

# Plumeless thistle

**ASTERACEAE** - Sunflower Family

*Carduus acanthoides* L.



**Common Name:** Plumeless thistle

(spiny plumeless thistle)

**Growth Form:** Forb

**Life Span:** Biennial (or winter annual)

**Origin:** Eurasia

**Flowering Dates:** June-August

**Reproduction:** Seeds

**Height:** 0.3-1.5 m (1-4.9 ft, usually 3-4 ft)

**Inflorescence:** Heads (1.6-2.7 cm tall, 1-2 cm wide), solitary or in clusters of 2-5, terminating branches; involucre with several series of bracts; outer bracts (7-12 mm long) spiny, inner bracts (to 2 cm) spineless; peduncles spiny-winged (3-15 mm wide) up to the bases of the heads (which is a distinctive characteristic separating it from the similar musk thistle)

**Flower:** Purple, rarely white or yellow, disk florets (1.4-2 cm long)

**Fruit:** Achene, slightly obovate to oblong (2.5-3 mm long), somewhat quadrate, somewhat compressed, straw-colored to light brown, ribs 10; pappus of numerous, minutely barbellate bristles, forming a ring; seeds 1

**Seed:** Small

**Leaves:** Alternate; blades simple; stem blades decurrent, elliptic to lanceolate or oblong (10-20 cm long), irregularly and deeply pinnatifid with spinulose lobes, segments 1- to 4-pointed, marginal spines 1-6 mm long, surfaces pubescent, sessile; rosette leaves similar except less deeply pinnatifid and less hairy on upper surface

**Stems:** Erect, freely branching above, with spiny wings (3-15 mm wide), surfaces densely hairy to nearly hairless

**Underground:** Taproot, stout, fleshy

**Where Found:** Primarily in the east central Great Plains and scattered farther west. It grows in pastures, rangeland, and noncropped areas. (NE, SD, ND, KS, MN, IA, & MT)

**Uses and Values:** Plumeless thistle is an important plant for butterflies. Its seeds are eaten by numerous species of songbirds.

**Poisoning:** Plumeless thistle may accumulate nitrates, but it is unpalatable to livestock.

**Other:** Plumeless thistle is an aggressive weed and is similar to the closely related musk thistle (*Carduus nutans* L.). Plumeless thistle is a noxious weed in many states. It rarely flowers during its first year of growth.



*Spiny-winged peduncles under the heads of plumeless thistle is a characteristic separating it from the similar musk thistle. Note: seedhead weevil egg mass on the bracts.*

*Plumeless thistle rosette (left) differs from musk thistle rosette (right) by having leaves that are deeply serrate to nearly the midrib.*

