

# SHARP BROS. SEED CO.



101 E. 4th Street Road  
Greeley, CO 80631  
970-356-4710  
Buffalo.GXY@SharpSeed.com

## HEALTHY HORSE PASTURE A CHALLENGE

By Lynn Allen

### CANON CITY, COLO.

As western states are divided into smaller and smaller lots, horses are crowded into smaller pens. Soon a five- or ten-acre pasture is just a dusty corral.

“It’s a major problem all over the west,” said Betty Chess, District Manager for the Fremont County Soil Conservation District. “There are a lot of small acreages with horses.”

And horses are hard on pasture.

“There is no domestic beast that I know of that can do more damage (to a pasture) than a horse,” said Tim Steffens, a Range Specialist for Colorado State University. “Shat they don’t graze out, they stomp out.”

Fremont County Extension Service and the Fremont County Soil Conservation Service have joined forces in an attempt to give horse owners an alternative to acres of dusty corral. They hosted a Healthy Horse Pasture tour recently. The group visited two farms in Canon City and one south of Florence, Colo. These farms have been implementing rotational grazing by dividing their land into three or more pens. One farm with only five

acres has managed to keep good vegetative cover by feeding the horses most of the time and only allowing the animals to graze on occasion.

“Turning them out for a couple hours every day isn’t rotational grazing, and it doesn’t rest the pasture,” said Steffens. “Horses will eat all of one plant and none of another every day until they kill the one they like.”

Participants were also shown the benefits of soil testing and fertilizing to meet nutrient deficiencies. Manure can be used to fertilize, but Steffens recommends composting it first to kill parasites. The compost pile needs to reach internal temperatures of 160 degrees to effectively kill weed seeds and parasites, he said.

“Grass uses a lot of nitrogen,” said Steffens. “But you need to test for other things, too.”

Weed control was addressed. Application of broadleaf herbicide was recommended for control of annual pests like kochia and ragweed clipping has proven to be very effective weed control in long run, but requires repeated effort. However grasses

also benefit from occasional clipping and horses prefer the more palatable regrowth and don't spot graze so badly if old growth is clipped off. If weeds are invading a pasture, there is an overgrazing problem, regardless of the size of the lot.

"If weeds are moving in, there has not been enough recovery time," said Steffens. It doesn't matter if its dryland or irrigated, a pasture can only stand so much grazing. There needs to be adequate recovery time."

Roy Roper, a retired soil conservationist, helped organize the event. Relying on wisdom gained from almost fifty years of working as a conservationist, he recommends limiting access to pastures even in the winter.

"People think it doesn't hurt the grass to turn out in the winter because it's dormant," said Roper. "But the trampling action will hurt the crown of the plant and compact the soil until the grass can't grow.

A horse is a very efficient compactor; ask anyone who has had a horse step in his foot. A thousand pound horse stands on four relatively small hooves of which the heels, outside wall and frog come in strongest contact with the ground. The pound per square inch a horse applies to the ground varies depending on weight and hoof size, but the pressure is extreme. Compaction can only be remedied by mechanical disruption on the soil with a disk or plow, which then requires reseeding. roper recommends limiting compaction by locking horses off pasture when it is wet and limiting access even when it is frozen.

Even during the winter, horses damage a pasture by compacting the soil. While

resting a pasture during the winter, spots that have been stomped out or overgrazed can be reseeded according to Roper. He recommends harrowing or disking to disturb the soil surface so the seed can find a place to root. If the seed is hand scattered after frost, the seed will germinate in the spring when it gets adequate moisture. The emerging grass will need several weeks to mature before grazing or the horses will pull it out by the roots.

Stiffens recommends Bermuda grass for small irrigated acreages with horses. He said the grass stands traffic, heat, and salty soil well, making it ideal for horse pasture conditions. However, it is a warm season grass and is slow to green up in the spring.

Tall fescue is a popular grass in eastern Colorado and serves well but horses will often prefer other grasses to the fescue, creating grubbed spots. Fescue also requires a lot of irrigation in semiarid climates. Tall wheat grass is another popular choice, but it must be clipped to remain palatable.

"At seed stage, a Shetland pony under saddle won't even eat that stuff," warned Steffens.

Stiffens is hoping more areas will begin the "Healthy Horse Pasture Tour" and that each district can tailor the idea to fit the locality and that overgrazing can be defectively addressed.

"Horse pasture is tricky to talk to people about," said Steffens. "Realistically it takes 80 acres to graze a horse in eastern Colorado without feeding him. In some places it's as high as 120 acres. A small pasture should be a place to stretch his legs, not a feed source."

**For more information, contact your local extension service or soil conservation office.**