



Southern Equine Consortium

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Getting a Grip on Strangles: Strategies for Maintaining a Strangles-free Farm

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Understanding Equine Strangles

Strangles is caused by bacterial infection with *Streptococcus equi* subspecies *equi* (referred to as *S. equi*). The bacteria typically infect the upper airway and lymph nodes of the head and neck. The disease has been in the equine population for centuries, and was first reported in 1251. The infection is highly contagious in horse populations and can recur on farms with previous outbreaks of the disease. It is one of the most commonly diagnosed contagious diseases of the horse worldwide. The persistence of this infection on farms is multi-factorial. The bacteria can survive on water sources (buckets and troughs) for over a month, **but the primary source of recurrent infections is most likely asymptomatic carrier horses, that can shed the bacteria to other horses for months to years.**

Clinical Signs of Disease

Historically, strangles got its name because affected horses were sometimes suffocated from large, infected lymph nodes that obstructed their upper airway or trachea. The hallmark clinical signs of infection are fever (temperature $>101.5^{\circ}\text{F}$), nasal discharge, and enlarged submandibular lymph nodes (in the space between the lower jaw bones) which ultimately abscess. Purulent (thick, yellow-white) nasal discharge is typically present, although it may initially be clear. The retropharyngeal lymph nodes, which are behind the throatlatch, may also become enlarged and abscess. These will sometimes drain into the guttural pouches, which are air-filled spaces within the head that are an expansion of the Eustachian tubes. Guttural pouch infection and pus accumulation (empyema) are often the result of retropharyngeal lymph nodes that abscess and rupture into the guttural pouches. Guttural pouch infection may also occur from bacterial entrance through the pharynx (throat). Anorexia, depression, and difficulty swallowing may also accompany signs of infection.

While most horses recover from strangles without issue, some horses will develop complications from infection that may include spread of the infection to lymph nodes other than the head and neck (also known as metastatic infection or bastard strangles), immune mediated disease (such as purpura hemorrhagica), muscle disease and pain, and lack of milk production. Studies report complications to occur in approximately 20% of strangles cases. Horses that develop complicated infection typically require antibiotic and additional therapies based on veterinary examination.

A small proportion of horses infected with *S. equi* will go on to develop chronic, latent infection in the guttural pouches. While these horses show little or no outward signs of strangles themselves, they will intermittently shed *S. equi* into the environment and can infect other horses for months or even years. **These asymptomatic carrier horses serve as the primary source of infection in barns that suffer recurrent strangles infections, and identification, treatment, and prevention of these carrier horses is the primary goal of strangles eradication programs in barns and on farms.**



An open, draining abscess. Photo credit: UF CVM

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Strangles Diagnosis and Identification of *S. equi* Carrier Horses

Clinical signs of strangles (fever, purulent nasal discharge, enlarged lymph nodes that abscess and drain) strongly supports a diagnosis of active infection in most cases. A confirmatory definitive diagnosis is often made by culture of the bacteria from a sample of purulent discharge (from the nose or guttural pouch), a lymph node abscess, or a nasal-pharyngeal wash. Another available test, polymerase chain reaction (PCR), is very sensitive test and detects bacterial DNA. PCR cannot tell the difference between live and dead bacteria, so is typically used in conjunction with culture. Studies have shown that using two or more of these tests together increases the likelihood of correctly identifying horses with strangles.

Identification of asymptomatic carrier horses is much more challenging. Anywhere from 4-50% of the horses on farms with recurring strangles are carriers of the infection. On farms in which a carrier horse is suspected (farms with recurrent strangles infections despite good biosecurity practices), it is often necessary to examine the guttural pouches via endoscopy (small camera device inserted through the horse's nose) on every horse on the farm. In addition to visually inspecting the guttural pouches for signs of chronic infection (accumulation of fluid and/or chronic pus concretions called chondroids), wash samples are often taken for PCR and/or culture. *Although this method can be costly on farms with many horses, this is the best method for identifying carrier animals and eradicating strangles from farms suffering recurrent infections!*



Purulent nasal discharge in a 1-year-old colt with Strangles. Photo credit: UF CVM

Treatment of Carrier Horses

Horses found to be harboring *S. equi* in their guttural pouches should be quarantined on the farm immediately to prevent further spread to other horses. Horses with only fluid in the guttural pouches can often be treated by flushing the guttural pouches with saline followed by instillation of antibiotics, all performed under sedation via endoscope inserted through the nose. This is often performed multiple times (1-3 flushes, performed every other day, in this author's experience), and then the horse is tested again via PCR and/or culture of guttural pouch wash samples. Horses with chondroids (smooth, pebble-like concretions of pus) in their guttural pouches must have them physically removed prior to initiating the aforementioned flushing and testing protocol. Most chondroids can be physically broken down and removed via endoscopy, while a very small proportion of horses with chondroids require surgery. Systemic antibiotics are generally not indicated in carrier horses.

Carrier horses are generally deemed to be clear of *S. equi* infection when they have had **3 consecutive negative tests with culture and/or PCR**. Some horses will require repeated flushing and testing cycles before they successfully clear the infection. Horses that repeatedly have positive results after flushing can be ultrasounded to look for abscesses deep within the throatlatch and upper neck that act as sources of recurrent infection. Remember that PCR can detect both live and dead bacterial DNA, so PCR often remains positive longer than true active infection. All diagnostics, treatment, and release of carrier horses should be done under the guidance and supervision of your veterinarian.

Managing Active Strangles Infections

The first and most important thing to remember in a suspected infection or outbreak of strangles is to contact your veterinarian right away to determine the diagnosis and the best control practices for your particular farm. Strangles is a reportable disease in some states, and the state veterinarian may need to be notified as well. Movement of any horses on or off the farm should be stopped, and new horses should not be introduced. Take the temperature of all horses on the farm twice daily. Normal rectal temperature is 99-101.5°F. Monitoring the rectal temperature and isolating horses at the first sign of fever is one of the most effective ways to stop the spread of infection. Infected horses can transmit the bacteria to healthy horses 1-2 days after they develop a fever.

An isolated area should be set up for horses with fever and any other signs of illness (nasal discharge, etc). Extreme care should be taken not to mix horses with infection, horses exposed to horses with strangles, and unexposed horses. Ideally, three groups of horses should be created: 1) infected horses 2) horses that have been exposed to or contacted infected horses and 3) clean horses with no exposure. No nose to nose contact or shared water buckets should occur among the groups! Unexposed horses should be kept in a "clean" area, and should ideally have separate caretakers, cleaning equipment, grooming equipment, water troughs and pasture. People and equipment can transfer the infection from horse to horse. Extreme care, handwashing, and disinfection of supplies must be observed by everyone involved. If different individuals cannot care for infected and healthy horses, then healthy horses should always be dealt with first. Dedicated protective clothing such as boots, gowns or coveralls, and gloves should be utilized when dealing with infected horses.

Getting a Grip on Strangles, continued.

Thorough cleaning and disinfection is critical when dealing with any infectious disease. All water troughs should be thoroughly cleaned and disinfected daily during an outbreak. Read the label instructions on disinfectants to be sure they are used at the correct dilution and are active against *S. equi*. All surfaces and stalls should be disinfected following removal of manure and organic material. Manure will inactivate bleach and iodine type solutions. Manure and waste feed from infected horses should be composted in an isolated location, not spread on the pastures. Pastures that were utilized for sick horses should be rested for a minimum of 4 weeks. Fortunately, *S. equi* does not live for a prolonged time in the soil (about 3 days).

Preventative Measures to Keep Strangles OUT

While the identification of carrier horses can be expensive and laborious, it will likely cost far less than dealing with repeated strangles cases on your farm (which on rare occasions can be fatal!), not to mention the lost business associated with having a 'strangles farm.' Once carrier animals have been identified and treated, and there are no longer any active cases on the farm, preventative strategies can greatly reduce the risk of re-introducing strangles onto your farm ever again.

These are some biosecurity suggestions for reducing your horse and your farm's risk for infection:

- Require a current health certificate (less than 30 days old) for all new horse arrivals on the farm, regardless of where the horse came from
- Ask owners of new horses about a history of strangles and consider testing new horses to see if they are shedding the bacteria. This is particularly important if horses are coming from a farm with *any* history of strangles infection. **Don't unknowingly introduce an asymptomatic carrier horse onto your farm!!**
- If feasible, quarantine new arrivals for 2-3 weeks and monitor their temperature. This is an important biosecurity measure for many infectious diseases in addition to strangles.
- All horses should have individual water buckets that are routinely disinfected.
- If shared water troughs are utilized, they should be routinely disinfected.
- When traveling to shows, minimize your horse's exposure by bringing your own feed, buckets, and equipment. Minimize use of shared stalls or pastures at show grounds. No nose-nose contact with other horses while traveling to shows or events. This is how diseases are spread! If horses are pastured together, group them according to their age and risk level (for example, all weanlings together, all broodmares together).

Vaccination for Strangles Prevention

Vaccination is one method for prevention and control of infection with *S. equi*. However, vaccination cannot guarantee disease prevention. With strangles, vaccination will most likely reduce the severity of disease in the majority of horses infected after they are vaccinated. Available vaccines can be administered by intramuscular and intranasal routes. Improper administration of the vaccination can result in poor protection against infection and/or complications at the site of injection; therefore, administration by your veterinarian is recommended. The intranasal vaccination results in the best local immunity.

Vaccination is generally not recommended during an outbreak of strangles. If there are horses on the farm with no clinical signs of infection (fever, nasal discharge) and no known contact with sick horses, vaccination may be considered. Horses that have had the disease within the previous year also do not need to be vaccinated. Once recovered from an active infection, 75% of horses have immunity for 1-2 years. Vaccination of horses recently exposed to strangles (that have high antibody levels) may result in purpura hemorrhagica. Purpura hemorrhagica is caused by an over-active immune response within the horse, which can result in limb swelling, swelling of the head, and small hemorrhages on the gums. Vaccination is only recommended in healthy horses with no fever or nasal discharge.

So should you vaccinate your horse? The answer to that question depends on your horse's chance of exposure to infection, and your personal comfort with the level of risk. The decision should be made in conjunction with your veterinarian. Generally, if your horse travels routinely and is exposed to varied or new populations of horses regularly, vaccination should be considered. Broodmares on farms with a history of strangles should also be vaccinated prior to foaling. Remember that the initial vaccination requires a booster dose before being effective against infection. It takes about one month from vaccination for immunity to develop. Therefore, be certain to vaccinate your horse in advance of transport or potential exposure to new horses.

For more detailed information:

The American College of Veterinary Internal Medicine (ACVIM) has developed strangles control guidelines which were the basis for the recommendations here. Available at: <https://onlinelibrary.wiley.com/doi/full/10.1111/jvim.15043>. Originally written in 2005, and recently updated in 2018.

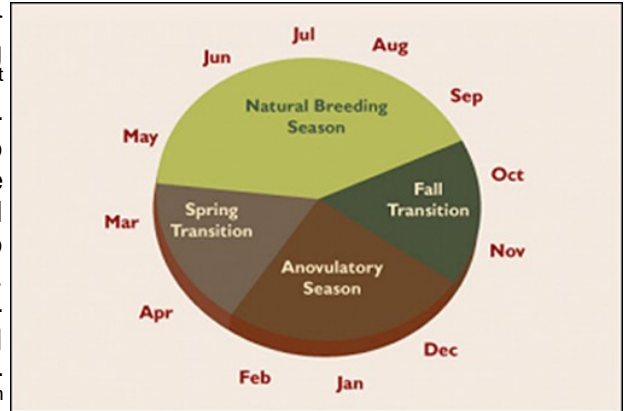
Link to AAEP Infectious Disease Guidelines for Strangles:
<https://aaep.org/horsehealth/understanding-equine-strangles>

Seasonality in Horses

Dr. Saundra TenBroeck
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Horses are seasonal breeders.

When day length is getting shorter, mares begin to grow winter hair coats, their estrous cycles become erratic, then they stop ovulating for a period of time that is called *anestrous*. After December 21st (winter solstice) the days begin to lengthen. The mare perceives subtle changes in daylight and, as spring approaches, she begins to shed her winter coat and her reproductive system begins to “wake up”. This time of year is called *transition*. During transition mares will develop follicles and display behavioral signs of estrus but they do not ovulate. Without an ovulation, the mare cannot become pregnant. On average, the date of first ovulation in horses in the Northern hemisphere is April 1st. If a mare does not become pregnant, she will come in heat and ovulate about every 21 days throughout the breeding season. The *natural breeding season* for horses is April 15th through August with the greatest fertility in June (longest day of the year). Considering an average gestation length of 340 days, a mare that is bred April – June will foal March - May. It is noteworthy that a mare bred in the natural breeding season will foal at an optimal time of year for foal survival. *Day length* is the environmental “cue” that synchronizes reproductive cyclicity with season of the year.



www.myhorseuniversity.com/single-post/2017/09/25/Breeding-the-Mare-Factors-That-Can-Influence-Conception-Rates

Universal birth date

January 1st is the universal birthday for registered horses. Regardless of actual birth date, they are classified a year older each time they pass January 1st. Most horses are not fully mature until they are four years old. For showing or racing events involving young horses (<4 years old) there is potentially a competitive advantage for horses born earlier in the year rather than later in the year because a January born two year old will likely be more growthy than a May born two year old. For this reason, the show/race horse industry's *imposed breeding season* begins February 15th and ends June 15th. What this means for the breeding shed manager is that many people are trying to breed mares that are still in transition. It can be very frustrating because mares may be showing signs of heat but are not ovulating. Having your veterinarian confirm ovulation is the best way to know the breeding season has officially begun for your mare.



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Fooling Mother Nature

The use of artificial lighting to hasten the onset of the breeding season has been well documented in horses. Exposing mares to extra hours of light alters the mare's perception of day length. The addition of 2-3 *hours* of light *at dusk* is more effective than early morning light or 24 hours of light. The response to extended days takes about 60-90 days so if you want to breed mares February-March, you should begin your light treatments no later than December 15th. Bringing pastured mares in for their supper in the evening and putting the lights on an automatic timer is a practical way to provide the “long day” experience. A 200 watt bulb in a 12X12 stall is sufficient (2 foot candles) illumination to achieve a response. If you do not want to stall horses, you can use flood lights in outside pens. The lighting

regime should continue until the mare is pregnant or until after April 1st, whichever comes first.

Notes:

If you breed mares before February 15th, you run the risk of having foals born in December. The result: January 1st your newborn foal would be considered a year old.

Side effect of extending the day

Remember that a side effect of extended daylight is the shedding of hair. If February is cold where you live, you may need to protect your mares from bad weather when they shed their winter hair early.

Managing Horses with Polysaccharide Storage Myopathy

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Polysaccharide Storage Myopathy (PSSM) is a condition that affects the way a horse stores glycogen and causes bouts of exertional rhabdomyolysis commonly referred to as tying up. This disorder mainly affects Draft horses, and light horses such as Quarter Horses, Paints, and Appaloosas. Currently there are two main forms of this disorder:

PSSM1- is due to a mutation in the glycogen synthase-1 gene (*GYS1*), which causes increased synthesis of amylase-resistant polysaccharide and results in an increased storage of glycogen (sugar) within their muscles. This form is easily diagnosed with a genetic test and requires a hair or blood sample, and is included in the AQHA 5 panel test.

PSSM2- this form is NOT caused by the *GYS1* gene mutation, but muscle biopsy still shows clumps of stored glycogen. Research has yet to identify the cause of PSSM2. This form is not so easily diagnosed and requires a somewhat invasive muscle biopsy.

Normally, insulin will drive glucose from the bloodstream into muscle cells to be utilized or sent into liver cells to be stored as glycogen to be used later as energy. In PSSM horses, there is an accumulation of excess glycogen and abnormal amylase resistant polysaccharides creating a large bank of “energy” that needs to be used, and a bank of abnormal “energy” that cannot be used and remains stored in muscle cells.

Typically the symptoms associated with PSSM will occur during and after exercise and in some breeds, horses with PSSM1 show no signs of the condition. Owners may observe traditional signs of tying up; mild signs include reluctance to work, engage the hindquarters, shifting lameness, and stopping and stretching as if to urinate. As the pain increases, frequent gait changes, stiff, firm and sore hindquarters will occur. In the most severe cases, horses will experience profuse sweating, increased heart rate and respiration, muscle twitching, refusal to move, off-colored, reddish-brown urine, and the inability to stand.



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While the symptoms of PSSM can be debilitating and potentially career ending, research advances have discovered management approaches that include strict nutrition and exercise schedules that allow affected horses to return to a normal performance level. Research has suggested that if only nutritional management is used, 50% of horses with PSSM will improve, while 90% of horses will improve with diet and exercise alterations. Current dietary recommendations for horses with PSSM include a low-starch, high fat diet.

- Forages including pasture and hay should be utilized as the main source of nutrients. Pastures should consist of low-sugar grasses and few legumes (clover, alfalfa or lucerne). If utilizing pasture, low yield acreage with mature grasses which contain less energy is appropriate for most affected horses. A grazing muzzle may be necessary to reduce access to lush grasses. Hay can also be soaked to reduce the amount of available energy and limit the intake of non-structural carbohydrates.
- Reduction of concentrates (grain, sweet feeds, etc.) is necessary. Additional supplementation of high fat concentrates can be used if the horse is performing at a level that requires additional caloric intake. At the most basic level supplementing with ¼ cup – 2 cups of vegetable oil high in Omega -3s is adequate. Although care should be taken to work the horse into a fat supplement slowly.
- Vitamin, Mineral, and Vitamin E supplementation should also be considered. For horses on primarily or all forage diets, ration balancers are a good option. The increase of fat within the horse's diet can cause an increase of free radical production. To negate the effects vitamin E supplement should be fed (approximately 1,000-2,000 IU of vitamin E/1000 lb horse/day).

Managing Horses with PSSM, Continued.

- Regular, regimented exercise is necessary to enhance energy metabolism. If your horse has recently suffered from a bout of tying up as a result of PSSM, exercise should resume within a few days or after the residual pain subsides. Excess time off can predispose PSSM horses to additional episodes. The following guidelines should help your horse return to work:
 - * Regular turn out.
 - * Condition your horse slowly to high intensity short duration work outs (no more than 20 minutes).
 - * Be consistent! Include some kind of exercise daily. Include warm up, cool down and stretching exercises.

PSSM is a disorder that has previously been viewed as a career ending condition. However with advances in nutrition and management techniques, horses with PSSM have increased longevity within their careers. If you suspect your horse may have PSSM please contact your local veterinarian for diagnosis and to create an effective management plan.

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Preparation for Horse Training Begins in the Mouth

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Lame in the mouth

Head bob is a widely recognized indicator of lameness as a horse will lift the head in order to shift weight off a lame foreleg as it strikes the ground. A horse with a loose tooth or retained cap may show a similar behavior, raising the head in rhythm while jogging in response to pain elicited from a tooth being jarred. Though most observers would agree that the head bobbing horse is lame, few would consider that the horse might actually be "lame in the mouth".

Resistance may be pain response

Similarly, when biting a horse, excessive head tossing is often interpreted as the horse being unwilling to accept the bit. Consider, however, that the time frame when the horse is shedding baby teeth (deciduous) and permanent teeth are erupting coincides with the time we are placing a bit in the horse's mouth and asking the horse to submit to pressure. Head tossing might be explained as a pain response to bit pressure applied over a small, sharp tooth just below the surface of the gum.

Significance of eruption patterns

It is helpful to understand eruption patterns of consequence to the young horse going into training. Horses have both temporary and permanent incisors (6 pairs top and bottom, front) and premolars (3 on each side top and bottom, cheek). Deciduous incisors erupt around 6 days (centers), 6 weeks (intermediate), and 6 months (corners) and are successively shed around 2 ½, 3 ½, and 4 ½ years old, starting with the centers and moving outward to the corners. Premolars come in by 2 weeks of age and are replaced front to rear between 2 and 4 years of age. Molars (3 rear cheek teeth on each side, top and bottom) occur only in the permanent form and erupt at 1, 2 and 3 ½ to 4 years of age front to rear.

Baby teeth are pushed out by the erupting permanent teeth. Some baby teeth are slow to fall out and are referred to as retained caps. It is not uncommon to see lumps develop on the lower jaw of 3 year olds because pressure from retained premolar caps causes bone remodeling. When the caps are lost and the permanent tooth breaks through the gum, the lumps typically go away. A retained but loose cap can cause significant irritation to the surrounding gum which can be exaggerated as the horse is asked to work. In addition, inflamed gums can lead to secondary sinus inflammation that could be mistaken for an infectious respiratory disease. Like small children cutting teeth, a young horse with teeth erupting may simply not feel well.

Another concern is wolf teeth, which are technically the first premolars. Wolf teeth are typically quite small, occurring on the upper jaw of some horses and more rarely on the lower jaw between 6 months and 3 years of age. Wolf teeth can cause a number of problems for the horse that is beginning to carry a bit.

What should be done?

Before putting a horse into training, it is wise to prepare the mouth with some fundamental dentistry practices. If the horse has wolf teeth, they should be extracted. This is a fairly simple process in young horses, even if the tooth is

Dentistry as a Training Tool, Continued.

still below the gum. After removing the wolf teeth, a “bit seat” should be created on the front edge of the first cheek teeth. A bit seat is simply a rounding or contouring of the edge of the tooth to prevent pinching of the cheek or tongue by the bit. Retained caps should be taken off so that the permanent teeth can come in unimpeded. Because the upper jaw is wider than the lower jaw, sharp edges often develop on the outer edge of upper teeth and the inner edge of lower teeth. These should be filed so that they do not cut the tongue or cheeks and so the horse can chew more efficiently. Filing the teeth is referred to as *floating*, because the traditional hand tool used is called a *float*. Horses that receive dental care early on are much less likely to develop dental problems like wave mouth later in life. The equine dentist is much like a skilled farrier who balances a horse’s foot, allowing for more even weight distribution and wear.



Who can do the work?

Some confusion exists over who is allowed to perform dentistry. Because human dentistry requires a professional degree, many would assume equine dentistry would require the same. Though equine dental schools do exist, they differ from human dental schools in that they are trade schools, not professional schools. Certainly dentistry is taught in the curriculum of veterinary schools but the broad scope of veterinary training does not afford students time to perfect the skills necessary to be proficient right out of school. Most veterinarians who specialize in dentistry seek additional training in certification programs or intern with veterinarians who specialize.

There are people who perform basic dentistry practices called *Lay Dentists*. They are not licensed veterinarians so they cannot sedate horses, use controlled substances nor diagnose diseases and/or prescribe antibiotics. Some work under the direct supervision of veterinarians and some work as independent contractors.

In understanding what is legal, it is good to look at current State Statutes. The Veterinary Practices Act provides some clarity. In Florida it states the following:

474.202 Definitions

(13) "Veterinary medicine" includes, with respect to animals, surgery, acupuncture, obstetrics, dentistry, physical therapy, radiology, theriogenology, and other branches or specialties of veterinary medicine.

474.203. Exemptions

(b) A person hired on a part-time or temporary basis, or as an independent contractor, by an owner to assist with herd management and animal husbandry tasks for herd and flock animals, including castration, dehorning, parasite control, and debeaking, or a person hired on a part-time or temporary basis, or as an independent contractor, by an owner to provide farriery and manual hand floating of teeth on equines.

Services available

Historically, the floating of teeth was done exclusively with hand tools, many of which were fabricated by the dentist himself. Using hand tools is extremely physically demanding and time consuming. Excellent horsemanship skills, strength and stamina as well as being ambidextrous are hallmarks of the person using hand tools. Most veterinarians were happy to have lay dentists perform routine dental care when hand tools were the only option.

Today, with the advent of power tools, more veterinarians are working in this specialty field. In order to use power tools, the horse must be sedated and fitted with a mouth speculum so the dentist can view the teeth and file with an electric dremel. On the positive side, the process is more rapid and the mouth is easier to view. On the negative side, sedation is required, heat generation from the tool could damage the pulp of the tooth and over-zealous practitioners could take off more tooth than necessary.

Bottom Line

For the young horse, performing routine dentistry prior to the biting process may be one of your best training techniques. Hiring an experienced professional is crucial. As in so many aspects of the business world, *let the buyer beware*. Price and value are not synonymous. The lowest price may not be the best value and the highest price does not assure the best quality.

Hiring an experienced professional to perform routine dentistry prior to the biting process may be one of your best training techniques.

Hoof Care During Winter Months

Dr. Mark Russell

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As the seasons change throughout the year, so do the needs of your horse's feet. Typically, a hoof grows more during the summer and will slow during the winter. However, it should still be trimmed on a regular schedule at an average of 6-8 weeks during winter months. Between shorter days and less than desirable weather conditions, we don't spend as much time outside with our horses and it's easy to forget to maintain our horses' feet. Here are a few basic tips on keeping hooves healthy and ready to go by spring.

1. Plan ahead as much as possible with your farrier. With travel schedules and several holidays to plan around, getting your farrier on short notice could be difficult. Don't wait until their feet are severely cracked or overgrown to call your farrier. Use specific dates as much as possible.
2. Many farriers prefer to pull shoes off during winter months. Although with some feet that are problematic and require corrective shoeing, this may not be an option. If you don't plan to haul your horse frequently and you have soft ground, consider pulling shoes for a couple months during the down time. Being barefoot can especially be beneficial when there is snow on the ground. Snow and ice can more easily get stuck or wedged in the horse's foot when he or she is wearing shoes and this can cause bruising and can make it difficult to walk. This can also be tough on tendons and joints.
3. Since there's usually more mud this time of year, it's a good idea to clean your horses' feet frequently. With an increase of mud being packed into their feet, bacteria can become trapped in the foot and cause a variety of problems.
4. Continue working with your horse(s) on good ground manners (i.e standing still while having their feet evaluated and trimmed). Winter is a great time to work with your horse in the barn when it's dark outside or too cold to ride. Work on picking up feet and teaching horses to hold them calmly for you while you clean them. Horses need to be trained to hold their feet up just like they need to be trained to do other things. Your farrier will appreciate the effort.

