

Weed Eating in Pasture

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I've trained four different groups of cows on 6 different weeds since I started developing the "We'd Eat It!" training process in 2004. That's enough cows and weeds to demonstrate that the process works, and also that there is plenty more to learn. I'd like to share with you a little about what I've learned from watching cows eat weeds in pasture.

The first thing I've learned is to check my expectations at the pasture gate. Here are some common expectations folks have of weed eating cows at work along with what I've seen them do:

1) Cows will focus on weeds first and avoid grasses.

Unfortunately this isn't so. True, I have seen cows head straight for spotted knapweed in the middle of belly high grass. But I have also seen them graze grass all morning long and then focus on Canada thistle in the afternoon. Most often I've seen them take a bite of this and a bite of that, mixing as they go. The training process doesn't teach the cow NOT to eat grass. It simply teaches her to include a new food in her overall diet.

Actually, we want our cows to mix forages. Science has demonstrated that since all plants contain toxins, if an animal only gets to eat one food, it will eventually begin to feel the effects of the toxins in that plant and will reduce how much it eats of that food. Animals may not lose weight because of this, but they won't gain the way you'd like them to either.

2) Cows will eat all of every weed in the pasture.

Wouldn't that be great! What actually happens to the weeds is just what happens to the grass and other forages the cow normally eats. Some plants get eaten to the ground but only the tops and a few leaves are bitten off of others.

The only way to ensure that all of everything is eaten is to change the size of your pasture. In intensively managed pastures, there is a little more pressure on the animals to make good use of the forage available. In these pastures they tend to eat more of everything including the target weeds. In larger pastures, they continue to eat weeds, but the effect on the weeds and on the grass is often patchier.

From what I've observed so far, the size of your pasture depends on the kind of weed and on your weed management goals. Some weeds may require a bit more pressure, or smaller pastures. You might also decide to manage more intensively to hit your target weeds harder.

3) They will eat every weed in the same way.

Here's one that caught me off guard. After a year of watching cows wrap their tongues around grass, thistle, and knapweed and biting them off, I just assumed that they would eat leafy spurge the same way. With that measure for my success, I was very disappointed when I checked out the first pasture targeting leafy spurge. It seemed like they weren't eating it. So I reduced the size of my trial pastures for my second attempt at getting them to eat this weed. At first, it seemed I was still having no success until I took a closer look at the plants themselves. That's when I realized the stems were still standing, but all the leaves and flowers were gone.

Were they actually stripping the stems just like goats and sheep do? I looked for leaves on the ground, thinking that maybe they had stomped the plants into submission or that the leaves were falling off on their own. But there was no evidence of any of this. With this new evidence in mind, I looked at the before and after pictures of my first leafy

spurge pasture. Sure enough, there were the same bare stems.

So the cows were eating the weed, just not in the way I expected. Now I've learned to look at the plants closely before deciding whether or not the cows are doing their job.

Another thing I've learned from watching cows at work is that once they've been exposed to one new weed, they seem to experiment with other plants in their pasture. The first cows I trained added musk thistle to their diet without any input from me. When I came back the next year, they had added Canada goldenrod, rose bushes, willows, and everything else in the pastures I put them in. In California, cows who were trained to eat distaff and Italian thistle decided to add bull thistle to the menu. I heard something similar from Joe Morris, a rancher who attended the Stockman Grass Farmer Organic Grassfed Beef School in February. He went home and trained a group of 50 heifers to eat milk thistle. He said that they decided to eat both Italian thistle and black mustard once he put them in pasture.

Stay tuned for more. This grazing season I'm heading back to California to continue more work on distaff and Italian thistle and to experiment with some new training techniques and later in the summer I'll be working in Boulder County, Colorado on a project to teach cows to eat late season diffuse knapweed. I'll share what I learn here and on my web site at <http://www.livestockforlandscapes.com>.