

## Comstock Staff

- Joseph M. Coli DVM
- Stephen C. Damonte DVM
- Shane M. Miller DVM Dipl. ACVS
- Jaime L. Hustace DVM Dipl. ACVIM
- Elisabeth M. Lau DVM
- Sadie B. Myers DVM
- Erin K. Price DVM
- Evan A. McQuirk DVM
- Kelby E. Myers DVM
- Lexie Conrow LVT

# Health CHRONICLE

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FALL 2013

## Photo Contest Pics



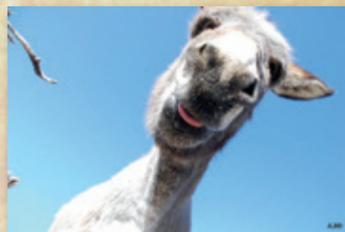
**FIRST PLACE:**  
In Memory of Bubba  
by Karen Hall



**SECOND PLACE:**  
Apache telling his friend he did not pee in the water  
by Sam DiMuzio



**THIRD PLACE:**  
Parker in his Woolly Mammoth Costume  
by M'Lissa Wilkins



Fuzz  
by M'Lissa Wilkins



Star  
by Heather Cavin



Bear  
by Deb Conrad

## Honorable Mentions

### Wednesday Night Round Table

Wednesday night pizza parties are back! Join us for an informal discussion on current topics in equine veterinary medicine and an opportunity to get to know our veterinarians and see our facilities.

### My Belly Hurts!: Colic 101

Wednesday September 18th 6pm

(RSVP by Monday September 16th)

Join Dr. Erin Price for an overview of equine colic and a discussion about causes of colic, recommended prevention, and current treatments.

### Sore Feet Make Sad Horses: Laminitis 101

Wednesday October 16th 6pm

(RSVP by Monday October 14th)

Join Dr. Evan McQuirk for an in depth discussion about laminitis and its causes, recommended medical treatment, and corrective trimming and shoeing.

### Broodmares to Weanlings: Breeding Management 101

Wednesday November 13th 6pm

(RSVP by Monday November 11th)

Join Dr. Betsy Lau for a discussion on developing a breeding plan, broodmare care, and preparing for the arrival of your foal.

### Snap, Crackle, Pop: Equine Arthritis

Wednesday December 11th 6pm

(RSVP by Monday December 9th)

Join Dr. Sadie Myers for an overview of arthritis and a discussion on prevention, pain management, and joint supplements.

### Strategic Deworming Reminder

Do not forget to submit your horse's fecal samples during your vaccine clinic appointments or drop them by the clinic within 24-36 hours (keep refrigerated). Based on the EPG (eggs per gram) counts, we can best advise your horse's yearly deworming schedule. We have been seeing a larger presence of bot flies in our area. If you see bot eggs on your horse's hair, remove the eggs and deworm after the first hard frost. Not all dewormers treat for bots so for more information, please contact us!



Top Picture: Bot fly eggs on a horse's legs.

Bottom Picture: Bot larvae in a horse's stomach.



### Welcome Dr. Myers!

Dr. Kelby Myers is a native of Estacada, Oregon. She received her Doctorate of Veterinary Medicine from Oregon State University in 2013. Dr. Myers moved to Reno to complete a one year equine medicine and surgery internship with the Comstock team. Her professional interests include internal medicine, podiatry, and dentistry. Her hobbies include barrel racing, hiking with her dachshund Dublin, backpacking, and rock climbing. Welcome Dr. Myers!



## Stifle Lameness: “The Knee Bone is Connected to the Thigh Bone”

Kelby E. Myers DVM

The equine stifle is equivalent to our knee and is the largest joint in the horse. It contains three joint pouches, menisci and multiple ligaments in the stifle including the intra-articular cruciate ligaments (akin to the ACL and PCL in people) and periarticular collateral cartilages. The patella and its associated ligaments are an important part of the “stay apparatus” which allows horses to stand for long periods without muscular effort.

Evaluation of the stifle involves palpation, gait evaluation, flexion tests and nerve or joint blocks. Stifle lameness presents as shortening of the stride, toe dragging and asymmetry of gluteal rise when viewed from behind. Abduction and adduction of the limb, stifle flexion, and joint and nerve blocks help to narrow down the source of pain. Diagnostics available for stifle injuries include radiographs, ultrasound, nuclear scintigraphy (bone scan) and arthroscopic examination under general anesthesia. If only they made an MRI big enough! To avoid general anesthesia, we offer the latest diagnostic technique using a needle scope under standing sedation.

The most common causes of stifle lameness include osteochondrosis, subchondral bone cysts, meniscal and ligament injuries, and upward fixation of the patella.

**Osteochondrosis (OCD)** is a developmental disease that results in abnormal ossification of the subchondral bone and defects in its overlying cartilage. The cause of osteochondrosis is complex and can stem from genetic factors, growth rate, nutrition and mineral imbalance. These defects can range in severity from flattening of the cartilage to fragmentation and most often occur in the lateral trochlear ridge of the femur. Signs of OCD usually occur early in life and include joint effusion (increased fluid in the joint) and varying degrees of lameness. Diagnosis is obtained with radiographs. The treatment of choice is arthroscopic debridement early in the course of disease. This helps slow progression of osteoarthritis and prevents further damage to the cartilage from fragments. If OCD is diagnosed early in foals and is mild, conservative management can help slow growth and prevent damage to the articular cartilage. These horses often require some joint management later in life such as joint injections or products like Adequan or Legend, but they have a good to fair prognosis for future soundness and athletic ability. If left untreated or severe, OCD can result in severe osteoarthritis.

**Subchondral bone cysts** are also developmental in origin and are related to OCD. They occur most commonly on the medial femoral condyle. Clinical signs such as lameness and joint effusion occur in young horses when they begin training. Like OCD, bone cysts are diagnosed with radiographs. Treatment includes arthroscopic debridement, joint injections, stem cell therapy, Adequan, and Legend. The treatment choice depends on severity of the lesion, the horses’ expected job and degree of lameness. Also like OCD, if left untreated or severe, bone cysts can result in severe arthritis.

**Meniscal and ligament injuries** in horses are more difficult to diagnose. Lameness is more severe, and radiographic lesions may or may not be present depending on the duration of injury. Ultrasound is an important diagnostic tool, however arthroscopic examination is sometimes required for definitive diagnosis. Acute stifle injuries with no definitive cause are usually treated conservatively with rest and anti-inflam-

matories. Arthroscopic debridement of the menisci helps decrease inflammation. Reconstruction of the cruciate ligaments has not been described in horses. Low grade meniscal injuries with no cartilage damage have a fair prognosis for return to work whereas cruciate ligament injuries carry a poor prognosis for soundness. Joint injections and anti-inflammatory medications can improve comfort, but osteoarthritis and chronic lameness will develop.

**Upward fixation of the patella** occurs when the medial patellar ligament becomes fixed over the medial trochlear ridge of the femur causing the stifle and hock to be stuck in extension. Horses with exceptionally straight hind limbs that lack muscle tone, ponies, and young horses beginning training are more prone to this issue. Upward fixation of the patella predisposes horses to dislocation of the hip joint, a fatal complication. Once upward fixation occurs, the ligament becomes stretched and reoccurrence is common. Radiographs of the stifle should be taken to rule out conditions that predispose horses to fixation. Conservative management of uncomplicated upward fixation of the patella includes hill work and cavalettis to strengthen the quadriceps muscles. Estrone sulfate is a newer treatment that is used in combination with rehabilitation. It is thought to cause laxity of the pelvis and alters the angles of the hips and stifles thus reducing the tendency for fixation. Surgical treatment in severe cases involves transecting or blistering the medial patellar ligament. Prognosis for horses that respond to a conditioning program is good, although periods of rest should be avoided in these horses as it may lead to reoccurrence. Horses that do not respond to rehabilitation may require surgical treatment. Horses that get a secondary hip dislocation have a poor to grave prognosis.

If you suspect that your horse has a hind end lameness issue, you should have it evaluated by a veterinarian who can make treatment recommendations that are right for you and your horse. 🐾

## The Importance of a Pre-Purchase Examination

Evan A. McQuirk DVM

Purchasing a horse can be a very stressful event. Hopefully it is a rewarding experience with a happy end result all wrapped into one. (Doesn't that pretty much describe owning a horse in general?!?!?)

Your veterinarian can help tremendously to mitigate the stress and risk of this process by performing a Pre-Purchase Examination (PPE). This thorough exam evaluates the overall health and soundness of your dream horse before you hand over the money and haul him home. The PPE involves an extensive physical examination - a nose to tail, top to bottom evaluation of the horse. We examine the horse's vitals including the cardiovascular, digestive, integumentary (skin), musculoskeletal, neurologic, ophthalmic (eyes), reproductive, and respiratory systems. In addition to assessing overall conformation, soundness evaluation is performed. We palpate the neck, back, pelvis, and all four limbs and flex all of the joints. We evaluate the horse in motion through all three gaits on different surfaces in a straight line and in a circle. Diagnostic nerve blocks, radiographs, and ultrasound examinations can be performed as indicated.

After the PPE is performed, we consult with the client who has requested the examination. Typically this is the prospective buyer, not the horse owner. The information contained in the PPE is the “property” of the person requesting the exam. This can be a bit of a sensitive issue so it is important to be aware of this fact going into the PPE. At Comstock Equine Hospital, the client is given a typed report of all findings, a complimentary Coggins test and Health Certificate, an insurance exam, and a digital copy of radiographs and ultrasounds performed during the PPE.

It is important to remember that a PPE does not result in a pass/fail nor is it a guarantee of how this horse can or will perform in the future. It is a report of how the horse looked at the time of the exam and his potential strengths and weaknesses. Our skilled veterinarians will assess their findings and how this could potentially affect the horse down the road. As with anything else in the equine world...nothing is guaranteed! Like purchasing a home or car, a thorough evaluation will help you come to the best decision when making a big purchase. The PPE is an added expense but one that is a valuable investment to help you more completely understand the new family member you may be bringing home! 🐾

## FALL VACCINE CLINIC SCHEDULE

Location	Day	Date
Washoe	Tues	10-Sep
Washoe	Wed	18-Sep
Washoe	Sat	21-Sep
Washoe	Thurs	26-Sep
Washoe	Wed	2-Oct
Washoe	Sat	2-Nov
SW Reno	Wed	11-Sep
SW Reno	Sat	14-Sep
SW Reno	Tues	24-Sep
SW Reno	Thurs	3-Oct
SW Reno	Sat	19-Oct
Mt Rose/Pleasant Valley	Thurs	12-Sep
Mt Rose/Pleasant Valley	Tues	17-Sep
Mt Rose/Pleasant Valley	Thurs	10-Oct
Mt Rose/Pleasant Valley	Sat	12-Oct
Spanish Springs	Tues	10-Sep
Spanish Springs	Sat	28-Sep
Spanish Springs	Thurs	3-Oct
Spanish Springs	Wed	9-Oct
Lemmon/Antelope Valley	Thurs	12-Sep
Lemmon/Antelope Valley	Tues	24-Sep
Lemmon/Antelope Valley	Tues	1-Oct
Lemmon/Antelope Valley	Sat	5-Oct
Golden/Sun Valley	Tues	17-Sep
Golden/Sun Valley	Wed	2-Oct
North Valleys	Thurs	26-Sep
North Valleys	Tues	8-Oct
Carson/Dayton	Thurs	19-Sep
Carson/Dayton	Tues	1-Oct
Toll Rd/VC Highlands	Thurs	19-Sep
Toll Rd/VC Highlands	Tues	8-Oct
West Reno/Verdi	Wed	25-Sep
West Reno/Verdi	Thurs	10-Oct
Palomino Valley	Mon	23-Sep
Palomino Valley	Mon	14-Oct
Minden/Johnson Lane	Mon	16-Sep
Minden/Johnson Lane	Fri	27-Sep
Minden-Gardnerville	Sat	19-Oct
Gardnerville	Fri	13-Sep
Gardnerville	Mon	30-Sep
Genoa/Jacks Valley	Mon	23-Sep
Genoa/Jacks Valley	Fri	4-Oct
Stagecoach/Silver Springs	Fri	20-Sep
Stagecoach/Silver Springs	Mon	7-Oct

Price List	
Farm Call	15
Physical/Wellness Exam	15
Rhino-Influenza	29
West Nile + EWT	39
Strangles I.N.	32
West Nile Innovator	32
Rabies	21
Deworm	17-24
Deworm (Foal/Mini)	14
Fecal Exam	21
Clean Sheath	45
Sedation- Starts At	45
Coggins	30
Health Certificate	39
Additional on H.C.	13

A 5% discount will be applied to owners with 5 or more horses. Not applicable with any other discount. \*\*Pfizer Immunization Support Guarantee: Pfizer Animal Health will pay for diagnostic and treatment costs up to \$5000.00 for your horse if he or she has been vaccinated by one of our doctors and becomes infected by West Nile, Influenza, Tetanus, Eastern Equine Encephalitis and/or Western Equine Encephalitis within one year of vaccination. This guarantee excludes Strangles and Rhino virus.\*\*



**\$140.00** **Fall Dentistry Special!!!**

All dental procedures during the fall clinics will be performed for the discounted price of \$140 plus sedatives (a \$50 savings). Sheath cleanings may be added to your examination for the discounted price of \$20 (a \$22 savings). To best serve our clients, all of our doctors are licensed and insured and have received extensive training and continuing education opportunities in the field of equine dentistry.

**The discounted price includes:**

- 🐾 Sedation
- 🐾 Full Mouth Speculum Examination
- 🐾 Dental Equilibration

(performed with hand floats and power float equipment)

Other discounts not applicable with the Fall Dentistry Special.