

Cribbing and Weaving

■ What are these behaviors?

Cribbing (or crib-biting) refers to a behavior in which a horse sets his upper incisors along an edge or protruding surface, tenses his neck muscles, and seems to swallow air in noisy, rhythmic gulps. Some horses crib infrequently or only when stalled, but others may crib at any time and on any exposed surface, sometimes **preferring the activity to exercising, socializing, or eating.**

Another vice, **weaving**, is seen most commonly in stalled horses, although some horses weave in paddocks or trailers. A weaver shifts his weight from one foreleg to the other, swinging his head and shoulders from side to side. **Stall-walking** is a more active behavior in which the horse takes several steps to one side and then the other, or even paces monotonously around and around the stall perimeter.

■ What causes cribbing and weaving?

No one knows just why a horse begins a habit like cribbing or weaving, but it isn't hard to figure out why he continues the behaviors: they are **more interesting or rewarding than standing alone in the stall for hours each day.** The stress of solitary confinement is thought to be a triggering factor, but there is **some evidence for genetic or neurologic links as well.**

■ Will these behaviors hurt the horse?

These behaviors, known as **stereotypies**, can affect the health and well-being of individuals that spend **a great deal of time engaging in them.** Horses may lose weight because they crib or weave instead of eating hay or grass, and chronic weavers greatly increase the strain on their legs, hooves, and shoes. Established cribbers develop abnormally heavy neck muscles and accelerated dental wear. Some owners have reported a higher incidence of colic in cribbing and weaving horses.

■ Can an owner prevent stereotypies?

When training and management strategies allow it, **pasture time** is preferable to confinement in a stall, and often the nervous habits disappear if the horse is turned out. If the horse must be kept in the barn, **a companion** (another horse within sight, a friendly goat or small pony to share the stall, or even an unbreakable mirror mounted on the wall) can alleviate much of the stress associated with boredom and loneliness. **Stall toys** (balls to kick or push around, milk jugs suspended from the ceiling) may provide a diversion. If the behaviors persist, **physical restraints** have been tried. Weaving can sometimes be disrupted if bars or posts are installed at strategic locations in the stall to block the horse's repetitive swaying. A cribbing strap, usually made of leather and designed to fit tightly around the horse's neck just behind the jaw, prevents the horse from flexing the muscles used in cribbing. **Surgery** to cut the nerves and remove muscle tissue involved in cribbing has been successful in stopping the

behavior in some horses, but in one study of this procedure, 12 of 30 treated horses found a way to continue cribbing even after the surgery. **Clearly, preventing stereotypies is not the same as eliminating their cause.**

■ **What has research revealed about stable vices?**

- When it was believed that cribbers actually swallowed air, their frequent colic episodes were blamed on distention of the stomach. **Radiographic studies have shown that the air is not actually swallowed**, and the characteristic grunting sound is made when air is forced into the top of the esophagus and then expelled into the back of the oral cavity. **Disrupted forage intake may lead to colic when dedicated cribbers or weavers spend hours without eating and then gorge on hay or grass. They may also be offered large grain meals to encourage weight gain, again increasing the chance of digestive upset.** One study showed a longer total gut transit time in cribbers than in other horses fed in a similar manner, a finding that may be related to colic.
- In a group of 14 horses, **average heart rate was higher for the eight cribbers than for the six non-cribbing controls.** Among the cribbers, **heart rate tended to decrease while the horses were cribbing.** Cribbing horses were more likely than controls to respond to a frightening stimulus outside the stall and to spend more time pacing the stall after the frightening stimulus. They were also shown to spend less time resting than other horses. These findings suggest that stereotypies and a nervous temperament may be related.
- **Some family lines show a far higher percentage of cribbers (30%) than the general equine population (3%). One theory is that cribbing horses may have inherited opioid receptors (the part of the brain that perceives the presence or absence of discomfort) that are more sensitive than average.** Administration of **dextromethorphan or naloxone**, both opioid antagonists that produce an analgesic (insensitivity to pain) effect has decreased or stopped cribbing in some horses but has not had the same effect on weaving. Studies of levels of **cortisol (an indicator of stress) and beta-endorphins (substances that mediate pain perception)** have yielded inconclusive, and sometimes contradictory, results.
- One feeding study showed that **meals of grain with or without molasses tended to increase cribbing behavior, but meals of pelleted alfalfa did not cause a similar increase.** Diets that provide energy through higher fat levels (rice bran) or super fibers (soy hulls, beet pulp) might be useful alternatives to traditional feeds. *See Equine Review Nutrition sheet N 05 for more information on super fibers.*

■ **What's the bottom line on stable vices?**

- Preventing stereotypic behavior is easier than curing it. **Allow horses as much group turnout time as possible, and avoid stress-producing situations such as isolation, boredom, and lack of exercise.**
- Stereotypies seem to be a response to stress, and physical restraints such as cribbing straps or weaving bars actually raise stress levels that can be alleviated by stereotypic behavior. There is some feeling that **mild to moderate cribbing and weaving are more distressing to the owner than to the horse, and physical restraints need not be used unless the animal's health is impacted by extreme concentration on the behavior.**