



Common Burdock (*Arctium minus*)

Provincial Designation: none

(NOXIOUS in MDs of Ranchland, Pincher Creek and Willow Creek)

Description:

An introduced biennial that forms a rosette of leaves the first year, and large, stout flowering bolt with many branches the second year.

It prefers areas with moist fertile soils – riparian areas – and recent soil disturbance. Its prickly seed heads are designed for dispersal, readily attaching to whatever animal may brush past (Burdock was the inspiration for the invention of Velcro by George de Mestral in the early 1940's)

Common Burdock produces burrs which can entangle in the manes and tails of horses and the wool of sheep and can damage and de-value the wool of sheep. Heavily burred cattle can experience eye, nose or mouth injuries, are stressed, de-valued at market, and aid in the weed's spread. There have even been occasional accounts where birds and bats have become entangled in the burrs and died.



Identification:

Stems are erect, coarse, branched and thick, have a reddish tinge and may be grooved or angular. Mature plants grow 1 to 3 m tall.

Leaves: Rosette leaves are large, hairy, and heart-shaped and readily shade out smaller plants. Stem leaves alternate and are broadest at the stalk. Leaf edges are wavy or toothed. Leaves are woolly on their undersides, and dark green above

Flowers are purple and borne in shortstalked clusters along the stems. Spiny, hooked bracts surround the florets.

Seed: Seed production starts in July and continues into the fall. Seeds are shed continuously throughout the fall, winter and following spring. A mature plant can produce from 6,000 to 16,000 seeds.

Habitat:

Common burdock is found in places where the soil is disturbed (but not cultivated). It does not survive under cultivation because of the fact that it is a biennial, so it needs areas that are not severely disturbed on an annual basis. Such areas include: farmlands, pastures, waste places, open or disturbed woods, road sides, fence rows, barnyards, abandoned fields, and stream banks. It is found both on moist fertile soils, many with high soil nitrogen content, and on sterile clay soils. Not many other plants will be found growing around large burdock patches – most likely due to the large leaves that reduce light at ground level.

Prevention:

Avoid soil disturbance, re-seed bare soil where possible, encourage desirable, competing vegetation, and don't let existing infestations produce seed. Preventing the production of the burred seed is a key way to prevent spread.



Control:

Grazing: Livestock (primarily sheep) may find burdock palatable, however infestations in riparian areas will suffer damage due to trampling.

Cultivation: Tillage will kill plants in the rosette stage – burdock is intolerant of cultivation.

Mowing or cutting can eliminate seed production and should be done after the plant has bolted, but before flowering.

Chemical: Several herbicides are effective on Common Burdock – applications in riparian areas will have limitations though. The following herbicides are registered for use in rangelands (from AFRD's Crop Protection "Blue Book" for 2006):

2,4-D, Grazon, MCPA (Amine, Ester, Na-salt) and Remedy/Garlon 4

Biological: Currently, there are no official forms of biological control for Common Burdock. However, there has been repeated interest from various provinces in researching biological control options. There are 13 insect species which attack Common Burdock. Only one of these insects, the Burdock moth (*Metzneria lappella*), has been reported in North America. This insect greatly reduces the number of viable seeds in the plant.



1 Always follow the product labels. The use of pesticides in any manner not published on the label or registered under the *Minor Use of Pesticides* regulation constitutes an offence under both the *Federal Pest Control Products Act* and *Alberta's Environmental Protection and Enhancement Act*.