20 to 30 hours per week to my hobby. An expensive, longtime dependent was off my payroll, and since I'd left corporate America to be with my son, I couldn't justify the expense of another horse.

GREETINGS: The author introduces her son to her 31-year-old horse, Jenda. I missed the barn, especially when the autumn foliage peaked and the air turned crisp and dry. Aside from a few blips—a

beach ride on vacation, a field trip to try a horse a friend considered purchasing—I went cold turkey. Horses had been such a huge factor in my life that dabbling wasn't an option. Of course I missed riding, but I couldn't imagine working the financial and time commitments into our family routine.

Finally, when my son entered preschool as a 4-year-old, I had an epiphany: I realized that I wanted to ride, but I didn't necessarily need to own a horse.

I briefly shopped for dressage or eventing lessons, since those were the types of barns I'd frequented in my younger days. Nobody in reasonable driving distance had a suitable school horse, and I wasn't up for the commitment of even a partial lease.

Undeterred, I put the word out that I'd be happy to experience or hack a horse for someone once a week, because as much as I missed the barn, I also craved the woods, the quiet, the simple adventure of seeing what was behind the next bend. Again, no takers within a doable commute.

Finally, I was put in touch with Allegra Valberg of Ridgetop Farm, a barn in Holliston, Massachusetts,

specializing in hunters and jumpers. I was skeptical. After a lifetime of riding a balanced seat, would I be comfortable tipped forward? Riding with my legs instead of my seat? In short stirrups?

I wasn't. I felt like a cake topper, perched awkwardly atop a cantering Thoroughbred. But I was in nirvana at the barn. The first day I went, I would have gladly paid the instructor for the privilege of brushing the horse, a bomb-proof schoolmaster called Junior, and feeding him carrots.

So I went back the following week. We negotiated the length of my stirrup leathers, and I relearned how to pop over cross rails. After a couple of months, I was paired with a seasoned hunter named Eno.

Eno isn't the most popular horse in the barn, due to his penchant for biting people, his need to wear earplugs to face the outdoors, his outrageous personal space needs, and some other less-than-lovely quirks.

But he's a handsome beast, with a flashy white blaze. And he's athletic. At our first meeting, he attempted to take a pound of flesh out of my shoulder with his teeth; I was too fast for him. He tried to buck me off; I stayed on board. He reared and smacked his head on the ceiling; I abandoned my attempts to brush his face.

But soon Eno and I developed a mutual respect that blossomed into something close to affection. He relaxed. I relaxed. I bribed him with treats. He began nicker hello when he heard my voice. After four weeks, he let me brush his face. I learned to pilot him around a full course, to measure distances, to hunt fences.

I am grateful Eno is easing into his senior years with a good home. These facts help remove the temptation to offer to buy him. It's not a burning temptation anyhow. More like a twinge, a nostalgia for the days when owning a horse defined me.

For now, I am only a woman who rides. And that's OK. 🐾

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TRAINING Too hot to trot

Q *I have a 13-year-old gelding that I got when he was 7. He has always been a hot, fizzy, tense horse, and my trainer told me he had been held back in the mouth, causing him to chomp at the bit, canter on the spot and take off if the reins were given. The trainer advised me to find a dry creek bed where I could let him run, which would settle him so I could then work him. This I did for a time, but all I got was a horse who got fitter and could run faster. I took up endurance work with him figuring the slow, steady work might settle him. He got even fitter and faster!*

I now can't do endurance due to health issues, and I find I have a horse who just wants to gallop fast, canters on the spot if restrained and also canters disunited both on the longe and while being ridden, particularly to the right. His favorite trick is to go disunited when I ask for a downward transition from canter to trot. I would like to find some way to settle him so that when I ask for a trot he doesn't lurch into a canter. Any advice? Am I fighting a losing cause?

Jacqueline Swinson
Cairns, Queensland, Australia

A Without being able to observe the situation, I can only share my thoughts based on what you have written. You have presented two issues. The first is a horse who is out of control and wants to run. The second is a horse who is disuniting/cross firing[®] at the canter. When a horse resists a rider's request, it is usually based on one or a combination of four reasons: misunderstanding, pain, disrespect or fear. Let's look at all four

in relation to both of your issues.

• **Misunderstanding.** A 13-year-old horse that you have ridden since he was 7 probably understands your requests to go, stop, slow down, turn and back. I would eliminate misunderstanding as a possible cause of resistance.

• **Pain.** Physical pain will always affect a horse's behavior. If he has an ill-fitting saddle or if his back, legs, mouth or any other part of his body hurts, the weight of a rider may intensify the pain. A horse will attempt to communicate this physically. He may react by running and not stopping, stopping and not moving, bucking, rearing or some other behavior to tell his rider he's hurting and to please get off and help him.

Pain that affects the joints, neck and back are also often a possible cause for a horse who is disunited. A misalignment of the pelvis is a frequent source of an inability to canter on the correct lead. This can be exacerbated by imbalance, lack of confidence or poor footing, whether ridden or on a longe line.

To eliminate pain as the cause for both your horse's tendency to go fast and his disunited canter, check your saddle fit and have him examined by a veterinarian, a dentist and a farrier.

If you and your equine health experts determine that your horse is physically fit, well balanced and not in any pain, then it is possible that he disunites to make riding uncomfortable for you. If he is not happy with the way you feel to him and has learned at some point in the past that when he disunites his gait it can cause you to slow down or even get off, he may do it on purpose to get you to stop riding. Watch him canter at liberty to see if he still disunites.

• **Disrespect.** In the wild, natural environment, horses live in herds with

a leader or alpha horse. In a domestic environment, a horse thinks of himself and his rider as a herd of two. If a horse does not trust, respect and accept his rider as his herd leader, he will assume the role himself. The job of leader, whether the herd has 50 members or two, is to make all of the decisions and do what he thinks is in his and the herd's best interest. If a horse considers himself the leader, and he thinks it's best to run, he will run.

• **Fear.** When a horse is timid, spooky or fearful, he will move his feet. The more anxious he becomes, the faster he will move them. A horse needs to feel he can always escape from predators. If he does not feel safe, he will run.

If a rider is not confident or is even the tiniest bit fearful, his or her body will become tense, if only slightly. When an anxious horse feels tension, he will become even more nervous and run even faster—especially if he does not accept his rider's leadership.

You said that your horse has always been "hot, fizzy and tense." These are characteristics of a horse who lacks confidence, is fearful and is relying on himself to be the leader. If that is the case, attempting to "fix" the issue of his uncontrollable speed will most likely continue to be ineffective because you are treating the symptom (running) and not the cause (fear).

After ruling out pain, the source of your horse's running must be fear, disrespect or a combination of both. Either way, the solution is the same: leadership. And the most effective and safest way to establish or reinforce leadership with a horse is with groundwork. A number of today's natural horsemanship programs offer groundwork exercises that replicate the same methods horses use with each other to establish themselves as the herd alpha.

Once you have established yourself as your horse's leader on the ground, you can progress to riding in a small, enclosed area, such as a round pen or a corral. Knowing that your horse cannot

take off and run great distances will help to increase your confidence, which in turn will help increase your horse's confidence in you as his leader.

Begin by working at the walk, then progress slowly to the trot and then the canter. Work through all three gaits in short segments, then rest a bit and ask again. Rest is a major reward for a horse. If your horse canters for a short distance, maintains his requested gait and is then immediately allowed to stop and rest, he will learn that going at the speed you have requested is in his best interest because you will eventually reward him with rest.

Once you have established your leadership with mutual trust and respect at all gaits in the small arena, move on to do the same in a larger arena. When he's respecting you there at all times, you can progress to open space.

The quality of your relationship with your horse directly affects the quality of your riding. Developing a new relationship, or changing a long-standing one, takes time. But when a horse understands that his well-being is more important to you than riding, it will increase his trust and respect for you. And that, in turn, will improve everything you do together.

Tim Hayes

*Natural horsemanship clinician
East Hampton, New York*

THIS MONTH'S EXPERT



Tim Hayes is a natural horsemanship clinician based in East Hampton, New York, with affiliates in New England and the Mid-Atlantic

states. He conducts clinics, classes and private sessions for all levels of English and Western riders throughout the United States and Canada. Hayes is currently a visiting instructor at the University of Connecticut and the University of Vermont departments of animal science. His website is www.hayesisforhorses.com.

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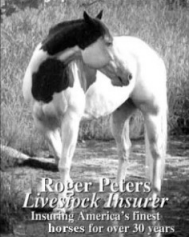
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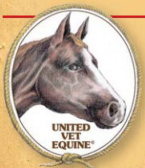
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anthrax—potentially fatal infectious disease characterized by fever, throat swelling and enlarged spleen; now rare in horses.

antigen—substance, often a protein, that the body's immune system recognizes as foreign and reacts to by producing an antibody.

arthritis—inflammation of a joint.

ataxia—incoordination of the muscles, which results in shaky, irregular movements; may also be accompanied by weakness and loss of proprioception.

botulism—food poisoning caused by the toxin secreted by *Clostridium botulinum* bacteria, which can contaminate feed or water; characterized by paralysis, beginning with the muscles of swallow; usually fatal.

choke—in horses, obstruction of the esophagus; in people, obstruction of the windpipe (trachea).

disunited canter—occurs when a horse's gait is not synchronized correctly, moving on one lead in the front legs and the other in the hind legs.

electrolytes—simple inorganic compounds that dissolve in water and are essential for many of the chemical processes in the body.

endotoxemia—presence of specific bacterial poisons (endotoxins) in the blood; usually caused by severe colic and resulting in shock and/or laminitis.

equine herpesvirus (EHV)—a family of viruses that primarily cause chronic respiratory infec-

tions in horses (EHV-1, EHV-4). EHV-1 can also cause abortions in mares and, in rare cases, both EHV-1 and -4 can cause neurological signs, including progressive weakness and incoordination. EHV-3 causes a venereal disease called equine coital exanthema.

equine viral arteritis—respiratory and venereal disease that can cause abortion.

fecal egg count—laboratory procedure for determining the number of internal-parasite eggs in a fecal sample; used primarily to estimate a horse's level of infection with ascarids and/or strongyles.

hyaluronic acid (HA)—molecule that forms the basis of the lubricating fluid within joints as well as connective tissues throughout the body.

hydrocephalus—abnormal amount of fluid beneath the skull, resulting in an enlarged head, brain atrophy and mental deterioration.

influenza—acute viral infection involving the respiratory tract. Influenza is marked by inflammation of the nasal mucosa, the pharynx, the conjunctiva, the lungs and sometimes the heart muscle.

insulin resistance—metabolic disorder, similar to type-2 diabetes, that occurs when certain cells in the body become less sensitive to the action of insulin, and normal amounts of the hormone can no longer keep adequate amounts of glucose moving into the cells for use as fuel.

laminitis—inflammation of the sensitive plates of soft tissue (laminae) within the horse's foot caused by physical or physiologic injury. Severe cases of laminitis may result in founder, an internal deformity of the foot. Acute laminitis sets in rapidly and usually responds to appropriate,

intensive treatment, while *chronic* laminitis is a persistent, long-term condition that may be unresponsive to treatment.

linebreeding—breeding two related individuals, usually at least two to three generations removed, to intensify the inheritance from a particular ancestor.

pituitary pars intermedia dysfunction (PPID, Cushing's disease)—disease caused when the cortex of the adrenal gland produces excessive amounts of hormones, including cortisol; signs include persistent long hair, thin skin, fragile bones, stupor, weakness and sweating.

polysulfated glycosaminoglycans (PSGAGs)—joint-lubricating substances that are chemically similar to the fluid-producing components of cartilage. When injected intramuscularly or directly into a joint, PSGAGs stimulate the production of synovial fluid.

Potomac horse fever (monocytic ehrlichiosis)—disease caused by a rickettsial organism, *Neorickettsia risticii*. Named after the Potomac River Valley where it was first recognized in 1979, the disease is characterized by fever, diarrhea and laminitis.

strangles (distemper)—highly contagious infection of the lymph nodes, usually of the head, caused by *Streptococcus equi* bacteria. The abscesses may become so large as to obstruct the airway (hence the term "strangles") and may break internally, draining a thick, yellow pus through the nose, or externally, draining through a spontaneous or surgical opening in the skin.

windswep legs—conformation abnormality in which both legs (either the fore or the hind) are "bent" to the side in one direction. ●

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From the ground up

Let me be clear: I do not advocate falling off a horse. But when I recently came off my slightly green, alpha-personality Quarter Horse, Sundance, I learned a lot. And it wasn't about technique or communication. It was about gaining a better understanding of who he is.

We were alone in an arena at a nearby equestrian center when we had a run-in with the gate. I came off (gently) and he took off toward the far end of the arena. I just stood and watched him.

He flat-out ran to the other end (perhaps not-so-coincidentally toward home), then, still at full speed, followed the rail around to about mid-arena, where he turned toward home again. He ran several laps in this way. As a spectator, I have to say it was a beautiful sight—there is nothing as graceful as a running horse. But, I thought, if this had happened on a trail, he would have been long gone. You've heard of those horses who don't abandon their owners when they fall off? First lesson: Sundance is not one of those horses. At least not yet.

Sundance called out a couple of times while he ran those laps, and I wondered whom he thought he was calling to, since there were no other horses nearby. Second lesson: In times of distress, Sundance will look for any other horse, rather than me, for comfort.

After he ran himself out and began trotting, I started my approach. Still on high alert, he kept his distance. I stood still and waited. After a minute, Sundance stopped and stared at me. It

No one wants to fall off, but if you do, try to look at it as an opportunity to understand your horse—and perhaps yourself—a little bit better.

By Leslie Curl



REVELATION: The author, here with her horse, Sundance, now realizes that "I should spend less time on drills and more on tackling little challenges and achieving small victories together."

was as if his mind had suddenly come back online, and he recognized me. His surprised expression seemed to say, "What are you doing here?"

I know there's a lot of debate on what horses actually think and feel. Some people consider them to be dumb. But I believe there is a lot going on between those fuzzy ears. I can't tell you exactly what Sundance felt about my witnessing his panic attack, but I believe it was something akin to embarrassment. He lowered his head and slowly walked to

me. Third lesson: He may not turn to me first during a panic, but when his mind comes back, I am a person he trusts.


After quickly checking over him and my tack, I remounted. We did a few more short exercises in the arena and headed home. Sundance was absolutely perfect during the extra work, the ride home, then a few extra laps and untack-

ing. My slightly green Quarter Horse, who was never absolutely perfect ... was perfect. Fourth lesson: In everyday riding, Sundance understands what to do; he just often chooses to argue about it.

And, finally, the takeaway lesson: The first and foremost thing I need to work on is establishing a better relationship with Sundance, one based on trust and respect. I've heard it said that alpha horses aren't looking for a leader—they'll accept one, but they're not

looking for one. It's clear to me that my Quarter Horse does not wholeheartedly accept my leadership. Perhaps he'll always be testing me to make sure I am still up for the role. Either way, the light went on: Sundance doesn't need more training per se as much as he needs to learn to trust and respect me more. Only then will our experiences on the trail improve. I decided that maybe I should spend less time on drills and more on tackling little challenges and achieving small victories together.

I still do not advocate falling off a horse. But every incident provides the opportunity to learn something. The trick is to try to keep an open mind to see things that hadn't occurred to you before. ●



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