

Weeding and (not) Watering

Helping Native Plants Thrive in Your Landscape
Landscaping with Colorado Native Plants Conference • Feb. 10, 2018

Weeds

- **Cheatgrass (*Bromus tectorum*):** Spring-annual grass, germinates after fall rains, grows over winter even under snow, produces dense stands with prolific seed production (400 pounds/acre). Seeds drop as plant dies and dries from April-June, depending on elevation. Out-competes natives by its early start, the density of germination, and by growing a fine network of roots that intercept moisture and nutrients. Control by hand-weeding, fall herbicide spraying, or combination of grazing and herbicide.

More info: <http://cpw.state.co.us/Documents/ResourceStewardship/DowneyBrome.pdf>

- **Tumbleweed (*Salsola tragus*) and Kochia (*Kochia scoparia*):** Both annuals that flower and seed in late summer or fall. Mature plants break off and “tumble” in the wind, spreading their seeds far and wide. Like many annuals, they are copious seed producers: a single tumbleweed plant can contain as many as 250,000 seeds! Both of these plants take advantage of disturbed soils, so minimizing soil disturbance helps control populations. Control: Hand-weed when small (hoeing can be effective, but only if followed by seeding native species to counter soil disturbance) graze in growing stage, or use broad-leaf herbicides before flowering stage. Remove dried plants carefully, bagging whole plants to prevent seed dispersal.

More info: <http://extension.colostate.edu/topic-areas/natural-resources/identification-and-management-of-kochia-and-russian-thistle-6-314/>

- **Field Bindweed (*Convolvulus arvensis*):** Perennial plant native to Europe that grows from an underground root stretching as deep as ten feet. Seeds are viable for as long as 50 years. Control is a multi-year project, involving removal of the above-ground part of the plant for several years in a row and preventing it from flowering. Foliar application of vinegar or herbicides is most effective in late summer/early fall, when the plant is storing sugars in its roots (the toxin is translocated to the root then and does the most damage). There are two insects approved for biocontrol as well, a mite and a moth.
More info: <https://coloradoplants.jeffco.us/plantdetail.do?sna=Convolvulus%20arvensis&image=1>

- **Canada Thistle (*Cirsium arvense*):** A rhizomatous perennial native to Eurasia, like so many of our worst invasive weeds. Learn to identify it because our native species of thistle are very important to pollinators (especially butterflies), and you don't want to control them by mistake. Stems two- to four feet tall and topped with multiple small purple thistle flowers. Leaves wavy-margined, spiny, and covered with downy white hairs. Control requires patience and more than one season. Spray spring plants with full-strength white vinegar (repeat every two weeks to successful burn tops and exhaust energy in the rhizomes. Or use broad-leaf herbicides at recommended times. Grazing plants when young is also effective in exhausting the roots. Cut back mature stalks before seeds form (the seeds with their parachute-like sails disperse long distances on the wind).
More info: <https://www.colorado.gov/pacific/agconservation/canada-thistle>

*For the earth to stay in balance, for the gifts to continue to flow,
we must give back in equal measure for what we take.*
—Robin Wall Kimmerer, botanist and author of *Braiding Sweetgrass*

- **Houndstongue (*Cynoglossum officianale*):** a biennial native to Europe and Asia that appears to be perennial in the lower elevations of the Rocky Mountain West. Grows two- to three-foot-tall stalks from a thick underground taproot. Large ovoid leaves have pointed tip and felty hairs; red to burgundy flowers in clusters at the top of stalks mature into four-parted nutlets covered with curved prickles that hook into the fur (or socks) of passing creatures. Poisonous: Foliage, especially of young plants, contains high levels of alkaloids that can cause liver failure in grazers, including cows, elk, and deer. Control: Pull young plants, or dig mature plants with a plant knife or shovel to get taproot. Cut stalks before flowers mature, or cut and carefully bag seedheads. Do not attempt to control by grazing because of alkaloid content.
More info: <http://msuextension.org/publications/AgandNaturalResources/MT199709AG.pdf>

- **Smooth Brome (*Bromus inermis*):** highly invasive rhizomatous perennial grass native to Eurasia; stems grow densely and 2-4 feet high, including flower stalks. Wide leaf blades marked by characteristic brome 'M' or 'W' constriction. Provides excellent hiding cover for grasshoppers, but few insects or grazers eat it. Control by spring mowing, treat re-growth with glyphosate.
More info: https://plants.usda.gov/factsheet/pdf/fs_brin2.pdf

Watering

Less is more unless you are growing wetland or riparian places. Gardeners are more likely to kill native plants by overwatering them than under-watering.

- Species native to our region evolved with our sub-arid climate, and are in general better adapted to drought than to abundant moisture. Too much water may cause native perennials to grow fast their first season, but it may also cause root rot and drastically shorten their lives.
- As with any new plantings, water regularly and deeply for their first growing season to establish their root systems. Then back off the watering.
- How much is enough? Let the plants tell you. If they are drooping and showing signs of stress first thing in the morning after the cooler relatively moist nights, it's time to water. Drooping leaves at hot mid-day are normal.
- A rule of thumb: Water only when plants show signs of stress and/or when the soil is dry to a depth of two inches.

Maintenance: Tidying and Pruning

Tidying: Cutting back above-ground stalks of grasses and perennials after the growing season. The general rule of thumb is wait until spring.

- Leave dried stalks of tall ornamental grasses and perennials through the winter to provide food for birds and shelter for small wildlife, including butterfly larvae and chrysalises, and other pollinators.
- Those dead stalks provide color and form—architectural interest—for the winter garden. And they act as snow fences and snow interceptors, collecting moisture that melts into the soil in spring.
- Cut warm-season grasses back in mid or late spring, before they put out new leaves from the base. Leave five to six inches of stubble remaining. (Warm season grasses include little bluestem, switchgrass, and blue grama, and other Plains natives.)
- Most cool-season grasses (Mexican feather grass, needle grass and other early-green-up, spring-blooming grasses) don't need cutting back. Simply rake out the dead leaves from the bunch with a leaf rake or your hands. Leave those fine dead leaves for birds to use as nesting material if possible.
- Divide large clumps of perennials or grass clumps with dead centers in fall.

Pruning Trees and Shrubs

- Winter is the best time to prune deciduous trees and shrubs, when they're dormant and won't bleed sap.
- Avoid pruning berry-laden branches if possible; leave their food for birds and other wildlife. (Some less-desirable berries don't get eaten until all other food is exhausted in late winter and early spring when they are critical for survival.)
- Know your tree or shrub's blooming pattern. Spring-blooming plants, for instance, often bloom on last year's wood. Pruning out that wood means no blooms. If you're unsure, wait to prune-spring blooming shrubs and trees until after they've bloomed.
- Prune for open and airy crowns: Remove crossing branches, weak branches, branches with dead tips, and "water sprouts," branches that grow straight up from larger horizontal branches.
- If you are unsure how to recognize what to prune, take a workshop from your local garden center or extension service. Hands-on experience is far preferable to simply watching videos!

Native plants reweave the community of nature. Gardening with natives restores our connection to place; it brings us home.

–Susan J. Tweit, botanist and author of *Walking Nature Home*