

# Seven Simple Steps for Turning Cows Into Weed Managers\*

## Step One: Know Your Weed

Scientists at Utah State University have discovered that animals choose what to eat based on feedback from nutrients and toxins in the foods. The more nutritious a weed is, the more likely the animal is to eat it. Fortunately, in spite of their spines and other defenses, many weeds are just as nutritious as alfalfa! Keep in mind that not all plants are safe to eat. Know the chemicals in your plant before you try to feed it!

## Step Two: Choose Your Animals

Younger animals are more likely to try new things than older ones and females are a good choice because they can teach their young what to eat. Kathy prefers starting with year to a year and a half old heifers. The process goes faster if the cows you are teaching know you and trust you.

## Step Three: Keep Cows Healthy!

Key to this process is your animals nutritional state. You may be able to starve an animal into eating something, but the result is reduced weight gain, reduced profits, and an animal who is less likely to try other new foods. Animals in Montana and California gained weight at expected rates and suffered no harmful effects from eating weeds.

*These steps were originally developed by Kathy Voth, of Utah State University, for a project teaching cows to eat Canada thistle, leafy spurge and spotted knapweed at Grant-Kohrs Ranch National Historic Site in Deer Lodge, Montana. They are based on principles derived from over two decades of research describing how animals choose what to eat. To learn more about the principles, visit Kathy's web site at [www.livestockforlandscapes.com](http://www.livestockforlandscapes.com), or [www.behave.net](http://www.behave.net), the web site for researchers continuing this work.*

## Step Four: Reduce the Fear of New Things.

Just like people, animals may not try new foods even if they're good for them. They're afraid of what might happen. Fortunately, an animal who has had lots of good experiences with trying new foods is less afraid to try another new food. Provide your trainees with good experiences by giving them new, nutritious foods like ground alfalfa and rolled grains served in the same feeding tubs every day. After four days of new foods twice a day, most animals are ready to try weeds.

## Step Five: Make the Unfamiliar Seem Familiar

If I offer you frog legs for dinner, you're more likely to try them if I tell you "They taste like chicken." Cows will also try a new food if it has a familiar flavor or smell. so we cut weeds, sprayed on a hint of molasses and added some ground alfalfa and served it up in their tubs.

We don't worry if our cows don't clean their plates the first day. Since they have no food safety labels, they try things a little at a time.

## Step Six: Field Test Your Animals

We always begin in small pastures with a mixture of both weeds and grass. This causes enough pressure so our cows don't just eat the best and leave the rest. We don't expect cows to eat solid stands of weeds. They will ALWAYS need to mix in other foods to be successful, healthy weed managers.

## Step Seven: Observe and Adapt

By observing what and how your animals eat, you can make adjustments to your grazing plan. Timing is an important consideration. Early season may allow for too much regrowth, but too late and you run the risk of animals spreading weed seeds in their manure.



*Before you turn your fields into a sticky mess spraying molasses on them to get the cows to eat weeds read this:*

A research experiment called "**Is Molasses the Silver Bullet?**" found that cows who did not have the four days of training to get them over their fear of new things ate very few weeds. In fact, the control group ate only 2 oz of distaff while trained cows ate 81 oz.