We are excited to say that equine ambulatory is growing on many fronts. When we originally opened our ambulatory doors, or perhaps, started our engines is a better way to say it, in 2001, I was a new graduate and intern, excited to delve into equine medicine. I felt as if I had been waiting my entire life for this moment. From my earliest memories, all I know is that I wanted to be a veterinarian and work with horses.

We started out with one faculty member, an intern, and one truck equipped with most of what is needed for a full-service ambulatory practice. Over the years, we have grown significantly, welcoming our third veterinarian to the practice this year. We are excited that Kelly Gravitt, DVM, who finished her American Board of Veterinary Practitioners residency, will be staying on. Between Martha Scharf, DVM, Dr. Gravitt and myself, we can run three trucks many days of the week, accommodating more clients. We also have four rotating interns this year who each bring excitement and a special interest to our practice.

A few years ago, we added a Lameness Locator, an objective lameness evaluation system, to our ambulatory practice, and this tool has really been incredible not only for true lameness examinations but for purchase exams as well. This is one of those tools that makes a person wonder how we every got along without it. Last fall we were fortunate to obtain a state-of-the-art field endoscope, after receiving a generous donation. This endoscopy system allows us to scope not only upper airways but includes a 3-meter scope for gastroscopy as well as an oral endoscope for dental procedures. It has truly been an amazing addition and we are so grateful to expand our services.

We have just received word that after much hard work and deliberation, the veterinary hospital will be acquiring a standing computed tomography system. The system is a helical fan beam CT system developed specifically for use in horses. The design will allow us to scan the head, upper neck and lower limbs of standing horses. We will no longer have to put horses under general anesthesia to obtain CT images. This will revolutionize our practice. We will be one of only a small handful of practices in North America to have this piece of equipment.

Finally, with many of our equine faculty interested in building our simulation teaching center, we have a strong equine presence in the new lab. We know, that between having high-fidelity models to practice on and state-of-the-art equipment, we are turning out new equine veterinarians who are prepared, technically savvy and ready to hit the road!

Sincerely,
Alison LaCarrubba, DVM
Diplomate, ABVP
(Equine Practice)

Mission Statement:
The mission of our equine ambulatory service is to provide the highest standard of medical and surgical care to our patients while training the next generation of veterinarians.
Meet the MU Equine Ambulatory Team

Alison LaCarrubba, DVM, DABVP

Alison LaCarrubba, originally from New York, grew up riding hunter-jumpers and dressage. As her love for horses developed, she attended the University of Missouri College of Veterinary Medicine in 2001. LaCarrubba completed an internship in equine medicine and surgery at the university and subsequently spent a year working in an equine exclusive private practice. She returned to the university in July 2003 as a clinical instructor, and in 2009 she completed the specialty boards with the American Board of Veterinary Practitioners in Equine Practice. LaCarrubba’s love of equine dentistry has inspired her to continue her training in this area. In recent years she has attended a variety of advanced equine dental courses, which have allowed her to develop specialized skills and expertise in this field. As the equine dentist for the university, LaCarrubba is excited to see all the things dental, from routine work to more complicated cases, which have allowed her to develop specialized skills and expertise in this field. As the equine dentist for the university, LaCarrubba is excited to see all the things dental, from routine work to more complicated cases. As the equine dentist for the university, LaCarrubba is excited to see all the things dental, from routine work to more complicated cases.

Kelly Gravitt, DVM

Kelly Gravitt grew up in Waterloo, Illinois, a farming community just outside of St. Louis. She started riding horses when she was young, primarily showing in the jumper ring. After completing her DVM degree at the University of Missouri in 2019, she spent a year as a rotating intern through the Equine Medicine, Surgery, and Ambulatory Services. Gravitt recently finished her equine residency and has stayed for an additional year as a postdoctoral fellow while working toward an ABVP certification in equine practice. In her free time, she enjoys spending time with her husband and two Australian shepherds, Brooking, and being with friends and family.

Megan Gallagher, DVM

Megan Gallagher grew up outside of Raleigh, North Carolina, in a town called Pungo, Virginia. She learned to ride saddle-seat at a young age and competed through high school. Gallagher received her bachelor’s degree in animal science from North Carolina State. She then returned to the university to complete her veterinary degree in equine medicine and surgery. Every June we welcome a new crop of interns. This year our interns include Megan Gallagher, Brianna Hamrick, Gabrielle Gonzales and Alexandra Warren. Gallagher is completing a specialty internship.

Standing CT Means Safer Diagnostics

Alison LaCarrubba, DVM, DABVP (Equine Practice)

Computed tomography (CT) has revolutionized the equine industry and equine practice over the past 20 years. A CT scan is a diagnostic imaging tool that uses X-ray technology and computer processing to create cross-sectional images of bones, soft tissue, and other internal structures of the body. During a CT scan, the X-ray beam moves in a circular pattern around the area of interest taking images close together allowing for greater detail than a typical radiograph. The newest software then converts these images to three-dimensional images, which can be immensely helpful when planning surgical procedures of better understanding the problem at hand.

Continued on page 3

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Supplement Use Demands Caution
Martha Scharf, DVM, DABVP (Equine Practice)

The equine supplement industry is an almost $100 million industry and is growing rapidly every year. There are products available online, at local stores, and through your friends in the horse community, each promising to provide a healthier horse through gut health, joint support, healthy coats, stronger hooves, or many other mechanisms.

While some of these products can dramatically improve the life of your horse, it is also important to know that equine supplements are not regulated by any governing body and may not have the effects or even contain the ingredients they claim. Some supplement ingredients have been shown to be effective and are widely recommended by veterinarians, but others have less research to support their benefits (or have even been shown to be harmful). It can be overwhelming to sort through the information and decide whether or not that product can benefit your horse and your budget.

Equine joint supplements are potentially the most popular and most numerous of all the available products. But just like the others, all joint supplements are not created equal. In fact, a shocking few stand up to label claims for contents, efficacy or bioavailability. For these reasons, choosing the right supplement to protect your horse and your budget.

Equiscience (Dairy Science) has showed that the people behind the supplement must be reputable and have a traceable history of research and quality assurance. The research and completion of these ingredients must be backed by clinical trials that include a control group. The safety and efficacy of the ingredient must be tested.

Before starting a supplement regimen, ask your veterinarian for their specific recommendations for your horse. They can help you understand with their knowledge of your horse and the research behind many of the ingredients. There may also be other medications they recommend that can benefit the horse more than a supplement.

Beyond that, there is some information you can gain from the product itself. A recognizable company name and manufacturer information should lead you to established and sustainable companies that can contact for educational material and customer support. Add a name that is on the list of the well-known companies have a traceable history of research and is growing rapidly every year.

For the safety and efficacy of their products, the label claims should not include unrealistic promises to cure your horse or prevent common ailments. It is important to remember that a few testimonials without data or citations of research are less likely to be associated with a quality product.

The contents should be clearly noted on the label along with their expiration dates. Additionally, administration recommendations should be clear and precise, typically varying with the size or needs of the horse.

Finally, even the safe, verified ingredients have variable research and efficacy. The chart can help you guide you on what joint supplement products are most likely to be worth implementing. As with any supplement, please contact your veterinarian for recommendations for your specific horse.

As we continue to develop our simulation center here in the MU College of Veterinary Medicine, there are so many incredible tools we can now use. Our current simulation center has a full-sized horse, with capabilities for practicing rectal palpation, with a life-like gastrointestinal tract and reproductive tract. We can manipulate the GI tract and have the students determine the exact “cause of the colic.”

At the same time, the students can practice reproductive examination, palpating both the uterus and ovaries, which come with a variety of follicle sizes. Along with this, the horse has jugular veins to practice venipuncture and catheter placement and a small area on ventral midline to practice abdominocentesis, or acquisition of fluid from around the intestines, a procedure commonly performed during a colic work up.

We recently were awarded a grant and have purchased a second high-fidelity model of a horse head that allows practice of passing a nasogastric tube, endoscopy of the upper airways and guttural pouches, venipuncture, flushing of the nasolacrimal ducts and even enucleation, or removal of an eye, fully equipped with a system which will result in bleeding during surgery. These models are truly amazing and teach everyone valuable lessons, from our first-year students to our interns and residents.

Along with these models we also have a “farrier buddy” for students to practice everything from picking up and holding a hoof, to cleaning it and placing and removing a shoe.

Next February the college plans to send a cohort of faculty who are intimately involved in promoting simulations in veterinary medicine to the International Veterinary Simulation Teaching Conference on the island of Grenada.

This conference hosts a group of international veterinary educators who are dedicated to promoting and advancing the use of simulation in veterinary education. The conference is an excellent resource regarding creative experiences for students and we are more than excited to bring home a lot of valuable information with respect to integrating this technology into our veterinary education.

Using Models and Simulation to Advance Veterinary Education
Alison LaCarrubba, DVM, DABVP (Equine Practice)

The skull, sinus system and dentition of the horse is quite complex and difficult to image with radiographs alone. CT allows us to create three-dimensional images of the complex sinus systems, or diagnoses skull fractures and dental disease with much greater accuracy and sensitivity.

Although CT itself is not a new technology, the ability to perform the CT in the standing horse will allow us to use this technology in a safe and affordable way. By removing the need for general anesthesia, we decrease the risk to the horse during the procedure, while obtaining images that can aid and direct our treatment plans.

To obtain an accurate diagnosis and moving forward with a treatment plan tailored to the problem.

Standing CT, continued from page 3
Bacteria Versus the Equine Joint
Alexandra Warren, DVM

Any time a horse is three-legged lame one of our top differential diagnoses is a septic joint. Septic joints occur when bacteria are introduced into the joint through a wound. The wound can be a tiny puncture wound that is not easily noticed. Joint injections are another potential cause for joint infection, though with proper sterile technique this risk is low.

Horses with an infected joint are markedly lame, the joint is hot, swollen, and painful to the touch. A definitive diagnosis is made by collecting a sample of joint fluid to analyze for the presence of bacteria, but a presumptive diagnosis can be made based on wound location or pressurizing the joint with sterile fluid and visualizing the fluid exiting the wound. In foals suffering from septicemia, multiple joints can become infected as bacteria in the blood move into the joint. Rapid treatment of septic joints helps to ensure a better outcome.

The solution to pollution is dilution. Flushing the bacteria from the joint is the number one way to beat infection. This can be done in a few different ways. The gold standard is to lay the horse down under general anesthesia and perform an arthroscopy. An arthroscopy is where a camera (the arthroscope) is placed into the joint through a small incision allowing the surgeon to look around the joint to allow for assessment of the damage and extent of infection. A second portal can be made to insert an instrument to remove pannus (vascular fibrous tissue that can harbour bacteria) and at the end of the procedure a large cannula is inserted to allow for a large volume lavage of the joint. The second best treatment option is also performed under general anesthesia, but instead of using the arthroscope to lavage the joint, large bore needles are used to move fluid through the joint and flush out the bacteria. With the use of the arthroscopic pannus cannot be easily removed and could plug the needles making flushing difficult to do in large volumes. The longer one waits to treat a septic joint, the more pannus and fibrin builds up making needle flushing more difficult. The needle lavage can also be done in the standing horse, but when a horse is only under standing sedation smaller volumes of fluid must be used as joint distention is painful, which makes it less effective. Sometimes, repeated flushing is recommended in more severe cases.

Antibiotics are also hallmark therapy. Intravenous antibiotics are often used as well to help reduce inflammation and help keep the horse comfortable during treatment. By daging the affected limb is also helpful to provide support, reduce swelling or to help manage the associated wound. If a wound is present, the wound is often allowed to continue to drain and may not be closed or may be left partially open. This is because it will allow the wound to drain out any infected material, but the bandage will prevent further contamination. The wound therapy will depend on the individual wound. Once infection has fully cleared, joint injections with hyaluronic acid or steroids may be recommended to promote joint health and reduce any remaining inflammation.

The earlier the joint is treated the better the prognosis. The longer the infection is allowed to fester the more damage to the internal structures. The infection can spread into the bone and damage the cartilage leading to osteoarthritis, which can require long-term treatment. In severe cases, the damage to the joint can be so severe euthanasia is necessary. Even horses that are treated immediately can have negative consequences that require life-long management. So, if your horse suddenly goes lame or has a wound that looks close to a joint have your vet examine your animal to make sure no bacteria have invaded a joint.

Lameness Exams in the Field Can Require Some Detective Work
Brianna Hamrick, DVM

Whether your horse had an acute injury, or it has been a chronic problem, lameness is a common issue encountered by horse owners. Lameness can often, due to pain, rather than a diagnosis. There are several tools available for ambulatory veterinarians to evaluate lameness without the horse having to leave your property.

Since a horse cannot tell us what happened while they were out in the pasture or where exactly it hurts, veterinarians have some detective work to do. To start, a history is helpful to point in the right direction. You know your horse best, and hearing your perspective is important. Your veterinarian will then perform a physical exam, looking specifically for swelling or heat, limb edema, joint effusion, and evaluating the digital pulses.

Next, a subjective lameness exam is performed. This includes watching the horse walk and trot in a straight line and circling both directions, ideally done on flat footing. Using asymmetry in the horse’s movement, the affected limb can be narrowed down to either a forelimb or a hindlimb. Forelimb lameness is often associated with a “head bob” when the affected limb is weight-bearing, while hindlimb lameness can manifest as a difference in hip movement between the right and left legs. The lameness might be observed consistently, or it may only be apparent under certain circumstances. A tool called the Lameness Locator, which uses sensors placed on the horse to objectively evaluate and quantify asymmetric movement, may be used in conjunction with the veterinarian’s exam as well. So far, the exam has identified which limb is primarily affected and under what circumstances. This is only part of it! Each limb is composed of multiple bones, soft tissues, and joints that could be the source of your horse’s pain. Increased digital pulses and hoof testers can be used to evaluate sensitivity in the foot. The veterinarian can also perform flexions by holding each limb in a way that stresses joints in the lower and upper limb. Based on the horse’s response to these manipulations, a local anesthetic will then be placed either under the skin over specific nerves or directly into a joint. This takes 10 to 15 minutes to desensitize, or block, the area. The horse is then trotted again to determine if no change, some improvement, or sound.

There is the potential that several blocks may need to be subsequently performed to localize the lameness to a joint or region. It can be a time-consuming endeavor, but localization will determine one specific area to then perform diagnostic imaging. The imaging modalities utilized are radiography to evaluate the orthopedic structures, and ultrasonography for soft tissue such as muscle, tendons, and ligaments.

Your veterinarian will combine all the information gained from the physical exam, history, lameness evaluation, and diagnostic imaging to come to a diagnosis. Even for a presumptive diagnosis, a plan for treatment or rest and rehabilitation can be formulated. While the goal is that your horse will respond positively to treatment, it is possible that follow up or recheck will be necessary in a couple of weeks to months.

Lastly, if further evaluation is warranted or advanced imaging is needed, our hospital’s surgery service offers MRI, CT, and nuclear scintigraphy (bone scan).
Management of Laminitis Requires Dedication and a Team Approach

Kelly Gravitt, DVM

Laminitis, commonly referred to as founder, is a condition of which many horse owners are aware. The disease results from a disruption of blood flow to the laminae within the foot that secure the coffin bone to the hoof wall. The sensitive and insensitive laminae of the foot act in a Velcro capacity and create a bond between the hoof wall and the bone. When the blood flow is disturbed, the resulting inflammation weakens this connection and, in severe cases, causes separation leading to rotation or displacement of the bone. An owner who has a thorough understanding of the causes and signs of laminitis will be able to recognize the disease and implement quick treatment for the horse.

There are a variety of inciting causes that can lead a horse to have laminitis: digestive upset due to a grain overload or abrupt change in diet, toxins released within the horse’s system, high fever or illness that can cause serious metabolic disturbances (Potomac horse fever, salmonella, etc.), severe colic, retained placenta in a mare after foaling, excessive concussion to the feet, or even excessive weight bearing on one leg due to injury to another leg. Horses with equine metabolic syndrome or pars intermedia dysfunction (PPIID or Cushings’) are at an increased risk of developing laminitis, especially when they are allowed sudden access to excessive amounts of lush forage or grass. Horses that are most at risk for developing laminitis tend to be overweight, fed large amounts of carbohydrate-rich meals, or have had previous episodes of laminitis.

Laminitis may appear suddenly (acute) or be a chronic issue that has built up over time. It typically shows lameness, especially when turning in circles, and may shift weight between legs frequently when standing. Horses with laminitis may exhibit cold or clammy legs, and a reluctance or hesitant gait (as if walking on eggshells) may also be noted in cases of acute laminitis. A horse with chronic laminitis may have rings in the hoof wall that become wider when followed from toe to heel, bruised soles, a widened white line, and a thick, “creepy” neck.

Treatment is best when implemented quickly. Some mainstays of treatment include allowing the horse to stand in deep supportive bedding to act as a natural cushion, limiting movement for inflammation and pain, and applying cold water or ice to the feet to reduce inflammation. It is also important to identify the underlying primary problem, such as a metabolic or inflammatory disorder, since laminitis is often due to a systemic or general problem elsewhere in the body.

Management of laminitis is a dedicated process that can either lead to useful careers and lives or can be deemed unsuccessful if the disease cannot be controlled. When a horse has had laminitis, it is likely to recur again. Therefore, certain management practices can be implemented to improve prognosis of the horse. A diet focused on high-quality forage, digestible fiber and oil is preferred to one high in carbohydrates, such as grain. It is also important to find a farrier who can help with routine trimming and therapeutic shoeing. Avoiding lush pastures is especially important. Plant sugars are highest between late morning and late afternoon hours and after sudden changes in temperature. Therefore, it is best to restrict pasture time for at-risk horses during the spring or when the pasture suddenly becomes green.

Laminitis can be a difficult disease process to control and often necessitates a team effort between the owner, farrier and veterinarian. If you have any questions about the disease, please feel free to call the MU VHC Equine Hospital.

A Midsummer Night’s Nightmare: Potomac Horse Fever

Megan Gallagher, DVM

Potomac Horse Fever (PHF) is most commonly caused by a bacterial species named Neorickettsia risticii. The organism was discovered by Dr. Miodrag Rustic in 1989, shortly after an outbreak of PHF occurred along the Potomac River in Maryland. Since then, cases of PHF have been identified throughout most of the United States and even in other countries. Many cases are reported in Missouri every year. Due to the lifecycle of the organism, the vast majority of PHF cases are found along major waterways.

The Neorickettsia risticii bacteria live within one or more life stages of a parasitic flatworm called a fluke. An infected bat will contaminate the environment with fluke eggs. Freshwater snails are then infected by the developing fluke. Once the fluke reaches the larval stage, they are released into the environment once again only to infect many species of growing aquatic insects. These infected insects may include mayflies, dragonflies, stoneflies, caddis flies, and damselflies. The adult flies, still infected with the fluke larva, are then consumed by bats. The larvae develop into mature flies within the bat’s body, allowing the disease to persist. If a new bat ingests the fly, the cycle repeats.

How do you know if you have PHF?

Symptoms of PHF include severe colic, a sudden increase in body temperature, and often a fever. Other common symptoms include fever, anorexia, cough, dyspnea, and a tachypnea onset. If PHF is suspected, your veterinarian should be contacted immediately.

How is PHF diagnosed?

Your veterinarian can collect feces and a blood serum sample to submit for PCR testing to detect the presence of N. risticii. The presence of N. risticii is the most common cause of PHF. Potomac Horse Fever can cause a variety of symptoms, including fever, anorexia, cough, respiratory distress, and depression.

How is PHF treated?

Treatment of PHF includes supportive care, which can include antibiotics, anti-inflammatory medications, and pain control. If the horse is not responding to treatment, or if the disease is severe, surgery may be recommended.

Prevention

There is a PHF vaccine available that will help prevent PHF. This vaccine is not 100% effective, but it can help prevent disease in at-risk horses. It is important to note that horses can only acquire PHF during their lifetime. Horses with PHF can become carriers and spread the disease to other horses.

There are several ways to prevent PHF in at-risk horses. This includes avoiding contact with water that has been contaminated by bats or other infected animals. Avoiding lush pastures is especially important. If PHF is suspected, your veterinarian should be contacted immediately.

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Older Teeth Need Special Care

Gabrielle Gonzalez, DVM

Equine medicine and nutrition have improved throughout the years. Thanks to these advancements, many horses are living into their 30s and beyond the point of normal dentition. They are outliving their teeth. This has made the importance of a healthy oral cavity environment and geriatric dentistry more prevalent and more important than ever.

Horses are classified as geriatric when they reach 18 to 20 years old. Termed hypodont, horse teeth are constantly erupting from the gingiva throughout their life and get worn by their constant grazing and chewing. As time progresses, the amount of reserve crown (the portion of tooth that has not yet erupted) decreases and eventually the geriatric horse runs out of tooth reserve. However, there is variation in this process and worn-out teeth may first appear in horses as young as 16 years old or in horses as old as 25.

A common presenting complaint for a geriatric horse is weight loss. Although weight loss can be a result of other diseases in an older horse, like PPID or neoplasia, there is a high incidence of dental disease that accompanies weight loss in an older horse. As horse owners, it is important to watch for changes in the way your horse eats. Signs of dental problems other than weight loss can include eating more slowly or unwillingly, moving food around the mouth due to the row of teeth resembling a staircase or a wave. The cheek teeth have a combination of tall and short teeth in one arcade. This occurrence can be treated with dental equilibration of the tall teeth with a power or hand float by your veterinarian.

Loss of teeth may also result in a step or wave mouth in the geriatric horse. It is termed a step or wave mouth due to the row of teeth resembling a staircase or a wave. The cheek teeth have a combination of tall and short teeth in one arcade. This occurrence can be treated with dental equilibration of the tall teeth with a power or hand float to make the horse more comfortable and improve its ability to chew. Difficulty chewing can lead to bigger problems such as choke or impaction colic.

Infection is another common problem seen in geriatric horses. Teeth, periodontal pockets (expand ed spaces between teeth), or tooth fractures may all lead to tooth root or sinus infection. Old horses with compromised immune systems that suffer from PPID, for example, are more prone to infections. To prevent and treat these possible problems, frequent and proper dental care is required. In most cases, antibiotics or extraction of the infected tooth can help clear the infection and provide relief.

Like younger horses, older horses also develop sharp points and hooks, although with less frequency. These can lead to ulcers in the cheek or tongue that become uncomfortable. Older horses are prone to having food pack between their teeth due to periodontal pockets or diastema, which is space between teeth. While cleaning out the pockets, your veterinarian might find a loose tooth as the root of the problem. Removing this tooth would be a solution, followed by periodic reduction of the opposing tooth so it does not become tall. Also, flushing your horse’s mouth periodically may help clear the food packed between the teeth. On scheduled dental exams, your veterinarian will clean up the periodontal pockets and may put impression material over it to prevent packing and allow it to heal.

Your horse’s incisors may sometimes develop problems if they are fractured, loose, or develop resorptive lesions. A condition that causes tooth resorption of the incisors and sometimes the canines is termed equine odontoclastic tooth resorption and hypercementosis or EOTRH. This disorder affects older horses, and it has a gradual onset that can go undiagnosed. Some things you might notice that can be indicative of EOTRH are loose or crooked incisors or your horse might lose interest in biting a carrot or special treat. This disease is extremely painful for horses and since a cause has not been found, prevention is unknown. On the other hand, with early detection and radiographic confirmation of resorption, it can be treated by extraction of the incisors by your vet. Horses with no incisors do well without them and will often go back to grazing normally using their lips and be much happier without the pain.

This disease is progressive and might necessitate the extraction of all incisors.

Continued on page 12

Horse-lovers Crossword

Across
2 Pattern of paint horse where the white does not cross the back
3 A scratch found on the cornea of an eye
4 Unit for measuring weight in veterinary medicine
7 The lower jaw
8 Difficult birth typically caused by poor positioning of the fetus
9 Common skin tumor of grey horses
13 Test used to check for Equine Infections
14 Tooth at the front of a horse’s mouth

Down
1 Castrated male horse
2 Marsupial that carries EPM
5 Cause of colic that is common with dehydrated horses
6 Fat disease characterized by a ‘sawhorse stance’ and muscle spasms
10 Walled-off lesion of pus that can cause acute lameness in the horse
11 Sire of a mule

PHF, continued from page 9

are often flooded should also be avoided. Horses should have access to fresh water that is dumped and cleaned daily to remove any insects. Special care should also be taken when designing barn and yard lighting. Lights over water troughs can attract insects that die and fall into the water: Causes have been reported where a stalled horse, with no access to outside water sources, contracted PHF simply because their stall water bucket was the closest to the lights in the barn.

While Potomac Horse Fever can be a nightmare for horse owners, by understanding the symptoms, knowing when to call your veterinarian, and practicing prevention, we can keep our equine companions safe and enjoy the summer spent with them.
Teeth, continued from page 10

Dental modifications may be a small part of the overall care of geriatric horses. A proper nutrition is a large part of keeping an older horse healthy when its ability to grind feed is reduced or absent. A high-quality protein and high-energy density complete senior feed may be needed as well as soaked hay or beet pulp to replace a bale of hay. Frequent oral rinsing with water or dilute chlorhexidine solution to control periodontal disease and release feed packed in periodontal pockets is a good management strategy to add to the routine of your older horse care. Frequent dental examinations by your vet to check for any disease or problem can help prevent a more serious issue in the future.