

Wild caraway

Colorado Dept. of
Agriculture
Conservation Services
Division
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303-239-4100



Key ID Points

1. First year rosettes have carrot-like leaves and slender tuber.
2. Mature plants have hollowed stems & small white or pink flowers in umbrella-like clusters.

Wild caraway Identification and Management



Identification and Impacts

Wild caraway (*Carum carvi*) is a biennial or sometimes perennial forb. It produces a low growing rosette in the first year, then the flowering stalk bolts the second year of growth, it can sometimes bolt a third year. Wild caraway is a prolific seed producer; under ideal conditions each plant can produce several thousand seeds. Stem leaves are finely divided, and resemble those of carrots in shape but tend to droop more. Shoot leaves are alternate and normally oblong or oval in shape. Flowers are white or pinkish in color, small, and occur in terminal or lateral loose clusters at the top of stems. Each flower produces two seeds that are narrow, oblong, brown, and have five distinct tan, linear, ribs. Mature plants are 1 to 3 feet tall and have one or more shoots emerging from a single taproot. Shoots are slender, erect, branching, and normally hollow.

Habitats for Wild caraway include: mountain meadows, hayfields, irrigation ditches, roadsides, and disturbed areas. The plant prefers full sun and well drained soils. Wild caraway was originally planted as spice crop, but escaped and has proven to be extremely invasive.

The key to effective control of Wild caraway is eliminating seed production by cutting or pulling plants before seed set. Herbicides should also be applied in rosette stage or before seed set. Later in the season, cut seed heads to prevent seeds from maturing. Try to minimize disturbance caused by these control measures; restore and maintain native vegetation in such areas. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Wild caraway is designated as a "List B" species in the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information visit www.colorado.gov/ag/csd and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.



Photos © Mary Ellen (Mel) Harte, bugwood.org.

Carum carvi

**CULTURAL**

Wild caraway plants are sensitive to root disturbance and could be eliminated by tilling, although such practices are not likely to be suitable for natural areas. Best preventive practices include the elimination of seed production, and maintaining healthy native communities.

**BIOLOGICAL**

There is not any biocontrol species available to control Wild caraway. Biocontrol takes many years of research and development. For more information, contact the Colorado Department of Agriculture's Insectary in Palisade, Colorado at 970-464-7916.

**MECHANICAL**

Hand-pulling of bolting stalks is effective at preventing seed production, but at maturity the seed heads are extremely fragile and shatter easily. At this stage, a plastic bag can be carefully placed over the mature plant, and closed tightly around the stem while hand-pulling. Carefully done, this method can remove seed without accidentally spreading it. Collected seed should be disposed of in landfill-bound garbage or thoroughly burned. This plant's response to repeated mowing is to stay short (mowing height) and bloom.

Integrated Weed Management:

Eliminate seed production by cutting or pulling Wild caraway plants before seed set. Later in the season, cut seed heads to prevent seed from maturing. Try to minimize disturbance caused by these control measures; restore and maintain native vegetation in such areas. Applying herbicide in the rosette stage or early in bud to flower stage will assist in the control of Wild caraway.

HERBICIDES

NOTE: The following are recommendations for herbicides that can be applied to range and pasturelands. *Rates are approximate and based on equipment with an output of 30 gallons per acre. Always read, understand, and follow the label directions. The herbicide label is the LAW!*

HERBICIDE	RATE	APPLICATION TIMING
Metsulfuron (Escort XP)	1.0 oz of product/acre + 0.25 % v/v non-ionic surfactant	Apply at bolting to bud growth stages. (Spring to Early Summer)
2,4-D	2 qt/acre	Apply at rosette to bud growth stages. (Spring or Fall rosettes, Spring to Early Summer bud)

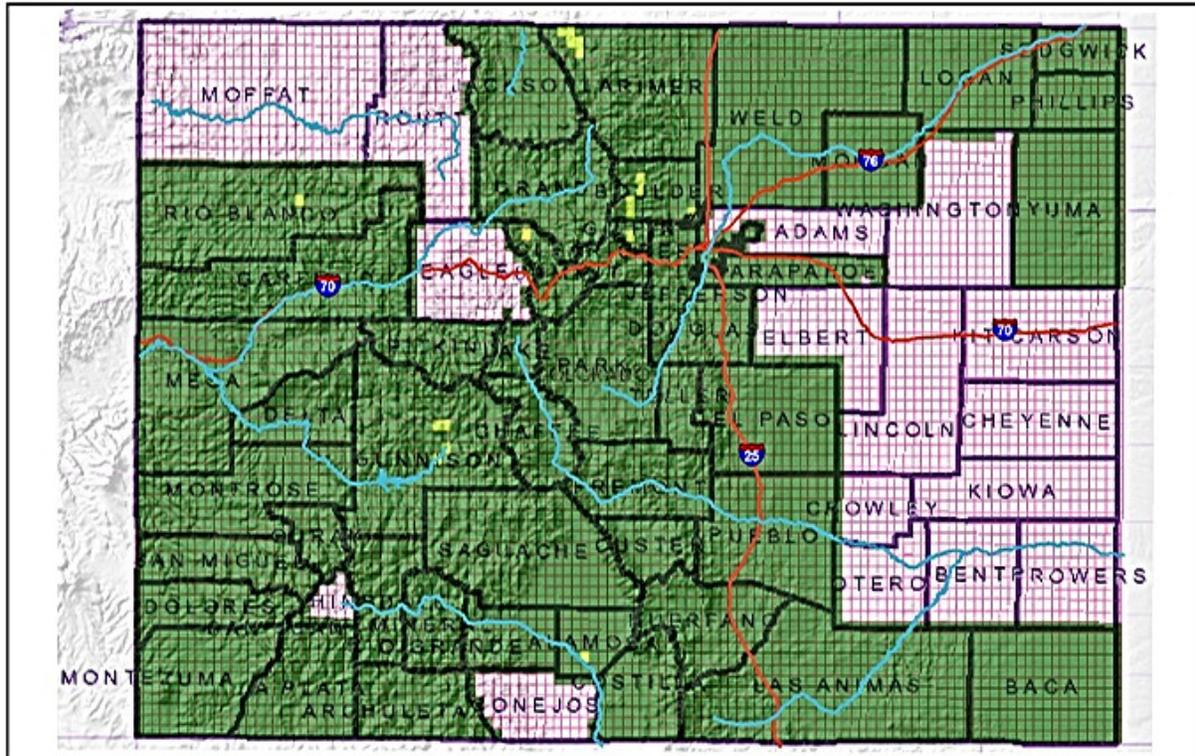
Wild caraway



Wild Caraway
Carum carvi

2011 Quarterquad Survey
Distribution and Abundance
In Colorado

114+ Infested Acres



Distribution Legend: 0 acres 1-10 acres 11 - 50 acres Not Reported

Acreege estimates supplied by County Weed Supervisors and compiled by the Colorado Department of Agriculture.