

## Canada Thistle *Cirsium arvense*



Do you remember the Roadrunner and Coyote Looney Tunes cartoons? I was weeding earlier today, and I came across a weed that always makes me feel like Wile E. Coyote. No matter how fast I work, no matter what I order from Acme (aka any store that sells herbicides) I just can't catch up to that stupid Roadrunner. Of course I'm not really talking about a bird, I'm referring to Canada thistle, *Weedus infuriatus*...just kidding, its real Latin name is *Cirsium arvense*.

For those of you unfamiliar with Canada thistle (thank your lucky stars!) it's a creeping perennial that forms large colonies thanks to extensive underground roots. I've heard it said that there is only one Canada thistle, and that all of them are linked together by the roots. Of course that's not true, but I can see why people suggest it. I've found plants less than six inches tall with roots more than two feet long. The literature on this plant describes roots six to fifteen feet deep and fifteen feet wide. That's a bigger root system than some trees!

Above ground, the plants are 1 to 4 feet tall with upright growth. Flowers appear from June through August, and are usually purple to pink, although white blooms have been seen. The flowers are typical of thistles, having a fringed appearance, but unlike other thistles, this weed is dioecious, meaning plants are either male or female. For this reason, Canada thistle is a poor seed producer, as it requires a plant of the opposite sex for fertilization. It more than compensates for this weakness of course, by spreading via underground rhizomes.

The leaves are simple and alternate. They attach directly to the stem; there is no petiole. They are oblong or lanceolate and lobed, but the lobes are irregular, meaning they are not the same size. The leaf margins sport short, but very sharp spines that make grabbing on to this weed a memorable experience.



The stems are ridged, and branch out near the top of the plant where are usually smooth. Near the base, they are pubescent, meaning they have fine hairs. Unlike some other thistles, Canada thistle has hollow stems.

Most other thistles are biennials, which means they form a rosette the first year, then bolt and bloom the second, and then die. Canada thistle is a perennial, meaning it just keeps going. It is not as spiny as Bull thistle, which is common in our area. The roots also set it apart, as other thistles usually have a taproot, rather than horizontal rhizomes.

It infests crops, rangeland and pastures, as well as wetlands, roadsides and abandoned areas. Livestock won't graze on Canada thistle, and while some birds will eat the seeds, it typically makes poor wildlife habitat.

We call it Canada thistle, but it is really native to Eurasia, and was introduced in contaminated seed in the late 1700s. It is found all over the US, including Alaska but not in the Deep South. While it is found in Alabama, it is not in South Carolina, Florida, Georgia, Mississippi, Louisiana, Texas or Oklahoma. Hawaii is Canada thistle free; no wonder they call it Paradise. It is almost always listed as a noxious weed; Spokane County identifies it as a Class C weed, meaning control is mandated.

As for control, a combination approach is best. The weed board recommends chemical controls (2,4-D, Banvel, Tordon) combined with monthly mowing over several growing seasons, and cultivation. Cultivation alone will actually spread Canada thistle, as new plants grow from very small sections of root; mowing alone will cause new shoots to grow, so combine them all for best results. As always, wear personal protective equipment when applying herbicides and always follow the label.

Crowding out Canada thistle by planting grasses in the area can be effective, although it limits the number of herbicides you can use. Canada thistle stem weevil, *Ceutorhynchus litura*, has been investigated as a biocontrol agent, but at this time is considered ineffective against infestations of any size.

**Sources:**

Weeds of Nebraska and the Great Plains, Nebraska Department of Agriculture, Bureau of Plant Industry, Lincoln, Nebraska, 1995

Weeds of the West, 9<sup>th</sup> edition, Tom Whitson, ed., The Western Society of Weed Science, 2000

Spokane County Weed Board, <http://www.spokanecounty.org/weedboard>

USDA Natural Resources Conservation Service, Plants Database  
<http://plants.usda.gov/java/profile>