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BROODMARE MANAGEMENT DOES NOT END AT CONCEPTION!

There are several long waits broodmare owners endure; the first is the 2-3 weeks after breeding the mare until you know by ultrasound or heat cycles if there's a pregnancy. The second is the even longer wait until she gives birth! Life would be easier if we used the old As Seen On TV Ronco rotisserie cooker claim of "Set it and forget it", but there are plenty of things to consider while we wait for the foal to arrive.

HD Philadelphia has had erratic heat cycles over the last several years. In 2021, we went through several unsuccessful rounds of embryo flushing hoping to transfer an embryo and be able to keep her in work. We have also struggled to keep her at a healthy weight as she's a very easy keeper. In the winter of 2021 into 2022, she was kept on a very strict diet and exercise plan, but she was defying my efforts to keep her slim. Finally in the late spring of 2022, when her shape changed a little more, we had our vet do an exam and sure enough, HD Esperance was hiding out in there! Again in 2023, we followed her cycle to try to get her bred (no E.T. this time!) and struggled all season to get a good follicle to breed. At the end of August, she showed a few heat signs and sure enough, wasn't that the cycle that took! She gave birth to the healthy chestnut colt, HD Sterling, at the end of July of 2024.

That is not to say that the journey was so simple. At approximately 270 days gestation (normal pregnancies in horses range from 320 to 365 days; Pixie carried for _____ days), a routine check showed some mucus-like, brick red tinged vaginal discharge. Her udder was normal sized at this point (premature udder development can indicate impending abortion). She had no other symptoms, but the alarm bells were going off. A quick call to the vet over Memorial Day Weekend got us an appointment early in the week, but also we started right away on treatment for suspected placentitis.

The placenta is the source of connection and nutrient/waste exchange between the fetal

See PIXIE, Page 7

MENTAL STRESS IN AGRICULTURE

Before choosing a career in agriculture, one should consider the physical and mental demand it puts on your body. After working long hours with heavy manual labor and a significant lack of time off, many people in the agricultural industry experience varying levels of burnout. Burnout is an emotional, mental, and physical reaction to constant stress. Physical symptoms of burnout include headaches and migraines, difficulty breathing or panic attacks, digestive issues and vomiting, high blood pressure and chest pains, and sleep issues like insomnia. Mental and emotional symptoms of burnout can show up as anxiety, anger, sadness, hopelessness, depression, and/or suicidal thoughts. In a cross-sectional survey conducted by researchers from the Dublin City University on burnout and sleep issues in Irish farmers, they found that 1 in 4 farmers are burnt out. More than 50% of farmers get poor sleep, with 31% of farmers only getting 5 to 6 hours a night. Additionally, the researchers

found that farmers with pre-existing physical and/or mental health conditions experience 40% more burnout and sleep issues than farmers without pre-existing conditions. Compared to the general working population, farmers experience higher overall burnout, sleep issues, cynicism, and exhaustion. According to studies conducted by the American Farm Bureau, suicide rates in farmers are 2 to 5 times higher than the national average. With financial uncertainty, labor shortages, extreme weather and natural disasters, farmers have a heavy stress load. Nearly 90% of farmers have financial issues and/or business problems and 87% of farmers fear they will lose their farm. The rural isolation of farming and social stigma around mental health often makes it difficult for farmers to reach out and get the help they need.

So how do we help farmers struggling with burnout and mental health? Many organizations like Farm State of Mind from the American Farm Bureau have a vast amount of resources available. On their website is a list of crisis helplines and access to anonymous online peerto-peer support groups. Similar to Farm State of Mind, the USDA has a Farm and Ranch Stress Assistance Network of organizations across the U.S. that provides support and resources to farmers struggling with stress and mental health.

For agriculture to have a sustainable future, the well-being of farmers, ranchers, and anyone in the industry is paramount. In order to do so we must continue to break the stigma surrounding mental health and become educated on the warning signs of suicide and how to help and support our peers struggling with stress, burnout, and mental health.

> — Summer Greene Summer Experience in Equine Management 2024

If you are concerned about yourself or somebody else, reach out.

- In an emergency, call 911.
- National Suicide Prevention Lifeline, dial 988.
 - Crisis Text Line Text "Got5" to 741-741
- Unsure of where to turn for resources or assistance? Call 211
 - NY FarmNet, www.nyfarmnet.org
- NYS County Mental Health Directory
 https://www.clmhd.org/contact_local_mental_hygiene_departments/
 - Farm Aid's Farmer Resource Network https://farmaid.my.site.com/FRN/s/

NAEP VETS & FARRIERS CONFERENCE

On Wednesday September 25th, 2024, I drove down to Saratoga Springs, NY to attend the National Alliance of Equine Practioners Conference. This was a three-day conference aimed at bringing together and educating equine professionals. With 34 total lectures occurring throughout these three days, there was no shortage of new things to learn. Each day started with a few lectures that everyone attended and then the afternoon allowed for each attendee to choose what lectures they would like to attend. The focus areas for these lectures included lameness, podiatry, and internal medicine. These lectures included information on recent/relevant research, case studies with pictures/videos, and even a demonstration with a live horse.

In picking which lectures to attend, I primarily focused on those relating to internal medicine with a few talks



related to lameness. Some of the most interesting topics covered in the lectures I attended included Equine Gastric Ulcer Syndrome and its complexities, leg, neck, and back injuries/issues, sedation in emergency situations, and sleep deprivation in horses to name a few. Combining my equine education and experiences, these lectures allowed me to build upon knowledge I had as well as learning new perspectives on a variety of issues. My favorite lecture that I attended was given by Dr. Joseph Bertone on sleep deprivation in horses. Prior to this lecture, I did not know about this issue but as a future horse owner and hopefully equine professional, being informed about how to identify sleep deprivation, sleep habits of horses, and how to fix/prevent this issue is super important.

With my career goal of becoming an equine veterinarian, this conference gave me so much insight into the profession and so much information for me to bring back to Miner. Beyond my interest in the veterinary field, I am also super interested in equine lameness and behavior, two topics that were also discussed throughout these lectures. This was an incredible opportunity that I took so much away from and will definitely attend again!

— Elizabeth LaValley, Equine Intern elavalley@whminer.com

GIFT TO CORNELL UNIVERSITY TO BETTER CONNECT US ALL!

The New York Thoroughbred Horsemen's Association (NYTHA) has made a generous contribution of \$25,000 to support the development of Cornell Equine. This cross-campus program, rooted in Cornell University's rich legacy of scientific research clinical care and education, and based at the Cornell University College of Veterinary Medicine, aims to advance equine health and education through enhanced collaboration amongst interdisciplinary teams.

"We are so grateful for the support of NYTHA in helping us bring Cornell Equine to fruition," says Dr. Mandi de Mestre, professor of equine medicine with the Baker Institute for Animal Health and Department of Biomedical Sciences, College of Veterinary Medicine. "This gift will support us to take the first steps in leveraging the exceptional breadth of skills of leading Cornell faculty to tackle novel research questions in equine health and safety and build leadership capacity for the future. A coordinated equine program will also bolster the University's efforts to recruit and retain the best veterinary students into equine practice through enhanced and coordinated access to educational opportunities, faculty support, and industry."

"The College of Veterinary Medicine has a long-standing history of driving research and clinical results that have had lasting impact on the Thoroughbred industry and equine health and care," said Tina Marie Bond, president of NYTHA. "We are pleased to be able to support the college as it builds upon this legacy."

This gift will be instrumental in Cornell Equine's first phase of development, in which a new, two-way communication platform will be launched to invite horse owners, trainers and veterinarians to discuss their most pressing issues, ultimately guiding future research and education programs. This platform will enhance dissemination of research results to deliver benefits nationally to equine management and clinical services. This initial phase of the initiative is underway, and it is anticipated to be available to the equine field at large by the summer of 2025.

— NYTHA, July 16, 2024

USING MIRRORS IN ISOLATION SITUATIONS TO REDUCE STRESS **BEHAVIORS & NEGATIVE EFFECTS OF EQUINE SEPARATION ANXIETY**

The culmination of my graduate program at Unity College in Maine was a research project looking at equine behavior. The abstract of that study is the summary of my results.

As a herd animal, interaction with conspecifics (a member of the same species) is a behavioral requirement of horses. However, there are many factors that may warrant the need for separation or isolation of a horse from its companions, such as guarantine or stall rest. This need for isolation based on temperaments or sex, and the stress that comes with it, has led Miner Institute to seek out A screenshot of the Polar Equine App collecting heart rate data.

new management strategies to improve the welfare of their horses. This study explored the effects of adding a mirror to a stall on these observed stress behaviors. 12 Morgan horses of varying ages, sexes, and temperaments were split into the control and test groups. The control group had no mirror access and the experimental group had varying mirror access across three phases. Both quantitative and qualitative data were collected and recorded on an Excel spreadsheet, set up with formulas for data analysis. Quantitative data measures included temperature, heart rate, and respiration rate. Qualitative data measures included observed behaviors using an ethogram (a catalog or table of all the different kinds of behavior or activity observed in an animal) and an assessment of the ease of handling. The results of this study were varied as there were different behavioral reactions of horses to the mirror. In some cases, the mirror did seem to have an effect on calming stress behaviors, demonstrated most clearly during Phase 3 after mirror access was allowed. Other horses experienced higher heart rates, respiration rate, and increased stress behaviors in the stall as a result of seeing the mirror. These differences were a result of the normal temperament of the horse, its sex in the case of the stallion, and where the horse typically resided. An important distinction was made between elevated vital signs due to continued stress behaviors or exhibiting natural behaviors in the case of the stallion. A need for future studies with different handlers and more test periods are necessary to explore this topic further.

elavalley@whminer.com the mirror of the test stall.





HD Hamilton, "Alex" wearing the heartrate monitor.



Elizabeth LaValley, Equine Intern HD Friendship, "Amigo" is checking out the "horse" in

Are you a college undergraduate looking for a PAID summer internship?

The Summer Experience in Equine Management may be for you! Learn more about the program at https://www.whminer.org/summer-experiences



JEFF WILSON AND HIS MORGANS VISIT 4th ANNUAL HEART'S DELIGHT SHOW

Jeff Wilson has worked around horses his entire life. Wilson works as a professional horse trainer based in Delhi, NY. His Black Willow Morgans originate from a historic Morgan bloodline from the region in the 1960s, originally known as Catskill Morgans, and then later Del View Morgans.

Wilson has been around horses and riding for most of his life. "I chose Morgans because they surrounded me growing up. I loved the Morgan's energy and way of going. I loved to trot," he recalled.

"As a trainer, I have trained most breeds of horses and evolved this career into teaching riding clinics," Wilson said. "Teaching people how the horsemanship team should operate together as a safe riding partnership has become a passion."

Wilson and his Morgans have traveled extensively. "On a world stage in 2010, my two stallions and I performed at the World Equestrian Games representing the Morgan breed to that audience. We've also traveled to Kentucky's Breyerfest and to every major horse expo," Wilson said. "Everywhere I have gone, there have been equestrians, breeders, performers, veterans, and enthusiasts, who have all been impressed with the ability of the Morgan horse."

In May, Wilson gave a presentation at the Fourth Annual Heart's Delight Spring Premier show in Plattsburgh. "It was a wonderful opportunity to showcase my Morgans to a Morgan crowd," Wilson said of performing at the Heart's Delight show. "I perform and teach in front of a large range of horse people, but rarely such a large group of Morgan lovers, so I was very proud to show Valiant and Patriot." Wilson brought the two stallions from his Delhi farm to perform in Plattsburgh. "Valiant has a steadiness and precision in his military tributes. His presentations, in vintage silver tack, with color guards and flags, compliment everyone. Patriot has an incredible ability to perform high-end movements with great Morgan athleticism and beauty. I haven't ridden a horse that can out-perform him."

To learn more about Jeff Wilson and Black Willow Morgans, visit https:// www.facebook.com/jeffwilsonhorsemanship





— Rachel Dutil dutil@whminer.com

SAVE THE DATE! 5th Annual Heart's Delight Spring Premier May 24-25, 2025 Clinton County Fairgrounds

ARE STALLS REALLY THE BEST PLACE FOR HORSES?

Horse welfare should be the priority when managing and caring for them. My college experience and life as an equestrian to date has emphasized this for me; I find topics that relate to management practices and their effect on our equine charges interesting. I appreciate those who have a passion for horses and are in pursuit of ways to continually improve domestic horse life leading me to share as my agriculture seminar this summer an article published in the October 2023 Equine Journal of Veterinary Science, "Time-budget and Welfare Indicators of Stabled Horses in 3 Different Stall Architectures." The Brazilian researchers focused on two topics: biological responses to being stalled (cortisol concentrations, cortisol circadian rhythm irregularities, other immunologic responses) and timebudget allocation (how many hours in a 24-hour period were spent practicing natural behaviors, stereotypies [vices], and abnormal behaviors based on the

natural behaviors of feral horses). It also sought to see if the architecture of the stalls had an impact on these responses.

The researchers found that the continuously stalled horses spent more time practicing abnormal behaviors than eating, sleeping, or doing any other natural behaviors, regardless of architecture. Every horse in the study population of 29 presented at least one abnormal behavior each day. Considering that domestic horses will display similar time budgets to feral horses when allowed, it is clear that being continuously stalled inhibits the natural behaviors of our horses. Cortisol concentrations were elevated, and immunologic responses were consistent with chronic stress, a disorder that can have detrimental effects to many aspects of a horse's well-being.

This goes to show that high level horses who are worked with the intent of peak performance and may be stabled to seemingly prevent injuries, are likely to be worse off mentally and physiologically. Our human-imposed concerns for our beloved equids can be hard to escape, but when it comes down to it, horses need to be horses! We as their champions and guardians need to realistically evaluate overall horse welfare and carefully examine if our imposed management is causing undue stress.

There are many options for horse management. It is up to us to educate ourselves as to what will make your horse not only the healthiest, but the happiest. It is always a balancing act when keeping horses, but using an open mind, science, and feedback from your horse will lead to better outcomes.

> — Alana Wideman Summer Experience in Equine Management 2024 Stephens College, Missouri

WILDER FARM BRINGS MINER "FAMILY" TOGETHER



Pictured from L to R: Jen Ward (2022), Equine Manager Karen Lassell, Summer Greene (2024), Alana Wideman (2024), HD Harkness, Maddie Sauro (2024), Alee Thornhill (2024), Ryann Baker (2024), Elizabeth LaValley (2023), and Liz Nuss (2022).

Miner Institute has collaborated for many years with the Almanzo Wilder Farm in Burke, NY — the original homestead of Laura Ingalls Wilder's husband Almanzo and his family. In July, Four Miner Morgans — HD Seneca, HD Esperance, HD Independence, and HD Adirondack — participated in an equine demonstration with our summer students at the farm. Additionally, HD Harkness traveled from Michigan to participate in a driving demonstration. Harkness was born at Miner in 1998 and has lived most of his life in Michigan with Martin and MaryChris Foxworthy. HD Harkness was selected to be a special run Breyer model horse in 2023, and has a large fan club as a result! Equine interns were also joined by alums from the 2022 summer, Jen Ward and Liz Nuss.

PIXIE, Continued from Page 1

foal and the dam. If the placenta is compromised, the foal can die due to lack of oxygen or serious infection. The vet performed an ultrasound and found the foal to be appropriately sized and active based on the breeding date, but the Combined Thickness of Uterus and Placenta (CTUP) was slightly higher than normal and some blood work indicated the possibility of an infection. A research study in mares intentionally given placentitis through compromising the cervix were successfully treated to have live birth rates of 83%, but the untreated control group was 0% live births. Treatment is three-fold; broadspectrum antibiotics to attack the anti-inflammatories infection, reduce inflammation, and to pregnancy supportive hormones.

For the duration of her pregnancy, we took her temperature daily, monitored discharge and watched her udder development. SMZ antibiotics (Sulfamethoxazole and Trimethoprim) were to treat the infection. A dosage based on her weight was given twice per day via oral syringe since she wouldn't eat medicated grain. For the first week or so, she was on a dose of Banamine to reduce inflammation,

but we didn't leave her on that for the whole rest of the pregnancy since we seemed to be managing it OK and were leery of the risks of ulcers and other side effects of NSAIDs. There are a few hormone treatment options available including both estrogens and progesterones. Regumate is the brand name of a synthetic progesterone which is often called the "pregnancy



Banamine to reduce inflammation, Above images of HD Philadelphia "Pixie" and her colt HD Sterling.

hormone". It serves the purpose of supporting the integrity of the cervix to keep it snug shut as that's the main point of entry of infection. The other effect of the progesterone is to encourage myometrial quiescence, or in plain terms, encouraging the uterus to calm down.

When her udder began to fill earlier

than 300 days, another sign of possible impending abortion, we had the vet out again to measure the placenta which had thickened a bit more, but the foal was still active! We did another course of anti-inflammatories and continued to hold our breath counting down calendar days to full-term.

Gratefully, on July 29th at the civilized time of 5:30AM, Pixie laid down for a normal delivery of a healthy chestnut colt! The foal stood quickly, eventually found the udder and had some big drinks. The vet came out to do a thorough well-baby check up and we drew blood to check that he had adequate passive immunity through that colostrum. Pixie passed the placenta in one clean push, so there were no retained membranes to worry about, but the placenta did show very obvious signs of stress. The color was darker and more dull than normal, with some spots or plaques where normal blood exchange probably wasn't happening well.

All is well that ends well. HD Sterling (Canon x HD Philadelphia) continues to thrive and Pixie is officially retired from baby-

making! The team of interns in the barn this past summer really took Pixie and her foal's wellbeing to heart and I'm sure that good vet advice, diligent caretakers, and probably a lot of luck brought about a happy ending.

> — Karen Lassell lassell@whminer.com

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FEATURED MINER MORGAN: HD PHILADLEPHIA



HD Philadelphia "Pixie" (UVM Equity x UVM Valkyrie) was born in 2004 with more spunk and sass than anyone thought possible to fit in that compact body! Cute as a button with a sparkle in her eye, Pixie always has gone headlong into interesting things. She picked up on training very quickly being the smarty pants she is, but it also helped her find trouble that often led to stitches or wraps! A fun pony to compete, her small stature surprised people once we stopped moving. Despite her just under 14 hand size, Pixie moves bigger and covers more ground than many horses hands taller than herself. With many successful ribbons in dressage, hunter pleasure, carriage pleasure and combined driving, it seemed natural to add her to our broodmare group. True to form, she didn't make foals the easy way (for us, anyway!), but we're grateful for the two she's had by Canon. HD Esperance is a perfect, tiny bay mare and HD Sterling is a chiseled colt who will likely end up a momma-matching chocolate chestnut.

Learn more about the Miner Morgans at www.whminer.org/equine.html