"No, I own the cattle. He's the vet!"
Equine Dentistry: Importance

Dr. Chris Blevins
Equine Field Service Clinician
KSU-VHC
Objectives

► Equine Dental Laws
  ▪ Kansas, Nebraska, Iowa
  ▪ States legal for Non-veterinary Dental Procedures

► Communications/pressure points of the mouth/head

► Mouthpiece/bits
  ▪ Differences and pressure points
“If history repeats itself, and the unexpected always happens, how incapable must Man be of learning from experience.”

George Barnard Shaw
1250: Johannes Ruffus (chief veterinarian to Fredrick II of Sicily) created *Equine Medicine*

- cutting horses lips for the bit, dental extractions and false incisor alterations (for making teeth look “younger”)

*History*
1566: Blunderville stated horses have 16 teeth (12 incisors and 4 canine teeth)

1749: M. Lafoose used a trephine to open the sinus. Farriers used a “key” to extract teeth (complications of jaw fracture and death)
History

► 1762: First veterinary school in Lyon, France
  ▪ Farriers were doing the equine dentistry

► 1865: Dr. Robert Jennings stated “Horses are subject to caries”

► 1875: U.S. opened first veterinary school

► Early 1900s: Many U.S. veterinary schools closed
  ▪ Equine Dentistry was done by non-veterinarians
History

- Erwin Becker, DVM from Germany
  - WW I and WWII
    - Captured by U.S. during WWII
      - Taught American Veterinarians in the Army during that time
History

► 1931: Dental Board of the UK (published eq. abnormalities

► 1954: AAEP was formed

► 1980’s and 1990’s: technologic eq. advancements

► AAEP Dental Campaign 2008
Horse’s Teeth NEED a Veterinarian

- 67% of horses with dental exams have more than just “Sharp Points” (KSU Study)
  - Malocclusions and other abnormalities
- Only 8% of geriatric horses seen with dental disease had primary dental issues (Brosnahan & Paradis, 2003)
Laws and Regulations

► Veterinary Practice Act
  ▪ Each state has one

► Contact State Veterinary Medical Board/Office
47-816. Definitions. As used in the Kansas veterinary practice act:

(h) "Practice of veterinary medicine" means any of the following:

1. To diagnose, treat, correct, change, relieve, or prevent animal disease, deformity, defect, injury or other physical or mental condition; including the prescription or administration of any drug, medicine, biologic, apparatus, application, anesthesia or other therapeutic or diagnostic substance or technique on any animal including but not limited to acupuncture, surgical or dental operations, animal psychology, animal chiropractic, theriogenology, surgery, including cosmetic surgery, any manual, mechanical, biological or chemical procedure for testing for pregnancy or for correcting sterility or infertility or to render service or recommendations with regard to any of the above and all other branches of veterinary medicine.
Nebraska Laws

► Direct supervision is required for the following dental procedures:
  ▪ a. Removal of calculus, soft deposits, plaque, and stains;
  ▪ b. Smoothing, filing, and polishing of teeth;
  ▪ c. Flotation or dressing of equine teeth.

► Immediate supervision is required for a dental extraction not requiring the sectioning of a tooth or the resectioning of bone.

► Making a diagnosis or prognosis; prescribing any treatment, drugs, medications or appliances; performing surgery or administering Rabies vaccine is prohibited.

http://vetequinedentistry.com/laws/
Iowa Laws

VTs must act under the direct supervision of a licensed veterinarian and may not perform surgery, diagnosis and have no prescriptive authority.

http://vetequinedentistry.com/laws/
States and Lay Teeth Floater (LTF)

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Laws

► “Dental Outlaws” by Diana Thompson

- American School of Equine Dentistry
- “The truth about teeth is that most veterinary practitioners, no matter how highly skilled they may be in other areas, know very little about our horses’ mouths and teeth.”
Laws

“This site is provided to clear up some of the confusion experienced by horse owners when the topic of dental care for their horse arises. Unlicensed “equine dentists” need to be exposed for the con artists that they are, and horse owners need to know the truth. Non-veterinarian dental lay practitioners (NVDLPs) are not “dentists,” nor will they ever be.”
The British Association Of Equine Dental Technicians (BAEDT) was founded in 2001 and is an organization for qualified professional Equine Dental Technicians, promoting the professional training of technicians and to provide greater understanding of the need for equine dentistry to the general public.

- Veterinarians and practicing EDT’s realized there was a great need for having a recognized examination and code of conduct for those who wished to look at horses teeth. This was to give the horse owning public and vets a list of people who have been rigorously examined by The British Equine Veterinary Association and the British Veterinary Dental Association, and have agreed to abide by performance guidelines, a code of conduct and who are all fully insured.
Importance

► Horse Magazines
► Horse Websites
► Horse owner conferences
► Horse owner training
► Horse camps
► Horse organizations
► Horse products
Mouth-Bits-Bridles

► Understand action/purpose of bridles, bits and accessories (nosebands and martingales)

► Communication-pressure on mouth/head

Mouth-Bits-Bridles

- Communication-pressure on mouth/head
  - Mouth Bars (lower interdental space)
  - Lips
  - Tongue
  - Hard palate
  - Chin
  - Nose
  - Poll

Tongue Wounds
Tongue Wounds
Mouth-Bits-Bridles

► Bridle/bit problems
  ▪ Proper use
    ► Communication
      (Rider/Driver to horse)
    ► Western vs. English
    ► Drive (carriage/cart and horse/horses)

www.laboe.com/

www.postquarterhorses.com
Mouth-Bits-Bridles

www.guaridan.co.uk/sport/2012/may/06/ill-have-another-kentucky-derby-winner
Mouth-Bits-Bridles

- Sore
  - Gap mouth
  - Pin ears
  - Toss head
  - Push into pain
  - Mistaken for lameness
    (fails to travel straight)

www.bitlessbridle.com
Mouth-Bits-Bridles

► Smooth mouthpieces gentler than those with edges, ridges, teeth or chains
Mouth-Bits

► Mouthpieces
  ▪ Solid
  ► Straight
    ▪ AKA: Mullen
    ▪ Severe pressure of tongue (most sensitive)
      ► Cut tongue with hard jerk of reins
  ► Curved

MULLEN

horsesaddleshop.com
Mouth-Bits

► Mouthpieces
  ▪ Solid
  ► Ported
    ▪ Prevents pressure on tongue
    ▪ High port (>2 inches) contact hard palate

horsesaddleshop.com
Mouth-Bits

► Mouthpieces
  ▪ One or more joints
    ► “Cannons”=halves mouth piece
  ► Tongue relief
  ► Angle of pull changed
    ▪ Bar and lips pressure
Mouth-Bits

► Mouthpiece diameter
  ▪ Measured 1” from bit rings or shank (contact area of horse)
  ▪ Smaller more severe
    ► Most are 3/8” diameter
      ▪ < ¼” diameter prohibited in most horse shows
      ▪ Too severe
  ▪ Large may be uncomfortable
    ► ≥ ½” diameter pressure on bars (Thoroughbreds small bars)
Mouth-Bits

► Mouthpiece materials

- Wet mouth = proper function of mouthpiece
  ▶ ±Copper promote salivation
  ▶ ±Sweet iron (rust) promote salivation
    - Taste good?
  ▶ ±Stainless Steel = some salivation
  ▶ Aluminum, chrome-plated, rubber and leather = dry the mouth
Mouth-Bits

Mouthpiece materials

- Nervous horse = sympathetic drive = less salivation
  - Some mouthpieces have rollers for the tongue for nervous horses = salivation
Bits

- Snaffle Bits
- Leverage Bits
- Gag Bits
- Full Bridle
- Pelham
- Driving Bits
- Overchecks and Sidechecks
Bits

► Snaffle bits
  ▪ Cheeks of bridle and reins attach to same (or adjacent rings)
  ▪ Common bit
  ▪ Starter bits
  ▪ Pressure-mild
    ► Tongue, Bars, Cheek
Bits

Leverage Bits (curb bits)

- Mechanical lever arm
  - Upper ring to bridle
    - Curb chain/strap on chin
  - Lower ring to reins
  - Ratio shanks to cheeks
    - Standard 3:1
      - 1 lb pressure reins to 3 lbs pressure on bit

- Pressure varies on ratio
  - Chin groove, Tongue, Bars
Mouth-Bits-Bridles

- Bitless bridles
  - Hackamore

- Accessories
  - Nosebands
  - Martingales

nrsworld.com
horsegroomingsupplies.com
dmtack.com
Bits

- **Driving Horses**
  - Only communication is with bridle and reins/lines
  - Curb/Lever bits
  - Overchecks/Sidechecks
    - Prevent horse from lowering head

www.laboe.com/
nurturalhorse.com
Thank You

Go to Next Slide for Bits
Video

Intro and Self Assessment
Anatomy
Physical Inspection of Horse’s Mouth
Snaffle Bits
Shank Bits
X-Rays
Let’s look at different bits

- Skull
- Bits
- Effect to Affect

http://www.sustainabledressage.net/tack/bridle.php