

# Stable Sheet



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## TAIL RUBBING — WHY ARE THEY DOING THAT?

At some point in our horse-care careers, we will run across a tail rubber. Seems innocent enough at first, but it is better to fix the problem before the horse starts to break hairs, cause bald spots and sores, and maybe breaking fences and stall doors trying to satisfy that itch! Getting to the root of the problem can take some effort, some of it trial and error.

A good place to start is a close look around the tail, deep to the skin and roots of the tail hairs. Could some products you're using be causing irritation? If you've recently changed hair care products or routines, perhaps there's a contact irritation or allergy. Give a deep cleaning bath to the tail with a very mild soap, such as Ivory liquid, and rinse really well.

Sometimes they'll itch at the tail because the parts they're trying to scratch are in that area and the tail's just collateral damage! For stallions and geldings, a good sheath cleaning including checking for the accumulation of debris called a "bean" could be in order. Udders of mares can also collect some of the dark, stinky waxy substance called smegma, as can the vulva. Not all horses appreciate

being handled to be cleaned like that, so be sure to "ask" them nicely first if you're able to wash the sheath, udder, or perianal area. I like to stand next to them out of kicking range and start by placing a firm hand against their side where I know they're comfortable. Then, I'll start to move my hand towards the sheath or udder all while watching the horse for signs that I might have gone far enough at that moment. Take a moment before you proceed. If over the course of a few days of trying the horse still tells you no, consider enlisting the help of a veterinarian.

Pests can cause rubbing too. Some ticks find the tail bone an easy target to latch on and either the ticks or the welts they leave behind can cause itching and soreness. While ticks come with a whole host of other issues, a good tail bath can soothe while you look for the nasty critters to carefully remove. We have a horse here that is terribly allergic to the tiny insect we call midges or Culicoides. These cause what's commonly known as sweet itch, and she'll rub her mane and tail to almost bald. Really good insect repellent

See **TAILS**, Page 7

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# MANAGING SMALL ACREAGES FOR EQUINE GRAZING

— Kevin Sedivec, Extension Rangeland Specialist, North Dakota State University

Our love for horses creates a passion in people to own a horse, or two. However, most horse owners don't necessarily have the land or pasture large enough to sustain the animals they have for grazing alone.

So, how do we manage these small acreages to maintain forage for grazing without creating pastures that are short and weedy?

The truth is, you can't if you allow them to graze freely. You need to plan your grazing periods to allow for grass recovery, always have stored hay on hand for supplementing during the recovery period and winter season, and design infrastructure to allow for dry lot feeding and grazing.

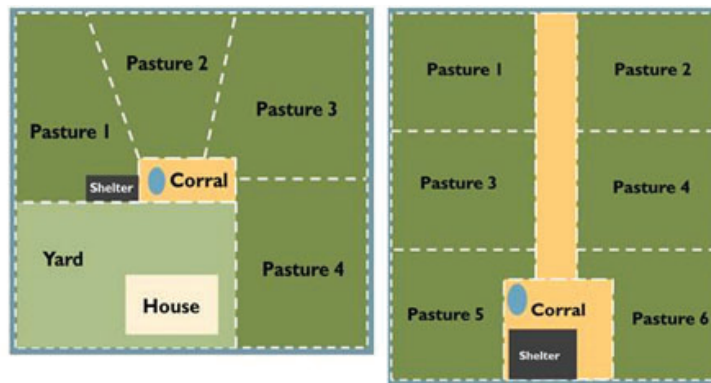
## How Many Acres of Pasture Do I Need For One Horse

General rule is a horse should eat 1.5 to 3 percent of its bodyweight in hay per day. So, a 1,000 pound, mature horse eating 2.5 percent of her body weight would eat 25 lb/day. As all horse owners know, if the pasture is good, a horse will eat more than they need. So, at 30 lb/day a horse will graze 900 lb/month. If you graze from May 15 until November 15, or 6 months, one horse will need 5,400 pounds of forage.

Rule of thumb for proper grazing is remove no more than 40 – 50 percent of the total production to maintain a healthy grass stand. So, at 50 percent use, your one acre would need to produce 10,800 lb/acre. However, the reality is that one acre needs to produce closer to 15,000 lb/acre because



**Figure 1.** Three horses on four acre smooth brome-Kentucky bluegrass pasture that lies adjacent to a sacrifice area in eastern North Dakota (photo taken by Kevin Sedivec).



**Figure 2.** Examples of a four and six pasture grazing systems that contain a sacrifice area and water (North Carolina State University 2017). Both examples include a shelter for protection from environmental conditions and pests.

of inefficient grazing. Horses won't graze near their manure pads. Grasses reach peak growth in the Midwest and Northern Plains by mid-July, then senesce (die back and leaves fall off). So, unless you rotational graze your pasture, you lose capturing some of the plants growth due to senescence, trampling, fecal pads, and insect/wildlife.

To maintain a healthy grass stand, each acre needs to produce about 15,000 lb/acre to graze one horse for 6 months. On average, one acre of pasture produces 2,000 – 8,000 lb/acre in the Northern Plains (less in the western Dakotas, more in the southern Minnesota, Wisconsin and Iowa). If you

have high production pastures, you will need a minimum of 2 acres per horse for 6 months, and if you have low production pastures, 7 to 8 acres of pasture is needed for one horse.

## Managing Small Acreage for Horses

So you got four acres and three horses (Figure 1). You planted a grass stand for pasture and have a beautiful stand of grass that not only provides great forage for your horses, but is also esthetically appealing. After reading the first part of this article, you now realize you only have enough grazable forage for two to three months. What do you do to keep your horses fed and happy, and your pasture healthy?

You need to create a management strategy that includes a holding pen (sacrifice area) for feeding hay when your pasture needs recovery or rest for the winter. This holding pen is classified as a sacrifice area and should be small enough to minimize the negative impacts of close grazing and trampling, but large enough so your horses have plenty of space to run, play and have a safe zone from other horses, depending on pecking order.

A sacrifice area is a small enclosure designed to be your horse's outdoor living space. It is designed to maintain healthy grass in your

See **GRAZING**, Page 3

# HEART'S DELIGHT SPRING PREMIER OPEN HORSE SHOW

No matter your discipline of choice or age and experience of your horse, the HDSP is a great show to both show off (it is a horse show, after all!) as well as get some experience. With open classes for English and Western, breed classes for Morgans, Quarter Horses, Appaloosas and Paints, jumping classes from cross-rails to a fun gambler's choice, and dressage tests for newbies or horses starting to move up the levels, there's fun for everyone. More information and downloadable prize list for the May 24-25, 2025 event at the Clinton County Fairgrounds can be found at [www.whminer.org](http://www.whminer.org) or getting in touch with Karen at [lassell@whminer.com](mailto:lassell@whminer.com).



Sisters Kobe & Kyla Rooney ready to show Morgan KHf Emerald and Gold and AQHA Boloxie Blue, Brittany Collins photo.



Georgia Belrose on ApHC, Dignified Elegance had a great 2024 show! Donna Sorrell photo.

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## GRAZING, Continued from Page 2

adjacent pasture. Horses should come off pasture when the grass is no shorter than 3 inches and can be put back after grasses have regrown 6 to 8 inches. The sacrifice area becomes part of your grazing rotation. Allow 30 to 60 days recovery to assure adequate regrowth occurs. The drier the climate, the longer the recovery period should be.

The sacrifice area can be as small as a large box stall (16 x 16 feet) – for one horse – or big enough for the horses to trot or gallop (50 x 50 feet). The more horses you have, the larger sacrifice area you will need.

### Designing the System

Your grazing system should be designed with a minimum two areas. One as a

sacrifice area and one for a healthy pasture for grazing. I prefer a minimum of four areas to increase flexibility. Three areas would be paddocked off for pasture and one as a sacrifice area. North Carolina State University Extension created two example systems using four and six pastures with a corral (sacrifice area), shelter, and water (Figure 2).

Take the time to draw out a possible layout before making a final decision. Always think about water placement first, avoid drainage areas or natural wetlands when creating your fences and sacrifice area. The sacrifice area should be the highest point that drains the best. A sand to fine gravel area will drain the best.

Feeding hay should occur in the sacrifice area. If pastures are small, minimize grazing on pasture when the fields are wet to reduce damage from hoof action. It is always important to minimize overgrazing, allowing the pastures to have sufficient regrowth going into the winter, and not starting the grazing season in the spring until the grasses average three to four leaves.

Remember, be flexible and patient when trying to rotational graze. The better you manage the pastures, the more they will produce and the less weeds you will have to control. If you have any questions about designing a grazing program with a sacrifice area, contact your local Extension agent.

# EQUINE REPRODUCTION RESEARCH: THE UTERUS UNDER PRESSURE

As the days begin to lengthen, mares' reproductive systems begin to "wake up" out of a winter slumber. The estrous cycle once the breeding season is in full swing averages about 21 days total and the estrus is when the mare is "in heat" and receptive to the stallion. Understanding more about how the system and cycles work is important to getting mares bred in the most efficient way and getting her pregnancy to result in a healthy foal. As an aspiring equine breeding manager, I sought out a research paper to read about mares to learn more and share as part of the Summer Experience internship ag seminar.

Teasing is testing the sexual receptiveness of a mare, usually accomplished through exposure to a stallion. When a mare is in heat, the signs of behavioral estrus include welcoming the stallion's company, lifting the tail, "winking" the vulva, and urination, but that's just what we can see. The process of teasing can increase the mare's own oxytocin levels which has the benefit of stimulating the mare's uterus to prepare for becoming pregnant. Because mares are receptive for up to several days for each cycle and their cervix becomes very soft and relaxed, it is important for the uterus to expel any extra fluids that might be accumulating, and oxytocin is a key hormone in this process. Modern breeding techniques, as well as how mares are often managed with hormones and ultrasound monitoring of the cycle,



Alee holding HD Pavilion (Privilege x HD Villenova), a 2024 colt.

sometimes leaves the actual stallion and teasing out of the picture entirely.

Published in 2003 in the *Journal of Theriogenology*, Day of cycle affects changes in equine intrauterine pressure in response to teasing, sought to offer some insights. The mares enrolled in this study were given a breeding soundness exam to ensure there was no uterine fluid and teased accordingly. Intrauterine pressure was evaluated by sensors placed inside the mares' reproductive tracts.

The researchers found that intrauterine

pressure increased when teased two days before ovulation and the day of ovulation. Once ovulation occurs, the follicle that had produced that egg switches to the production of progesterone. One of progesterone's jobs is to quiet down uterine activity for the pending baby horse that will arrive in a few days if the egg was fertilized. There was no effect on the pressure when it was measured two days after the mare had ovulated; this corresponds to the balance of oxytocin and progesterone during the cycle. Oxytocin helps clean the nursery and progesterone is the babysitter! As oxytocin increases, progesterone decreases and vice versa. Oxytocin is high before ovulation and decreases after the mare has ovulated.

Breeding farms routinely use oxytocin injections for a mare to improve uterine clearance of fluids. Teasing could not only help chart a mare's cycle, but it could be used as a method to naturally release oxytocin and clear the uterus, thus potentially increasing pregnancy rates. Knowing what hormones are at play when following a mare's cycle is critical knowledge for a breeding manager. While we will still rely on ultrasounds and modern technology to get mares bred, Mother Nature is a pretty good breeding manager too and it behooves us to keep her in the loop!

— Alee Thornhill  
2024 SEEM student  
University of Missouri

## The Horse Farm Improvement Program

### What is it?

HFIP is a program for interested equine operations in New York State.

### What areas can the program help with?

HFIP has nine focus areas: horse health and biosecurity, nutrient, pasture, and manure management, human safety, business management, facilities, and environmental sustainability

### How do I get involved?

Contact your local CCE office here:

[cals.cornell.edu/cornell-cooperative-extension/local-offices](https://cals.cornell.edu/cornell-cooperative-extension/local-offices)

A livestock specialist will send you a pre-visit questionnaire and schedule a farm visit.



SCAN ME

Cornell CALS  
College of Agriculture and Life Sciences

## First Annual Tack Swap- Free Admission Saturday, April 12, 2025

10AM-3PM

Miner Institute Horse Barn (dress accordingly!)

1034 Miner Farm Rd.

Chazy, NY

Sponsored by and fundraiser for Soulful Strides 4H  
[soulfulstridesny@gmail.com](mailto:soulfulstridesny@gmail.com) for more information  
or to reserve a table for \$30 + 25% commission on individual items.

*The 37<sup>th</sup> Annual*

# Equine Reproduction Workshop

Friday April 4 and Saturday, April 5, 2025

*Lectures  
and  
Workshop  
by:*

**Meadowbrook  
Equine**

**Dr. Molly  
Witters, VMD**

**Miner Institute**

**UVM Morgan  
Horse Farm**

*Photo by Margot Smithson*



THE UNIVERSITY OF VERMONT  
**MORGAN HORSE FARM**

Learn the art and science of equine reproduction through two days of lectures and hands-on demonstrations.

Topics include:

- Ethics of breeding
- Mare and stallion management
- Breeding techniques
- Foaling and neonatal care

Lectures are hosted at UVM Extension – Middlebury Office: Pond View Lane, Middlebury VT.

Practical hands-on sessions held at UVM Morgan Horse Farm in Weybridge, Vermont.

All levels of experience welcome.

Contact the UVM Morgan Horse Farm for more information  
(802) 388-2011; 74 Battell Drive, Weybridge, VT 05753

email us at: [uvmorgan@uvm.edu](mailto:uvmorgan@uvm.edu) or visit online: [www.uvm.edu/morgan](http://www.uvm.edu/morgan)

*The registration fee of \$350 includes- Workshop, materials and meals. Door prizes are awarded throughout the workshop. Spaces are limited to 25 participants*

# EQUINE SLEEP DEPRIVATION

Back in September, I attended the National Alliance of Equine Practitioners (NAEP) conference where I listened to a variety of equine health lectures spanning across the areas of internal medicine, lameness, and podiatry. One of the lectures that piqued my interest before even attending the conference was about sleep deprivation in horses, presented by Dr. Joe Bertone. Right away he caught the interest of all in attendance by addressing the common misdiagnosis of narcolepsy in horses who were instead sleep deprived.

While ideal sleep time for humans is 8 hours with 2 hours of rapid eye movement (REM) sleep, horses require much less. Current research says that a total of 4 hours of sleep with less than an hour as paradoxical sleep, that very deepest mode, is what horses need. While this is the ideal amount daily for horses, their status as both a herd and prey animal allows them to go longer periods without sleep if necessary. Instinctually, horses sleep when they feel safe and comfortable, rather than following a strict sleep cycle. Horses can go up to 4 weeks without paradoxical sleep based on their biological traits; just because they can, however, does not mean that they should.

Many may look at their horses in the barn and assume that they go to sleep when the lights get turned off after night check, but human-managed horses run the risk of sleep deprivation just as much, if not more, than those in the wild. Knowing and understanding leading causes, signs, and how to help sleep deprived horses is critical for all who work with and around horses.

## The Sleep Cycle

Alert Wakefulness → Diffuse Drowsiness → Intermediate Period → Slow Wave Sleep → Paradoxical Sleep.

## Signs & Symptoms of Sleep Deprivation

- Sudden drowsy collapse to the ground
- Otherwise unexplained fetlock lesions or scars
- Hard keeper, weight loss
- Lethargic

## Potential Causes:

In Dr. Bertone's research, he categorized the horses presenting sleep deprivation symptoms into the following six groups to attempt to identify the key issue causing the horse's lack of sleep.

- Pain or Physical Discomfort: injury, joint problems, PSSM, musculoskeletal disease, ulcers, pregnancy
- Environmental Insecurity: changes in environment – pasture or stall, changes in light/light bulbs, change of herd mates, weather, blanket issues, etc.
- Monotony: demonstrate behavior only when placed in long-term cross-ties or forced to stand quietly for prolonged periods
- Aggression Displacement: display of consistent aggression towards a single horse or all of the horses in the group
- Lyme Disease: positive for Lyme disease with no indication of fitting the other groups
- Sleep Terror: aggressive fall, kicking feet, startle awake behavior observed during the night via surveillance camera

## What to Do?

The first thing to do is assess the situation. The big question you should be asking is “what happened within the last 2-4 weeks?” Were there any big changes to your horse's life? Some of these changes could be a diet change, new paddock, new or a loss of herd mate(s), changing stalls/barns, the introduction of new equipment the horse is not used to, or any other change that could cause the horse stress. Treatment of the issue will vary depending on the category the horse has been placed in. While some may resolve themselves after foaling or treatment of an injury/illness, others may require veterinary intervention with medication and/or management changes. Some of these management changes could include changing or increasing bedding in the stall, adding a mare into an all-gelding pasture, or reverting back to any recently changed protocols in the barn to name a few. As sleep deprivation is a complex issue that is not widely researched yet, every case will look different. It is important to make it a top concern if you should notice it, as it is a safety concern to your horse, you as a rider, and anyone who works around him.

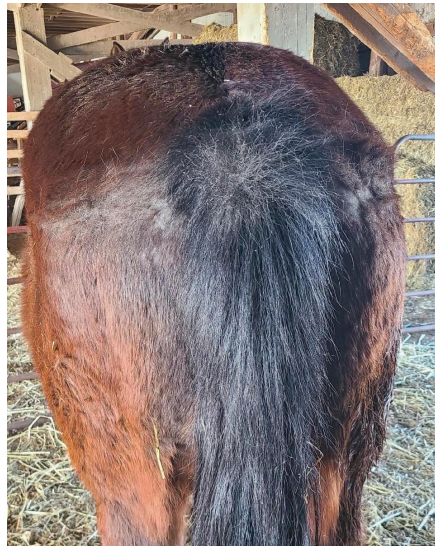
If you have or know someone who has a horse that may be struggling with sleep deprivation, there is a support page available called “Horses with Narcolepsy and Sleep Deprivation” on Facebook. Additionally, for more serious cases, an internet search for “Equine Sleep Disorders” or visit <https://www.equinesleepdisorders.com/consultation-options> for consultation options with Dr. Joe Bertone.

— Elizabeth LaValley  
Equine Intern

# TAILS, Continued from Page 1

sprays, roll-ons, and ointments have helped her quite a bit as well as occasional doses of antihistamines, such as Tri-Hist. Ticks unfortunately are an almost year-round problem, but they're certainly more active in the warmer months. Very consistent use of the products is key to preventing tail rubbing from bugs.

Fecal Egg Counts are a great way to do targeted deworming of individual horses, but for the most part, FEC's target only a few common species of internal parasites. Pinworms have been showing signs of being resistant to some of our go-to drug classes of dewormer. The pinworm is gratefully not nearly as hard on the overall health of a horse, but the itch caused by the eggs at the perianal area can get a horse to ruin his tail and some fences or buckets along the way! Looking at the anus, you can often see signs of the eggs stuck at the exit or nearby, or you can carefully use clear tape to lift around the area, then fold it on itself and get it evaluated under a microscope to ID



Gordy letting us know it is time to check for pinworms again!

eggs. We have one gelding that seems to be quite susceptible to pinworm infection and our usual products for our targeted FEC-based deworming program do not clear it up. Consulting with our vet, we have determined that the program of double dosing him with fenbendazole

three times with 2 weeks between each treatment does the trick. Because the itching is caused by eggs at the perianal area, and the spreading of those eggs can only increase infection rates, we wear gloves and use disposable baby-wipes to both clean and soothe the area around the anus and under the tail every couple of days. Again, work with your vet to check for pinworm infection and the best treatment for your horse.

Finally, they could be rubbing out of boredom if you've ruled out all the other things. Consider adding some enrichment for that horse, particularly if your schedule doesn't give you lots more time to spend with the horse. Slow-feed hay nets, toys, treat-dispensers they have to move around, a mirror in the stall, or ideally more turnout with horse-friends are ways to add to your horse's life and make it more enjoyable to keep boredom at bay.

— Karen Lassell  
lassell@whminer.com

## EQUINE SLEEP CYCLE IN PHOTOS



Alert wakefulness:  
Alert,  
Awake,  
Standing



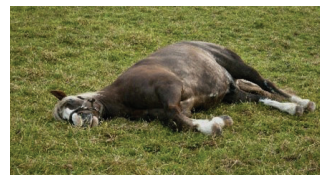
Diffuse Drowsiness:  
Dozing, Standing



Intermediate Period:  
Wake up,  
check for  
herd mates,  
standing



Slow Wave Sleep (SWS):  
Deeper dozing,  
still somewhat  
aware, lying  
down



Paradoxical Sleep:  
Recumbent or Sternal with head curled



The William H. Miner Agricultural Research Institute  
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## FEATURED MINER MORGAN: HD SARANAC



Sara aged better than most fine wines! (L) Sara's 30th birthday photo (R) Still had 'it' at age 27!

HD Saranac (Belcrest Anthem x Peterbarb Top Delite) was born a legend; from her arrival in 1993, we knew that this "princess" would graduate to "The Queen" someday. Probably the smartest horse we've ever had the chance to work, Sara seemed to know just what to do and occasionally resisted being directed, but she also looked beautiful doing anything. With blue ribbons from walk-trot riders near home through tri-color championships in hunter pleasure and carriage driving, Sara earned the respect of so many. She was laid to rest in December of 2024, but her legacy will long live on. Horses that will come after Sara have big shoes to fill, but the lessons we learned from her will benefit generations of horses and horse people to come. We are still collecting pictures of Sara through the years for a photo-collage project; feel free to share any you have with us! [lassell@whminer.com](mailto:lassell@whminer.com) or through our Facebook page.

**Learn more about the Miner Morgans at [www.whminer.org/equine.html](http://www.whminer.org/equine.html)**