

Controlling Canada Goldenrod in a Prairie Restoration



PHOTO: MELISSA McMASTERS



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With more than 40 years of experience in the research and establishment of native plant communities, Neil is an internationally recognized pioneer in the use of North American plants in contemporary landscapes. He is a regular keynote speaker on topics such as establishing prairie meadows, designing with native plants, and the benefits of converting resource-intensive landscapes into self-sustaining ecological sanctuaries.

Canada Goldenrod (*Solidago canadensis*) is a native perennial that commonly invades prairie restorations by means of its tiny airborne seeds. It creeps by rhizomes to form large clones that typically smother out, or at best, suppress other native prairie flowers and grasses. These methods of control include two organic methods, and two chemical methods:

ORGANIC

1. The stems and attached rhizomes can be pulled up after a soaking rain when the soil is damp. A “dandelion digger” tool can be used to uproot the rhizomes by following them where they creep, about two inches below the soil surface. It is impossible



to extract all the rhizomes in one go, so repeat removals will be required to completely eliminate them all.

2. The infested areas of the prairie can be mowed twice a year for two years, once in mid-June at a height of six inches above the ground, and again in late August to early September when the Goldenrod is in full bloom, at twelve inches above the ground. These four mowings will set back the prairie plants, but will not kill them. They will re-grow after each mowing. By cutting at these specific times and heights for two years in succession, Canada Goldenrod has been essentially eliminated from prairies where it was once dominant, prior to this mowing treatment.

CHEMICAL

1. The new sprouts of Canada Goldenrod can be treated in spring when they are 3-4 inches tall using a broadleaf herbicide, such as Triclopyr (Lontrel, Garlon 3-A, Garlon 4 with crop oil). This will kill much of the clone, but not all, as the timing of the application is not ideal for overall effectiveness. However, treating the new sprouts when they are still relatively short prevents collateral damage to nearby desirable prairie plants. A clear upside down plastic funnel, or the top half of a clear plastic soda bottle should be attached to the end of the herbicide wand by removing the nozzle fixture and taping the funnel or bottle onto the lower wand above the nozzle. This will create a "Cone of Death" that prevents drift onto nearby desirable plants. Triclopyr will not harm prairie grasses when used according to directions, but will harm or kill many prairie flowers. Herbicides are best applied when there is no wind, and the air temperature is between 60 and 85 degrees F.
2. In late summer, 10-12 stems of Canada Goldenrod can be bundled together at waist height using twine or tape, and either Glyphosate (Roundup) or Triclopyr herbicide applied to the upper one foot of leaves on the stem, using a small plant mister bottle set on "stream" to avoid herbicide drift. This local application prevents the herbicide from drifting onto desirable plants below. No herbicide should be allowed to drip off the leaves onto vegetation below. Glyphosate is a broad-spectrum herbicide that kills both flowers and grasses, while Triclopyr will only kill flowers.

