

# **2022 Jim Steere Memorial Veterinary Student Scholarship Runner Up**

## **Sarah Yonker**

**Michigan State University College of Veterinary Medicine Class of 2025**



Sarah is currently a second-year veterinary student at Michigan State University. As a West Michigan native, she attended Hope College to earn a B.A. degree in biology. She plans to become an equine and canine general practitioner after graduation, with a special interest in reproduction. In her free time, she enjoys reading, riding her horse, Jaxsen, and hiking with her two Golden Retrievers by Lake Michigan.

# Equine Myth Busters

If you spend time with horses, you recognize routine health maintenance is key for comfort and performance. Providing the best care for your horse involves continually growing and assessing your knowledge. This essay includes three “myth busters” to test your skills while considering important aspects of horse health.

## BAD BREATH:

Myth or fact? All horses need routine veterinary dental exams.

Test your knowledge: What is “floating” and “quidding?”



Figure 1: Each tooth in a horse’s mouth has a unique number for identification (*Equine Dental Care*).

**FACT:** Every horse requires a routine dental exam, not just older horses. Foals are examined to correct issues such as a cleft palate or crowded incisors (*Equine Dentistry*). The first routine procedure is performed at a year of age when sharp enamel points are reduced, and wolf teeth can be removed prior to training. Horses between two and five years old may need up to three dentals per year to evaluate tooth eruption, overgrown incisors, and abnormal wear. During this time horses lose up to 24 teeth and erupt 36-44 new teeth! (*Equine Dentistry*). Horses 5-20 years old require a dental one to two times per year to treat potential tartar, gingivitis, periodontal disease, fractures, and diastemas (spaces between teeth). Horses over 20 years of age also need frequent dental exams to help maintain a healthy weight. Older horses experience the above issues in addition to calcification, oral growths, and gradual onset diseases such as tooth resorption (*Equine Dentistry*). Painful dental problems occur at any age, impacting performance and causing additional health issues. A veterinarian should examine the entire mouth every 6-12 months under sedation, allowing for early detection of subtle changes (Figure 1).

## COLIC CORNER:

Myth or fact? If a horse can pass manure, colic is not a concern.

Test your knowledge: What is an “enterolith?”

**MYTH:** Colic is a broad term for abdominal pain or discomfort. Causes include sand impaction, lipomas, stress, and environmental changes. A lack of manure production often indicates colic but occasionally a colicky horse will still pass manure (Malone, Erin). It may appear abnormal, such as mucus-lined, or an issue could develop “upstream” in the gastrointestinal track, allowing the horse to pass manure during early stages. Withholding feed and walking with periods of rest may help resolve a mild colic (Loving, Nancy). However, be sure to seek veterinary assistance immediately and follow recommendations for treatment or referral.

**Colic Prevention Tips:** Minimize stress during trailering and in new situations. Maintain a regular feeding schedule, offering hay and grain in smaller portions throughout the day (*Colic Prevention*). To benefit the digestive system, maximize pasture turnout and minimize concentrates fed while maintaining a healthy weight. Avoid grazing horses on stressed pasture, rotating if possible to prevent overgrazing. In addition, place hay on a mat or in a feed tub to decrease sand ingestion (*Colic Prevention*). Encourage water intake by providing a clean, easily accessible water source that remains ice free in cooler weather. A heavy intestinal parasite load also increases the risk of colic (*Colic Prevention*). Submit a fecal sample to determine the appropriate deworming schedule for your horse each year. Finally, keep a list of emergency contacts and be able to recognize subtle signs of colic (Figure 2). Horse owners and barn staff are the first line of defense when noticing a problem to initiate communication with a veterinarian.

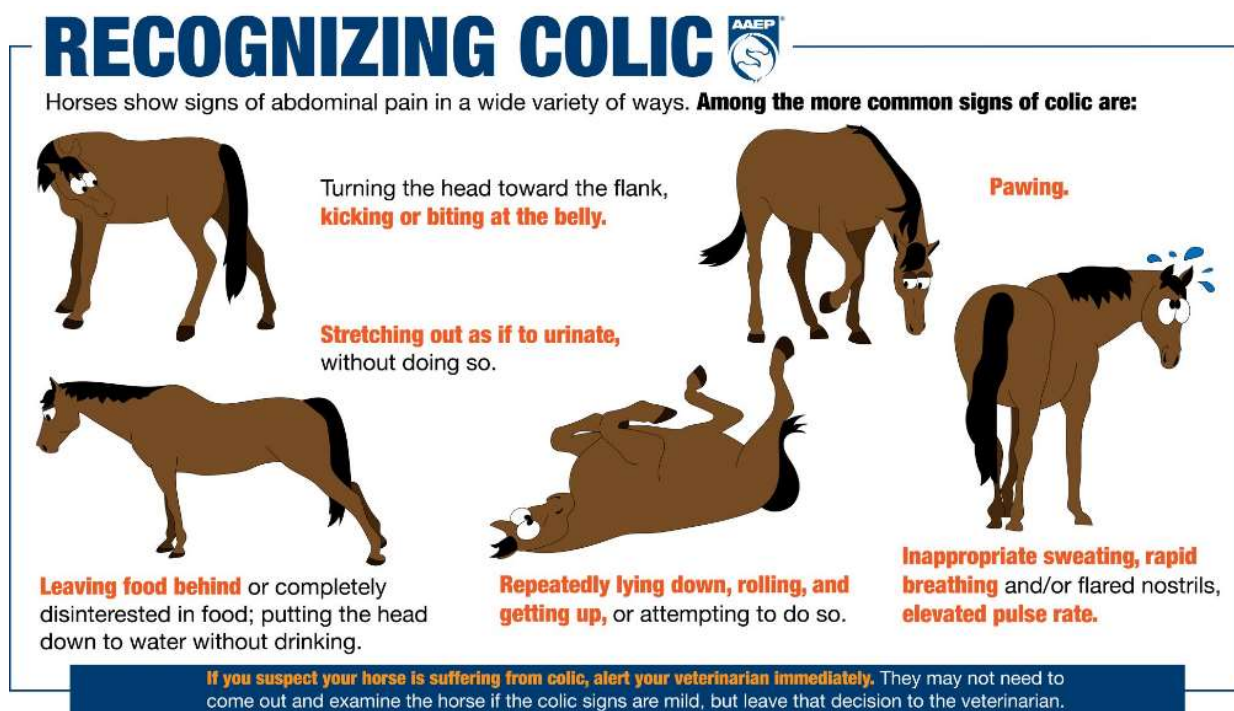


Figure 2: Signs of Colic in Horses (*Recognizing Colic*).

## PERFORMANCE PROBLEMS:

Myth or fact? The most common reason for horse elimination in long-distance events is compromised metabolic status.

Test your knowledge: What should you do if a horse steps on a nail?

**MYTH:** Researchers conducting a study with endurance horses found that metabolic factors such as heart rate, respiration, hydration, gut sounds and capillary refill time accounted for only 10.8% of eliminations analyzed (Nagy 2010). In contrast, lameness caused 69.2% of eliminations (Nagy 2010). Lameness results from injury to bones, joints, nerves, and soft tissue, as well as endocrine and vascular disorders. Many conditions originate in the hoof and lower leg (Thal, Doug). If lameness is a common issue for sport horses, how can competitors reduce risk?

Important aspects include “conditioning and fitness, matching of conformation to use, hoof care and shoeing, and nutrition” (Thal, Doug). Understand which lameness conditions affect “horses of your breed, type, conformation, and discipline” (Thal, Doug). Recognizing early stages of lameness can prolong a horse’s career and improve the prognosis for return to work. Schedule evaluations with a certified saddle fitter every 6-12 months. Consider routine performance evaluations with a veterinarian for horses in rigorous training programs. In addition, occasionally record training sessions to create a record of normal movement to compare with future issues.

Check the legs and back for heat, swelling, pain or sensitivity daily. Practice taking a pulse and evaluating ease of flexion and extension in the legs and neck (Figure 3). This routine establishes a solid recognition of “normal” to identify acute or gradual changes in movement, behavior, stamina, and performance (*Keeping Horses in the Game*). Thoroughly evaluate the condition of your horse before trailering to an event. Consider weather and terrain in relation to horse and rider skill level (*Lameness is Most Common*). Sudden changes in footing, slippery terrain and fast speeds are risk factors for lameness (Nagy 2010). Proactive decisions increase success and help establish mutual trust to last a lifetime.



Figure 3: Evaluating limb flexion (*Keeping Horses in the Game*).



## “Test your knowledge” (Answers)

- 1) Floating a horse’s teeth reduces sharp points and abnormal ramps caused by regular wear. Quidding refers to a horse dropping partially chewed feed due to dental pain.
- 2) An enterolith is a stone resulting from mineral buildup around a foreign object such as a pebble or piece of baling twine in the large colon of a horse.
- 3) Do not remove the nail without contacting your veterinarian. Taking radiographs to evaluate structural damage before removal often directs the treatment plan.

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