



## A Northern Arizona Homeowner's Guide To Identifying and Managing BULL THISTLE

Common name(s): Bull thistle, spear thistle

Scientific name: Cirsium vulgare

**Family:** Sunflower or Aster family (Asteraceae)

Reasons for concern: This aggressive and persistent species can quickly take over both disturbed and unattended areas, and outcompete native species, reducing plant diversity and wildlife habitat. It can form huge monocultures and is very difficult to eradicate. Thistle seed is easily dispersed by wind, water, birds, and other animals.

Classification: Non-native



Bull thistle. Image credit: Steve Dewey, Utah State Univ., Bugwood.org

Botanical description: Tall, sturdy, very spiny plant with many branching stems.

**Leaves:** Rosette leaves deeply lobed, dark green, prickly and spiny on top, cottony underneath, 2 to 10 inches long or even longer, with a raised center vein. Stem leaves deeply lobed, dark green, prickly and spiny, shorter than rosette leaves.

**Stem(s):** Has very spiny wings, each extending down the stem from a leaf. Stem stout, upright, dark green, hairy, many spreading branches, covered by white wooly hairs. Stems up to 2 to 6 feet. Dead stems remain through winter.

**Flowers:** Large, purple, solitary flower heads, clustered at end of each branch. Flower heads are supported by very spiny, pointed, green modified leaves, called bracts. Blooms June through October.

**Seeds:** Seed heads topped by plume of feathery white hairs. Seeds are short-lived, particularly those on or near soil surface. Seeds buried 5 or 6 inches in soil may remain viable up to 3 years.

**Roots:** Short, fleshy, slightly branched, short-lived taproot.

Native to: Europe, western Asia, North Africa

Where it grows: Fields, pastures, wastelands, roadsides. Generally likes sun and moist areas. Does not tolerate shade. Elevation 4,200 to 9,000 feet.

Life cycle: Biennial. Basal rosette forms the first year. Bolts, flowers, and dies in the second year.

Reproduction: By seed

**Weedy characteristics:** Bull thistle is highly competitive and aggressive, and forms dense colonies that choke out native vegetation important to wildlife and pollinators. Seeds germinate rapidly and are spread by wind. An individual plant can produce up to 100,000 seeds.

**Look-alike native plants:** Many native thistles can look similar to bull thistle. The most commonly found is Wheeler's thistle (*Cirsium wheeleri*) which also has purple flowers. Wheeler's thistle plants are shorter and smaller with more delicate stems and rosettes. The stems do not have spiny wings and therefore can be easily touched. The leaves are not covered in bristles or bumps like bull thistle.

Control strategies: Eradicate them in rosette stage in the first year whenever possible. In the second year, do not let them go to flower or seed. To prevent resprouting, cut taproot about 2 to 3 inches below soil surface, while disturbing soil as little as possible. Bag all buds, flowers or seeds. Always use gloves. Repeatedly monitor previous infestations for new growth. Plant desirable native species to outcompete invasive plants. Chemical control can be effective on rosettes. Contact your local county extension office for more information on chemical control.



Wheeler thistle. Image credit: Max Licher, swbiodiversity.org/seinet

## Images:



Bull thistle flower head. Image credit: Max Licher, swbiodiversity.org/seinet



Bull thistle. Image credit: MS, AZ Native Plant Society



Bull thistle basal rosette. Image credit: Michael Shepherd, USDA Forest Service, Bugwood.org



Bull thistle seed head. Forest and Kim Start, Starr Environmental, Bugwood.org

## References:

- Bull thistle Washington State Noxious Weed Control Board http://www.nwcb.wa.gov/weeds/bull-thistle
- A Northern Nevada Homeowner's Guide to Identifying and Managing Bull Thistle University of Nevada Cooperative Extension <a href="https://naes.agnt.unr.edu/PMS/Pubs/1510\_2010\_74.pdf">https://naes.agnt.unr.edu/PMS/Pubs/1510\_2010\_74.pdf</a>
- Bull Thistle Invasive Plants, US Forest Service https://www.fs.usda.gov/naspf/sites/default/files/naspf/pdf/bull\_thistle.pdf
- Field Guide for Managing Annual and Biennial Invasive Thistles in the Southwest USDA Forest Service Southwestern Region https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb5410130.pdf

## https://nazinvasiveplants.org

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