# Bridles, Hackamores, Reins, Bits, and Rider Aids

Our topics for this week are types and uses of:

- Bridles
- Hackamores
- Reins
- Bits
- Spurs
- Riding whips

#### **Bridles**

Bridles consist of *headstalls* (leather straps that hold the bit), a *bit*, and *reins*. English bridles have a *noseband* or *cavesson* and reins that buckle together. Cavessons limit the ability of the mouth to open and escape bit pressure when applied. Western bridles do not have nosebands, although separate nosebands may be worn in conjunction with the bridle. Advanced dressage may use a *double bridle*, which have two bits (a curb and a snaffle) in the mouth at the same time and has two sets of reins. A cavesson is always used with a double bridle.

Double bridles include a small diameter snaffle bit (*bradoon*) and a curb bit. The bradoon sits above and behind the curb bit, the Weymouth. Double bridles are used for more sophisticated signaling to the horse. The bradoon is primarily used to raise the head and signal turns while the Weymouth is used to lower the jaw and collect the horse (push more weight carriage toward its hindquarters).

Californio (Spanish)-style western riding uses a form of double bridling in traditional training. A young horse is started in a *hackamore* (from the word *jaquima* meaning "halter" in Spanish) which is bitless and puts pressure on the nose and jaw.

The hackamore is comprised of a *bosal* that encircles its jaw and nose and *mecate* (rope made of hair used as reins). A bridle and spade curb bit is added later with less use of the bosal and gradual reliance on the spade bit until the bosal is no longer needed.

#### **Hackamores**

Horses used in Western riding are commonly trained under saddle at 2- and 3-years of age. Young horses with "wolf teeth", vestigial first premolars which should be removed as a yearling, or erupting adult teeth may not tolerate bits well at this age. For this reason, hackamores, bitless bridles are often used on young horses in Western training. Hackamores consist of a bosal similar to a cavesson, a headstall consisting of only a strap that goes behind the poll, and mecate reins. In some cases, a fiador is added to balance the bosal and keep it from rubbing on the nose. A *fiador* is a cord that loops over the poll, is attached to a headstall with a browband, runs underneath the horse's jaw, and connects to the heel knot of the bosal. Pulling on the reins of a hackamore causes the bosal to press on the top and sides of the nose and on the bottom of the lower jaw.

A *side pull* is another bitless bridle that does not cause as much pressure on the nose or jaw as does the bosal. It is used for training young horses with tender mouths or inexperienced

riders with rough hands. It also may be used in place of a bridle in freezing weather to prevent frostbite in the horse's mouth from the bit.

#### Reins

The reins on Western style bridles are usually separate, i.e., *split reins*, but they may be *loop reins* used for training or for roping, barrel racing, or other sports, mecate (another loop rein with extra length, a third rein, that is used for leading and tying the horse), or romal reins that are attached with an extension that may be used like a quirt (a short soft whip). *Romal reins* have a series of knots called buttons that aid in signaling the location of the reins to the horse.

Split reins are used on working horses because if dropped from the bit they do not form a loop the horse can step through or catch on objects and unexpectedly trap the horse. If lifted behind the horn of the saddle, split reins will not trap the fingers if the horse lowers its head, and split reins do not catch branches and brush when trail riding. The advantage of loop reins is when dropped from a riding position they fall on the horse's neck. If a split rein is dropped while riding, it falls on the ground and some control of the horse is lost. Reins are usually attached to the bit by leather straps. In some cases, snaps are used. Rubber bands should be used to secure the snaps to reduce the problem of snaps opening during use.

English bridles have loop reins. Reins in a double bridle need to be distinct by size and texture. The bradoon rein is thicker and textured. The curb rein is smaller and smooth.

With the exception of a mecate, reins should never be used to tie a horse due to risk of injuring its mouth. Mecate reins can be arranged around the horse's upper neck so that the long extension of the mecate can be a tie and any pressure from a pullback is put on the horse's neck, not on its bit.

#### **Bits**

Bits are metal bars that are placed in the toothless gap of the mouth called the bars or diastema. Bits are only one aspect of the control of horses. Riders who do not realize this and rely heavily on rein pressure instead of proper use of the seat and legs can injure the mouth of horses and endanger their own safety.

Metals used in making mouthpieces vary. Those that stimulate salivation are preferable. Salivation makes the bit more comfortable and allows the horse to be more relaxed. Cold-rolled steel (sweet iron), copper alloys, and German sliver (nickel silver) encourage salivation; stainless steel does not. Aluminum tends to dry the mouth.

There are basically 2 types of bits, snaffle and leverage, with many variations of each. *Snaffle bits* are usually the first bit used in training and the most common bit overall. Snaffle bits are usually jointed in the middle. Reins are attached to the snaffle rings, not to shanks (levers), and therefore no leverage is produced by pulling on snaffle reins. Pressure from the reins is directly applied to the mouth. Snaffle bits cause pressure primarily on the individual corners of the mouth. If the horse's head is lowered, there can be some pressure on the tongue and roof of the mouth. Reins should be attached to a snaffle bit above and behind the chin strap (bit hobble). Otherwise, pulling on the reins will tighten the chin strap down on the lower jaw.

Snaffles are direct force bits, meaning they are mild compared to the force possible with leverage bits. The rings that the reins attach to can be round ("O" ring), D-shaped, or oval ("egg butt"). They can be solid, single jointed, or double-jointed mouthpieces. More severe mouthpieces are twisted wire. There are no shanks or curb straps. Western riding uses a bit

hobble that looks similar to a curb strap that prevents the bit from being pulled sideways through the mouth. Snaffles are fitted to create one or two wrinkles at the corners of the mouth. Snaffles are intended for young horses in training, for inexperienced riders who may pull with force on the reins, and for English riding which maintains constant contact with the horse's mouth.

Leverage (curb) bits are used primarily by western riding. They are metal bar mouthpieces combined with lever arms called *shanks*. The shortest shanks are 2 inches, called Tom Thumb shanks. Leverage is a factor of the length of the shank in relation to the shank that extends above the mouthpiece called the *purchase*. Short shanked bits are better for younger horses getting used to the pressures of a curb bit. Longer shanked bits can exert more pressure but also signal the horse earlier than short-shanked bits. Straight shanks apply pressure more abruptly than curved shanks. Ultimately, the severity of any bit is dependent on the rider and the force exerted with the hands. The purchase determines leverage on poll pressure; the shank determines pressure on the curb strap, tongue, and corners of the mouth. These bits magnify the pull on the reins and creates a squeezing effect on the poll, lower jaw, tongue, and in some types of curb bits, the roof of the mouth. Curb mouthpieces are fitted lower in the mouth than snaffles. Curb bits should touch or only create one wrinkle at the corners of the mouth. Most curb bits exert a 1:4 ratio of pressure, meaning 1 oz of pull on the reins will result in 4 oz of pressure on the mouth of the horse.

A Western curb bit mouthpiece is a solid metal bar that often has a bend in the middle called a *port*. High port bits (more than 2 inches high) or those with a high welded or jointed midpiece such as western-style "correction" bits or "spade" bits may also put pressure on the roof of the mouth. Bits that have a hinge where the bit connects to the shanks are called *loose-jawed* and provide an early signal to the horse. Those that do not have the hinge are called *fixed shank*. A grazing bit is a curb with shorter shanks that curve turn back to allow grazing, although it is generally inadvisable to allow horses to develop the bad habit of trying to graze with a bit in their mouth. The width of a bit should not be more than ½ inch wider than the mouth. The distance can be measured by putting a wooden dowel in the horse's mouth and marking the width across.

The *Kimberwich bit* and *Pelham bit* are English-style curb bits because they apply leverage with shanks, although the bit may be solid or jointed. Pelham bits have a second set of ring attachments next to the bit to alternatively exert direct rein pressure. The Kimberwich has large rings next to the bit that look similar to snaffle bit rings, but the Kimberwich rings are offset and will create leverage. The *Weymouth bit* is a straight shanked bit used in a double bridle for advanced dressage.

Gag bits are double reined bits that have rings on each side with a straight or broken bit attached with small metal tubes that allow the bit to slide up the cheeks to tighten the distance between the bit and the poll. The rings also have shanks attached for leverage. One set (smooth) of reins attach to the rings for snaffle action and the other (textured) to the shanks for leverage on the mouth and poll. A curb strap is not used with gag bits. Gag bits can be very severe. They are used primarily for warm-ups or retraining periods.

A *Liverpool bit* is a curb bit with several rein attachments for fine-tuning the pressure exerted. This bit permits individualized pressure delivered to horses in team harness and allowing the reins of different horses to be joined together, simplifying the signaling to the team by the driver.

#### **Rider Aids**

## **Spurs**

Spurs are metal riding accessories worn on the rider's heels to reinforce subtler cues to horses to move to the side and gain its attention for instruction. They can encourage collection for precise moves, but use of spurs shorten horse's strides and will reduce their forward speed. English spurs have either rounded (*Waterford style*) necks for dressage riding or blunted (*Prince of Wales style*) necks for hunter and jumper riding. English spur necks are shorter than western spurs and designed for close leg positioning when riding. Western spurs have longer necks with rotating rowels. Eight or more points on a rowel or blunted points are mild when used correctly. *Roweled spurs* allow rolling the rowel on the horse's side for further attention when the horse ignores leg pressure and then rowel pressure. It is important for the rowel pin to permit easy rotation of the rowel. Proper and safe use of spurs requires finesse and should never be injurious to the horse. Shorter legged riders should use short shanked spurs and long-legged riders should use long-shanked spurs to reach and touch the horse only when intended and necessary. If the rider cannot push, roll, or bump spur rowels or blunted necked spurs on their facial cheeks in the same manner they plan to use them on a horse's side, the rider should not wear spurs.

Spurs should never be worn when riding bareback. If the rider begins to slide off, he may accidently spur the horse on the opposite side and cause the horse to jump into or onto the rider.

### Riding Whips

Riding *whips*, *crops*, *bats*, and *quirts* are rider aids carried in the hand. Riding whips, crops, and bats used primarily by English style riders. A riding whip is about 3 feet long with a lash at the end. A crop or bat is a stiff 2 feet long stick with a popper at the end. A quirt is a short riding whip that has been used in Western riding and is similar to a crop but has 2 falls (leather straps) at the end. Romal reins are looped reins that a quirt is attached to at the reins' midpoint.

Used correctly, riding whips are not whips but extensions of the rider's arm and used to tap areas of the body to move. Dressage whips are permitted for show riding in dressage events.

Now, let's recap the key points to remember from today's episode:

- A bridle is a combination of a headstall, bit, and reins.
- Hackamores are used to teach young horses to give to pressure and flex at the poll without having the discomfort of a bit.
- Split reins are for western working horses. Looped reins should never be dropped in front of horse.
- There are two categories of bits: snaffle and leverage.
- Spurs are valuable rider aids to position a horse's body for different gaits and for lateral movements.
- Dressage whips are useful as an extension of the riders arm and communicate desired positions to the horse. The need to use whips in racing or timed competitions is debatable.

More information on animal handling is available in my book, *Animal Handling and Physical Restraint* published by CRC Press. It is also available on Amazon and from many other fine book supply sources.

Additional information is available at www.betteranimalhandling.com

Don't forget serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.