

ARTICHOKE THISTLE

Also known as cardoon, wild artichoke

Cynara cardunculus

Sunflower Family (Asteraceae)

DESCRIPTION

Artichoke thistle is a perennial herb commonly found in disturbed grasslands where it can form dense stands. It also invades chaparral and riparian woodland habitats.

Growing up to 5 feet tall, its erect stems are thick, coated with downy hairs, and ribbed like celery. The leaves are silvery or grayish-green on the upper surface, and whitish beneath due to the presence of white hairs. The leaf margins have one-eighth to one-quarter inch spines. The leaves form a basal rosette.

REPRODUCTION

Artichoke thistle reproduces primarily by seed but can also resprout from the roots if cut back. One or more flower heads bloom at the tip of stems from April to July and are pollinated by bees. Occasionally flowering occurs in the first year, but more often in the second. One plant can produce up to 15 or so flower heads (or cardoons) with pinkish-purple or blue flowers. A single flower can produce hundreds of seeds. The seeds are brown to black, roughly a quarter-inch long, and have feathery bristles at the tip. Being too large and heavy to travel far by wind, the seeds generally drop near the parent plant. Seed that has travelled farther afield is usually spread by birds, animals, and water. Research suggests that seeds remain viable up to 7 years.

IMPACT

Artichoke thistle competes with neighboring vegetation for moisture and nutrients, and once established will shade out other plants to form monocultures. Thick stands of the plant inhibit the movement of wildlife. The plant is not poisonous but may injure grazing livestock and humans who come into contact with it.



KEY FACTORS

- u The spines necessitate wearing heavy leather gloves, long sleeves, and even protective clothing such as chainsaw chaps when removing this plant.
- u Abundant seed production.
- u Seed longevity reported to be at least 5 years.
- u Prolonged germination period (from first rains to as late as July).
- u Resprouts vigorously from deep taproot (up to 8 feet deep).

TREATMENT OPTIONS

- u **Pull or dig** plants out. In theory, most of the taproot needs to be removed to prevent resprouting, but some land managers have been able to kill artichoke thistle by digging up only 12–18 inches of the root. The taproot's brittleness may make removal difficult, so pulling during the rainy season is best.
- u **Cut and bag** flower stems before they open, to reduce seed production if you do not have time to remove plants. Some practitioners have also found grazing by goats helpful in reducing seed spread.

- u **Cut and treat.** Some weed workers using herbicide prefer to apply it to the base of a cut plant rather than covering the large leaves. They cut the stems close to the base with loppers and apply herbicide to the base.
- u **Brush cut** every 3 weeks between December and March, and then every 4 weeks until the plants died during the summer drought. For heavily infested areas, a tractor with an attached flail mower has been used.
- u **Foliar spray.** Seedlings may need to be sprayed just once, but larger plants may require 3–4 sprays in one season. Some practitioners spray as plants begin to bolt (at the end of the first year of growth).

DISPOSAL

Seed heads should be disposed of (if flowers are developed or seeds are present, place in plastic bags), together with any roots, and taken off-

site. It's important to destroy as much of the root system as possible, either by herbicide or physical removal and proper disposal.

FOLLOW-UP

Return periodically to the site to check for seedlings coming up from the seedbank. Some have also carried out surface tilling as a follow-up treatment after mowing or brushcutting.

INTERESTING FACTS

Native to the Mediterranean, this plant was introduced to the US in the mid-1800s for use as a vegetable (the inner leaf-stalks, taproot, and base of the flower head are edible). It is related to the commercially grown globe artichoke (*Cynara scolymus*), and the two will hybridize. The commercial variety of cardoon has fleshier flower heads, and the leaf lobes and inner flower bracts are without spines.

Notes