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Bits for Horses

Our topics for this week:

- **Basic types of bits**
- **English riding bits**
- **Western riding bits**

Some riders, a few trainers, and most bit makers seem to feel that a metal bit is a key pin for any control of a horse. It is as if a bit is a missing part of the horse's anatomy that must be filled to do anything with a horse. Unsuccessful riders frequently go to harsher bits as a means to improve control of a horse. This is rarely a good approach. American Indians and early Spanish Californians did not feel metal bits were needed all the time, or in some cases, ever needed.

Metal bits are not needed to control most young horses. If not used in early training, bits are not needed to control mature horses. Harsh bits are not an effective means of correcting behavioral problems in horses. However, early Spanish California caballeros would transition horses from a bitless hackamore to bits that, when used correctly, enabled one-handed finesse in control of a mature horse. Because a metal bit is not essential, when one is used the best style depends on the preference of the handler and the behavior of the horse when carrying the bit in its mouth. The other mysterious aspects of picking a bit are …. mysterious … without scientific basis.

Basics of 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 silver (nickel silver) encourage salivation; stainless steel does not. Aluminum tends to dry the mouth.

Types of Bits

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 create 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.

English Bits

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).

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.

Western Bits

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.

If you have comments or you're interested in particular animal handling subjects contact us at CBC@BetterAnimalHandling.com

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

1. **Well trained horses and experienced riders do not require a bit for communication between each other.**
2. **The most common bit is the snaffle.**
3. **Leverage bits amplify the rider's hand cues to the horse.**

More information on animal handling can be found in my book, ***Animal Handling and Physical Restraint***, published by CRC Press and available on Amazon and from many other fine book supply sources. My new spiral-bound handbook, ***Concise Textbook of Small Animal Handling*** was recently published and available from all major science book supply sources.

Additional information is provided at: www.betteranimalhandling.com . This website has more than 150 past podcasts with notes on handling of dogs, cats, other small mammals, birds, reptiles, horses, cattle, small ruminants, swine, and poultry.

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.