

## **The Economics of Training Cows to Eat Weeds**

### **What makes it possible for us to teach cows to eat weeds?**

All creatures use feedback from nutrients and toxins in foods to decide what to eat. The more nutritious a plant is the more likely it is that an animal will continue eating it once they have tried it.

### **How do weeds compare with traditional forages when it comes to nutrition?**

Weeds are generally more nutritious than grasses in mid-summer and often are equivalent to or better than alfalfa in nutritional value.

### **If weeds are palatable then why don't my animals just eat them?**

When animals' nutritional needs are met then they are unlikely to add a new plant to their diet. Animals just don't like to eat new foods. The training process highlighted in the video reduces the fear of new foods. Since most weeds are nutritious once animals start eating them positive feedback from nutrients in the weeds encourages them to continue to eat weeds. In addition some weeds, thistles for example, are just hard to harvest. The training process encourages them to learn to eat the weed.

### **How can I learn about my plant's (weed's) nutrient and toxin content?**

If you have access to a university library, you can check out your plant's toxin make up using the following resources:

1. *Toxic Plants of North America* by George E. Burrows and Ronald J. Turl
2. *A Guide To Plant Poisoning of Animals in North America* by Anthony P. Knight and Richard G. Walter
3. *Natural Toxicants in Feeds, Forages, and Poisonous Plants* by Peter R. Cheeke

The nutrient and toxin content of many weeds are listed on the Livestock for Landscapes website. The link is <http://www.livestockforlandscapes.com/answers.htm>. You can hire folks at Livestock for Landscapes to research your weed for you for a nominal fee.

### **Do I have to fence my animals in tightly so that they will continue to eat weeds in pasture?**

No. Trained animals have continued to eat weeds in any size pasture. Animals mix forages depending on the plants' nutritional value and their individual needs.

### **Are there health issues associated with eating weeds?**

To date, their have trained weed eaters have suffered no weed-related illnesses or injuries. Animals breed and gain weight at or better than expected rates. Of course this is because we have been careful about choosing which weeds to train animals to eat. Remember that there are

weeds that can cause problems and you should never train a cow to eat those weeds.

**Do I have to retrain my cows every year?**

No. Research shows that ruminants learn quickly about foods and remember them for years. Once your animals are trained they are trained for life.

**Do untrained calves and herd mates learn from trained cattle?**

Yes, young animals are more likely to learn from mom and peers than older animals but older animals can learn from their offspring and herd mates.

**What breed of cattle is best for eating weeds?**

All breeds of cattle can be trained to eat weeds. Some individuals eat more weeds than others, but this does not appear to be breed specific.

**Can cows eat leafy spurge?**

Yes, but they need other forage to mix with spurge and they need to learn how to harvest it.

**What are the economic benefits of teaching cows to eat weeds?**

1. You reduce costs for herbicides and for the labor and equipment to apply them. Research indicates that farmers and ranchers who reduce their costs are always more successful.
2. You increase the amount of forage available to your animals and you improve pasture utilization. This means you may not have to lease as much pasture, you may be able to extend your grazing season, or you may be able to run more animals, all depending on your operation and goals.
3. You can turn a problem into a benefit.
4. Your animals may gain weight faster thanks to the higher protein value of weeds vs. many traditional forages.