

SPRING 2026

Laramie County



Photo by Jacki Bakker

LIVING IN THE COUNTY

wyoextension.org/laramiecounty

laramiecountyweedandpest.com

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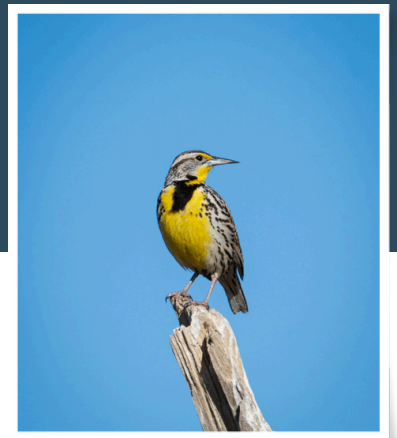
Laramie County is located in a region known as the *high plains* and *semiarid prairie*, therefore it should come as no surprise that the annual precipitation for our area is a mere 11.5 inches. This includes both rain and snow. Due to our minimal exposure to the wet stuff coming from the sky, it can be easy to forget about protecting our waterways from pollution. We may not see the effects of water pollution immediately, but the results can be consequential.

Take, for example, our yards. We love green grass, especially in the summer. We apply fertilizer for growth, pesticides to get rid of the weeds, and then we water it. Whatever is not used by the grass and soil, washes away to the storm sewer or into depressions on the land (this process is known as runoff). Then the rain comes, or the snow melts and those fertilizers and pesticides wash into our creeks, streams, and riparian areas. This can cause many issues, including overgrowth of undesirable plants in the creek beds, obstruction of water flow downstream, flash flooding along banks or low areas, and pollutants being transported downstream. As we work our way deeper into 2026, remember to use chemicals as directed on the label (the label is the law!), pick up debris around your place, and dispose of or recycle household waste, after all, remember we all live downstream!

Written by Jacki Bakker & Shelby
Stith - LCWP Assistant Supervisor



Helpful Places



- Laramie County Extension Office: 307-633-4383
- Laramie County Weed and Pest: 307-245-3213
- Laramie County Conservation District: 307-772-2600
- Cheyenne Natural Resource Conservation Service: 307-772-2314
- Cheyenne Audubon Society: 307-634-0463
- Household Chemical Disposal: 307-637-6440
- Laramie County Animal Control: 307-635-1453
- Wyoming Game and Fish: 307-777-4600
- Cheyenne-Laramie County Environmental Health: 307-633-4090
- Wyoming Livestock Board: 307-777-7515
- Brand Inspector Christine Wilson: 307-757-0188
- Brand Inspector Quinn Merrick: 307-343-3261
- Brand Inspector David Hanson: 307-331-0128
- Brand Inspector Matt Dole: 785-664-8335
- Wyoming Department of Agriculture: 307-777-7321
- Barnyards & Backyards: barnyardsandbackyards.com

Helpful Information

- Even though the USDA Plant Hardiness zone map lists Laramie County as zone 5a to 5b, it is better to buy plants hardy to zones 3 or 4 in case of a harsh freeze.
- Our average soil pH is 7.5.
- Our average growing season is 100 days or less. Our last average frost is May 20th. Our first average frost is September 25th.
- The average yearly moisture in Laramie County is only 13 to 15 inches.
- We are always in a drought.
- It is advisable to refrain from mowing the prairie, especially during the spring season. If mowing becomes necessary, opt for late August as the ideal time. Limit mowing to a single instance and keep the grass about 6 inches high. Note: It is important to mow sufficient grass around buildings to mitigate fire risks.

Plants to Support Pollinators

By Jennifer Thompson

Interested in helping support pollinators? It's relatively easy – add plants to your landscape so there are some blooming throughout the growing season! Plant it and they will come! Pollinators tend to be looking for nectar and/or pollen (bees, butterflies, hummingbirds, some flies), occasionally they are looking for something else and just become pollinators by accident (some flies and beetles). There are lots of great plants to choose from which will provide nectar and pollen for busy pollinators – they include both native plants and non-native plants. In my landscapes, I try to have plants which are blooming from early spring (a lot of the spring bulbs) through the first frosts (some aster and colchicum flowers). It's good for pollinators and great for me!



How can you learn more about pollinators and find examples of plants which will survive in our climate and provide blooms? Check out our publication [Promoting Pollinators on Your Place: A Wyoming Guide](#). In this publication you'll find lots more information on the pollinators that call our state home and the plants they visit. Hard copies of this publication are sometimes available at your local University of Wyoming Extension office and select Conservation Districts. Call or email ahead – sometimes it is out of print. However, it is also available online at bit.ly/wypollinators

Two very valuable resources in this publication for those trying to add plants to their landscapes are:

The bloom calendar – located in the middle of this publication, this calendar shows when and for how long various pollinator friendly plants bloom (and some info on the pollinators which have been seen to visit them). The data for this calendar was collected at 7,200 feet so at lower elevations you'll want to assume that these plants will begin blooming a bit earlier. A separate version of this calendar can be found at <https://bit.ly/bb-pollinator-guide>

Plant portraits for selected plants – this appendix is at the end of the publication. It provides plant pictures, names and other useful information for selecting pollinator plants. You can also find it alone at <https://bit.ly/wy-bloom-list>

We hope these resources get you off to a great start! Watching pollinators visit your plants and providing them with the nectar and pollen they need can be very satisfying. Plant it and they will come!

Jennifer Thompson, University of Wyoming Extension Horticulturalist

Interested in native plants? Check out one of our newest publications
Native Plants for Wyoming Landscapes at <https://bit.ly/wy-herb-perennials>



Rocky Mountain penstemon

Penstemon strictus

Height: 18–24 inches

Width: 12–18 inches

Native. Easy to grow. Susceptible to powdery mildew in shadier acres. Prolific reseeder; deadhead to avoid reseeding.



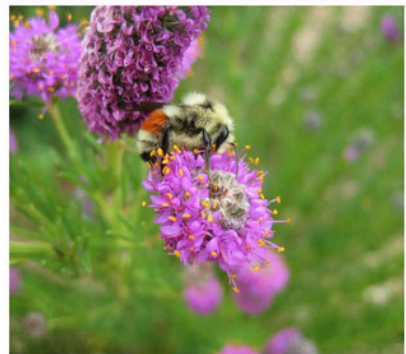
Purple prairie clover

Petalostemon purpureus (also *Dalea purpurea*)

Height: 2–3 feet

Width: 1–2 feet

Native. Nitrogen-fixing plants. Slow growing from seedlings. Takes a couple of years to bulk up. Likes some irrigation. Very attractive to some bees.



Palmer's beardtongue

Penstemon palmeri (also known as pink wild snapdragon)

Height: 2–4 feet

Width: 18–24 inches

Native to Utah. Large, showy fragrant blooms. Short-lived but reseeds when happy.



Blanket flower

Gaillardia

Height: 12–18 inches

Width: 12–18 inches

Many varieties available. Can reseed a fair amount and be short-lived. Native *Gaillardia aristata* (right) has rhizomatous tendencies and is susceptible to powdery mildew.



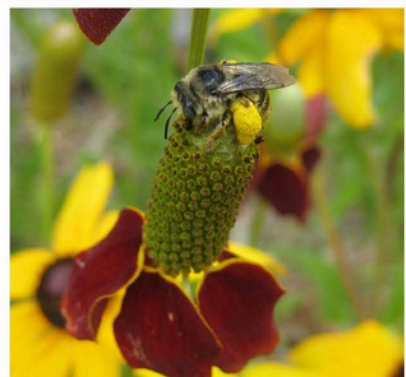
Prairie coneflower

Ratibida columnifera (also known as upright prairie coneflower)

Height: 18–24 inches

Width: 18–24 inches

Native. Long bloom period. Short-lived plant but reseeds moderately. Flowers can be yellow or burnt orange. Some interesting native bees, such as digger bees, visit this plant.



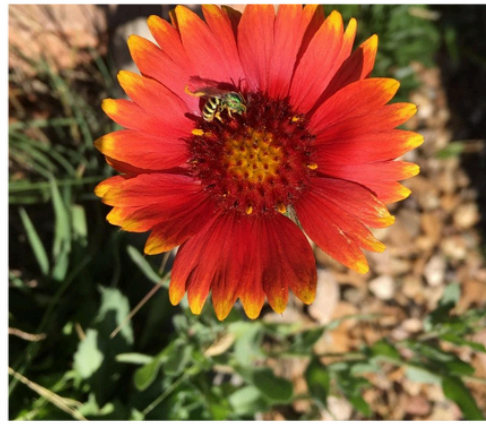
Providing Nesting Habitat for Native Bees

By Scott Schell (UW Extension Entomology Specialist)

Planting flowers is one of the best ways to help pollinators, but nectar and pollen are only part of what bees need. Native bees also require suitable places to build their nests and raise their young. In fact, most bees do not live in hives like honey bees. The majority of native bee species in Wyoming are solitary, meaning each female builds and provisions her own nest.

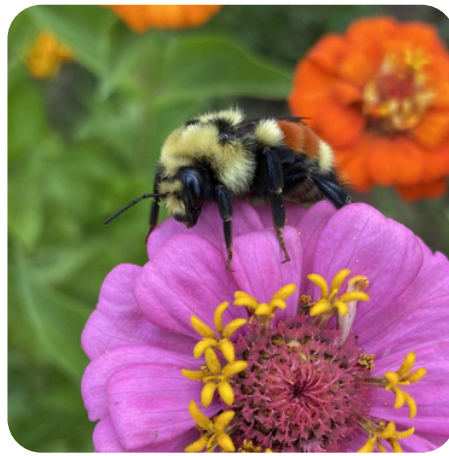
About 70 percent of native bee species nest in the ground. These bees prefer well-drained soil in areas that receive sun and are not heavily mulched or frequently disturbed. Leaving a few small patches of bare or lightly vegetated soil in your yard or garden can provide a valuable nesting habitat. South-facing slopes, garden edges, and lightly compacted paths are often used by ground-nesting bees. Avoid covering every open area with landscape fabric, thick mulch, or gravel if you want to support these species.

The remaining native bee species nest above ground in natural cavities. In nature they commonly use hollow plant stems, beetle burrows in dead wood, or cracks in bark. You can encourage these bees by leaving some standing dead plant stems through the winter and delaying garden cleanup until spring. Also, pithy or hollow stems from plants such as sunflowers, raspberries, and some perennial wildflowers can provide nesting sites.



An Agapostemon bee species feeding on a blanket flower is an example of a common ground nesting species that prefers well drained, bare ground for their nest tunnels. Avoid watering the areas of bare ground on sunny days where you see nesting activity going on. The bees will leave the tunnels to go pollinate and then the water will wash the entrances closed and they will be forced to start over. Wait to irrigate these areas until the evening. On cool, cloudy, and rainy days, ground nesting bees generally stay in the tunnels and dig their way out after the rain stops.

Photo by Scott Schell



Another option is installing bee nesting blocks or “bee hotels.” These structures contain drilled holes or bundled tubes that mimic natural nesting cavities. If you choose to use them, place them in a sunny location protected from rain and wind. It is important that nesting blocks are maintained properly. Replace or clean nesting materials when they are empty to reduce the buildup of parasites, diseases, and predators that can harm developing bees.

Providing nesting habitat works best when combined with good floral resources. Bees need flowers nearby so females can collect pollen and nectar to provision their nests. When nesting sites and flowers occur together, native bee populations are much more likely to establish and persist.

By allowing a few natural areas in your landscape—bare soil patches, standing stems, and small pieces of dead wood—you can create habitat that supports many species of native bees. These small changes can make a big difference in helping maintain the pollinators that contribute to healthy gardens and ecosystems across Wyoming.



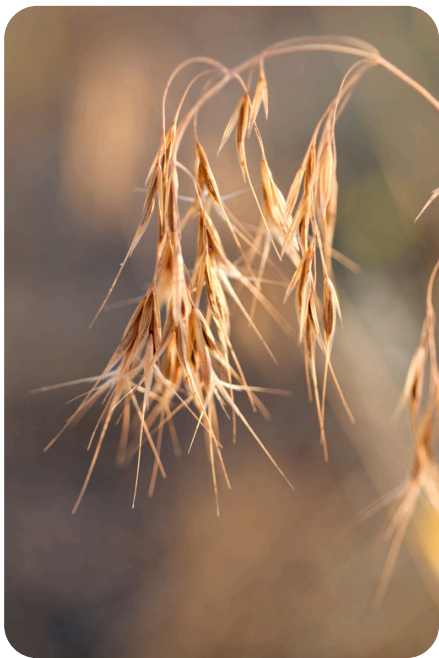
Scott Schell, University of Wyoming Extension Entomology Specialist

For more information about supporting native bees, visit resources from Oregon State University Extension Service such as *Enhancing Urban and Suburban Landscapes to Protect Pollinators* and Utah State University Extension’s *Creating Habitat for Native Bees*, which provide practical guides on pollinator habitats and bee nesting structures.

Know Your Noxious Weeds

Help Save Wyoming From These Invaders

These are some of the state designated and county declared noxious weeds to be on the lookout for.



Cheatgrass or Downy
Brome

Bromus tectorum

GROWTH HABIT: Winter annual, 4-30 inches tall, spreading prolifically by seed

LEAVES: Leaf sheaths and flat blades are densely covered with soft hair.

STEMS: Covered with soft hair.

FLOWERS: Inflorescence is dense, slender, usually drooping, 1-sided, 2-6 inches long. Awns are 3/8 to 5/8 inch long usually purplish at maturity.

ROOTS: Shallow, brown root system

OTHER: Grows in nearly all soil types and habitats. Outcompetes more favorable perennial grasses and increases fire risk.



Locoweed
Oxytropis lambertii

GROWTH HABIT: Perennial herbaceous legumes, 6-12" tall, spreads by hairy kidney-shaped seeds.

LEAVES: Pinnately compound basal leaflets that are covered in fine hairs.

STEMS: Leafless long stalks.

FLOWER: White, purple, or pink in color. Borne from stalks in spike-like clusters.

SEEDS: Kidney-shaped seeds that are formed in a hairy/leathery pod.

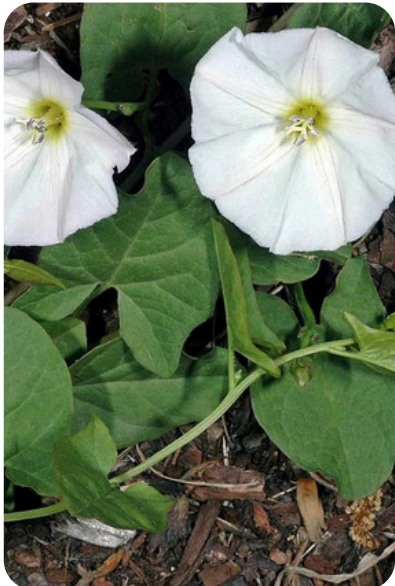
OTHER: Toxic to all livestock. Horses can never recover once poisoned. Induces abortions in cattle and sheep. Generally avoided by livestock, but risk of consumption increases on overgrazed land.



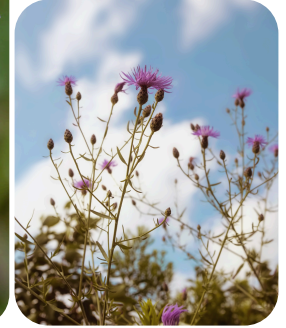
Poison Hemlock
Conium maculatum

GROWTH HABIT: Biennial, 6-8 feet tall
LEAVES: Shiny green, finely pinnately divided, leaflets segmented. Lower leaves clasp the stem, upper leaves on short stalks
STEMS: Erect, stout, and purple-spotted
FLOWER: Umbrella-shaped clusters, supported by a stalk. White, lacking sepals.
ROOTS: Large white taproot
SEEDS: Light brown, ribbed and concave
OTHER: All parts of this plant are poisonous! It is sometimes mistaken for parsley.

Field Bindweed
Convolvulus arvensis L.



GROWTH HABIT: A perennial that often forms dense, tangled mats. Typically found in highly cultivated or waste areas.
LEAVES: Alternate, arrowhead-shaped with spreading pointed or blunt lobes at the base.
STEM: Stems are prostrate, 1-4 feet long.
FLOWER: Bell-shaped, white/pink in color, about 1 inch in diameter with 2 small bracts located 1 inch below the flower.
ROOTS: Elongated and extensive taproot. Can penetrate the soil up to 10 feet, which gives rise to numerous lateral roots.
SEEDS: Dull brown, roughened, flattened on two sides, 1/8" long. Seeds remain viable in the soil for up to 50 years.



Spotted Knapweed
Centaurea maculosa Lam.

GROWTH HABIT: Biennial or short lived perennial, up to 3' tall. Rosette formed first year, flowering stalk elongates second year.
LEAVES: Long and divided below, short and narrow above. Covered with fine hair.
STEM: Erect with slender wiry branches. Covered with fine hair.
FLOWER: Seed heads mostly on branch tips, solitary, to 1" diameter. Pink to purple, rarely white. Seed head bracts are black tipped, with 5 to 7 pairs of short feathery appendages.
ROOTS: Taproot not well developed.
SEEDS: Brownish, 1/8" long, notched on one side of base, short tuft of bristles at tip end.
OTHER: Very aggressive, can infest large areas quickly, offers very little big game or livestock forage value. Readily establishes on disturbed soil.



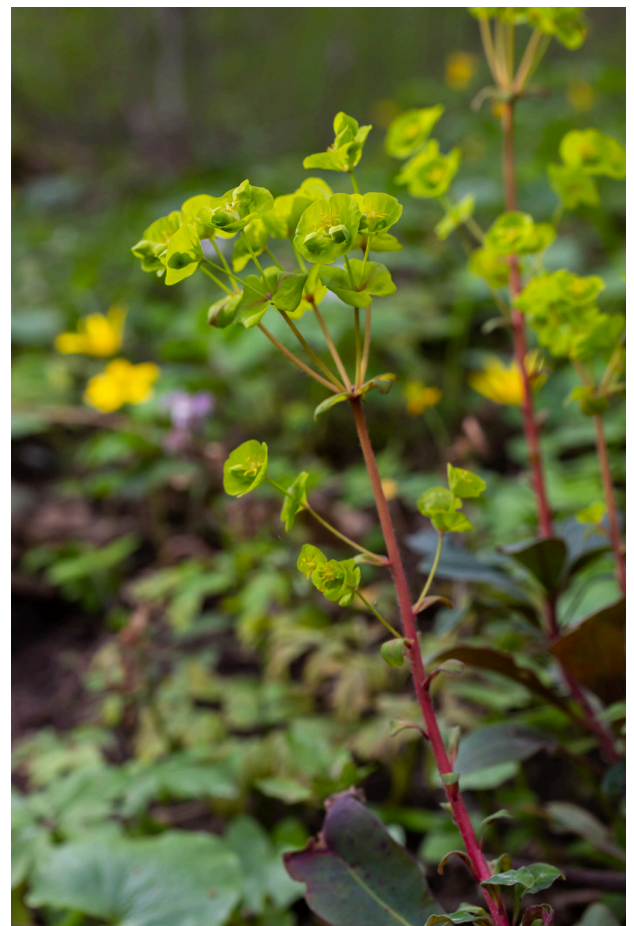
Leafy Spurge

Euphorbia esula L.

Leafy spurge is a perennial growing up to three feet tall. It is native to Eurasia and was brought to the US in 1827 as a seed impurity. It is a Wyoming State designated noxious weed.

It reproduces vigorously by rhizomes and seed. The seeds, which are oblong and grayish purple, can be thrown up to 20' by an exploding 3-celled seed capsule and remains viable in the soil for 8 years. The leaves are alternate, narrow, usually drooping and 1-4 inches long. The stems are thickly clustered making it easy to spot a patch of this yellowish-green weed off in the pasture.

The entire plant contains a toxic milky sap making this plant inedible to cattle and wildlife. Sheep and goats can be used to help control spurge. There are also four species of flea beetles (*Apthona nigriscutis*, black-dot flea beetle; *A. cyparissiae*, brown-dot spurge flea beetle; *A. czwalinae*, black spurge flea beetle; and *A. flava*, copper spurge flea beetle) that are used as biocontrol. Their larvae feed on leafy spurge roots and the adults feed on the foliage. There are several different chemical control options for leafy spurge as well. Laramie County Weed and Pest and the NRCS office have cost share programs for managing this weed.





Dalmatian Toadflax

Linaria dalmatica (L.)

Mature Toadflax plants are strongly competitive, especially with shallow-rooted perennials and winter annuals. Dalmatian Toadflax causes negative impacts in pastures, rangelands, and natural areas, where it outcompetes natives or other desirable species. It is not palatable and most wildlife and grazing animals will not eat it, leaving less native forage.

It was introduced into the Western U.S. as an ornamental in 1874 and escaped cultivation. Toadflax readily spreads into adjacent non-disturbed areas. Much of this spread is by vegetative means, reflecting a vigorously-growing root system. Dalmatian Toadflax roots may grow 20 inches deep or more nine weeks after seedlings have emerged and have vegetative buds that give rise to new shoots. Patch expansion can be dramatic. Dalmatian Toadflax typically flowers beginning in late May or June in western states and may continue until fall, particularly if moisture is not limiting. It spreads by horizontal or creeping rootstocks as well as by seed. A mature plant can produce up to 500,000 seeds.

Dalmatian Toadflax may be controlled with herbicides labeled for toadflax. Please consult Laramie County Weed and Pest for specific recommendations or cost share program options.

Researchers in Wyoming sprayed Dalmatian Toadflax in early September, 1994, then seeded the following year in April or October with Crested Wheatgrass, Pubescent Wheatgrass, Thickspike Wheatgrass, Russian Wildrye, or 'Sodar' Wheatgrass. The combination of spraying and seeding competitive grasses controlled Dalmatian Toadflax better than spraying alone. Three years after treatments were started, control of Dalmatian Toadflax ranged from 61-86% where grasses were seeded in April and 76-95% from the August seeding, compared to no control from spraying alone .

The best times to spray are just before and during blooming. Another more effective time to spray is mid September to the first of October after the first frost.

Several classical biocontrol agents are available to use against Toadflax. The success of these agents remains largely unknown. A defoliating moth (*Calophasia lunul*), and ovary-feeding beetle (*Brachypterolus pulicarius*), and two-seed capsule-feeding weevils (*Gymnaetron antirrhini* and *Gnetum*) have been released in the U.S. and Canada to control all Toadflax species. Particularly the flowering and seed feeding insects should help decrease seed production. A stem-boring weevil (*Mecinus janthinus*) and a root-boring moth (*Eteobalea intermediella*) were also released in the U.S. and Canada to control all species of Toadflax. These species may help to control shoots and seed production as well as decrease root vigor. This method only works on large or very large stands of Toadflax.

Also be on the lookout for these...

These invasive species are not yet prevalent in Laramie County, but are in other parts of the state. If you see any of these species, eradicate them or contact Laramie County Weed and Pest with the location.



Palmer Ameranth

Centaurea solstitialis L.

Starthistle is an annual growing 2-3 feet tall with winged stems. The basal leaves are deeply lobed, upper leaves are entire and pointed. Flowers are yellow, with dark brown and lighter brown seeds emerging from the ray and disk flowers. This one is native to Europe and is inedible due to the straw colored 3/4 inch thorns on the flower head.

Medusahead Rye

Taeniatherum caput-medusae

This aggressive winter annual can be 6-24 inches tall. The inflorescence is a long-awned spike that is nearly as wide as it is long. It is sometime mistaken for foxtail barley or squirreltail, but its head does not break apart as seeds mature and it is an annual. The seedlings are similar to cheatgrass, but not quite as pubescent. This species is native to Eurasia. It is extremely competitive, crowding out all other species and greatly reducing grazing capacity.



Ventenata

Ventenata dubia

This slender annual is 6-27 inches tall. The inflorescence is an open, pyramidal panicle up to 8 inches long and is tawny to light yellow in color. The awns on the upper florets are 3/8" to 1" long, bent and twisted. Originally from Eurasia, this invasive occurs in croplands and rangelands. It is not grazeable once the panicles emerge.



Laramie County Weed & Pest Newsletters

laramiecountyweedandpest.com/newsletters



If the information that you have learned so far has been helpful, please visit our website and click the Newsletters tab! Newsletters are uploaded every three months and delves into a wide range of land management topics. The articles typically follow which weed species to look out for and practices to employ during the period of release.



- Weed Prevention
- Herbicide Treatment Timing & Tips
- Personal Protective Equipment
- Fire Prevention
- Upcoming Events & Workshops
- Land Management & Grazing
- Weed Identification
- Vectors of Spread
- Herbicide & Equipment Storage/Maintenance

Small Acreage & Pasture/Grazing Management

By Chris Vercelli - Laramie County Conservation District

Introduction

To understand grazing management you first need to understand how grass works. As you are probably well aware, when grass disappears, weeds come in. This is especially true with new development where there are large tracts of disturbed ground. This reduces competition for water and nutrients, which makes it easier for weeds to take over. I wish native grasses grew as well as weeds do in this scenario, but that is just not the case. This is the result of overgrazing, new development, or not giving the grass time to rest or recuperate. You may have heard the old philosophy of take half and leave half. The reasoning behind this philosophy is that once over half of the plant is removed the roots will stop growing for a time. Therefore, the more of the plant that is removed the longer it takes for the plant to start growing again. Once this point is reached it takes significantly longer for the grass to recover to a point where it can outcompete undesirable forage. Seeding in native grasses and forbs ASAP after new development that has disturbed ground is crucial to keeping weed populations from taking over.

Why Grazing Management is Important

By increasing production of the grass on your property you will reduce the amount of supplemental feed required for livestock, reduce erosion, reduce weed problems, and reduce animal health problems. Increasing production of grass also increases the organic matter essential for healthy soil.



Setting Up a Grazing Management Plan

As stated above, rest is the key to a good grazing management plan. The best way to rest an area is to break your pasture into several smaller pastures or paddocks. This will give you the ability to rest areas while still using some of the pasture. Portable electric fences and virtual fence work well to break up a pasture. When setting up your pasture, remember to allow access to water and possibly shelter. The size of your property and the number of animals that are grazing will determine how long you can graze each paddock. Always keep in mind the variability of the changing weather patterns in grazing your paddocks. It is good to use the philosophy of take half and leave half (leaving the forage height around 3 to 4 inches) as well as just letting some paddocks rest for extended periods of time, to help maintain your property into the future.

Mowing Your Acreage

There are numerous small acreage landowners that keep their fields mowed. Mowing can be a useful tool for reducing fire and controlling weeds. However, too much mowing can also have negative impacts to the vegetation and sometimes encourage weeds. Also, there are many species of wildlife native to the prairies that can benefit from tall vegetation areas by creating cover, reducing the exposure to predators as well as provide hiding for their nests and young. There is a variety of song birds and upland game birds that require dense tall vegetated areas for nesting and raising their young. Many of these species will nest in May and have flightless young until the first week of July. Dense cover is also essential for thermal protection from winter's harsh temperatures, snow and wind. Many small mammals such as rabbits also use these areas. Prairie dogs and ground squirrels prefer shorter vegetation areas to survive. These animals rely on being able to see their predators from a long distance to provide time to escape. I know many people move out to an acreage to enjoy the wildlife so think before you mow.

Fire is a definite concern that needs to be considered when you are leaving areas of tall vegetation. It is recommended to create a defensible space around your buildings or landscaping to protect them from wildfire. In grasslands it is recommended to create a 100 foot perimeter around the areas you want to protect. The first 30 feet out away from the area or building you are trying to protect should be mowed down to about 3 inches. The next 70 feet only has to be mowed down to 6 to 8 inches. This will give you a 100 foot defensible space around the areas or buildings to be protected.



Mowing will also have a big impact on the soil. Taller vegetation will protect the soil from the wind and keep it from blowing away. Taller vegetation will catch more snow reducing snow drifting in unwanted areas and providing more moisture for the soil in the spring. Taller vegetation also shades the soil keeping it cooler and retaining moisture longer. More moisture in the soil means the grass will stay greener longer and reduce the stress on the plant. Healthy grasses will be able to compete with weeds more effectively.

Mowing can be a form of weed control if used correctly. Some weeds can be eliminated by mowing the infested area several years in a row at the same time of year, allowing desirable plants a competitive edge. If you mow before the weeds have seed heads this can keep them from going to seed but if mowed with the seed heads you can actually spread the seeds. However, there are some weeds that mowing will encourage regrowth and actually increase your problem. Excessive mowing can also be similar to overgrazing and can encourage weeds. When the good grasses are mowed too low or too many times over the summer, it will deplete the energy reserves in the plants root system and decrease its ability to compete against weeds. If possible, just mow the areas that are infested with the weed.



Even if you do decide to leave some of your property in tall vegetation, it is a good idea to either mow or graze it every third to fourth year to remove some of the old dead material. This is especially important for vegetation that is very thick and tall. Again, mow it after July 1st and leave at least 6 inches if not 8 inches of stubble. You can also separate your property into four parts and mow a part every year, spanning it out over four years. This will allow at least a portion of your property available for wildlife habitat every year.

Some areas in the county will have a majority of shorter grass species which probably means that is what occurs there naturally, this means it requires little to no mowing (i.e. every 5-7 years). Who doesn't have time for less maintenance!

If you decide to mow your property, remember to wait until July to protect nesting prairie birds. If you are mowing for weeds before July, it is a good idea to walk the area that you plan to mow and watch for birds flying up. If you see a bird fly up, check that area to determine if there is a nest or young in the vicinity. Also, remember to leave your mower on the highest setting possible to leave the most stubble to protect the soil from blowing away and drying out.

If you have questions on weeds, mowing, or any vegetation management contact the Laramie County Conservation District at 772-2600.



Black-tailed Prairie Dog

Cynomys ludovicianus

The black-tailed prairie dog is a Wyoming State designated pest. This burrowing rodent can consume up to two pounds of forage per month which reduces forage for livestock and wildlife.

They are also carriers of the sylvatic plague, an infectious disease caused by the same bacterium responsible for bubonic and pneumonic plague in humans. Prairie Dog ‘Towns’ can be very dense and compete greatly with agriculture. The burrowing can be dangerous to horses and disruptive to irrigation systems. Contact Laramie County Weed and Pest about management options.

Don't Kill Me!

by Kathleen King
USDA APHIS PPQ
State Plant Health Director - WY

Lady Bugs

Coccinellidae



- Common Lady(bird) beetles (ladybugs) are mostly predacious species.
- Lady beetles have four life stages: Eggs, Larvae, Pupa, and Adult.
- Eggs hatch after approximately one week, while the larval stage lasts two to three weeks with four instars.
- Pupation lasts until the average weight is between five and thirty milligrams, with best weight above fifteen.



- Adulthood can last from a few months to over one year.
- Most lady beetle species are predatory species eating a primary diet of aphids, scale insects, and plant mites. They are beneficial insects as larva and as adult ladybird beetles.
- Two generations of lady beetles occur yearly; the first hatching in late spring, and the second hatching in late fall with overwintering happening in adulthood.

Lacewing Bugs

Chrysopidae

- Lacewing bugs are commonly found throughout all North America in tree and field crops, landscapes, gardens, and rangelands.
- Lacewings commonly go through four life stages; Eggs, Larvae, Pupa, and Adulthood.
- After hatching larvae progress through three instars, each increasingly larger until they reach pupation. Pupa's can be found on leaf surfaces or on loose tree bark.
- Larvae are commonly referred to as "aphid lions" as their diet consists of aphids and other soft-bodied insects and larvae. These insects are beneficial for natural aphid control.
- Adults live for a few weeks and commonly eat honeydew, nectar, and plant pollen.
- Lacewings can reach adulthood within four to six weeks and produce several generations. In warm climates they can be found year-round without winters, and just in warm temperatures in winter climates.



Grasshoppers



Grasshoppers have the potential to inflict significant harm on Wyoming's rangeland and crops through their voracious feeding habits. A single grasshopper can consume enough forage to equal its own weight on a daily basis. As grasshopper densities increase, the result is consequential yield loss. Grasshopper outbreaks typically occur in warm and dry seasons because these conditions support their survival over their natural predators, pathogens, and parasites. During these outbreaks, adult grasshopper densities can reach near 30 or higher per square yard, far surpassing the sustainable levels for most areas of the state.

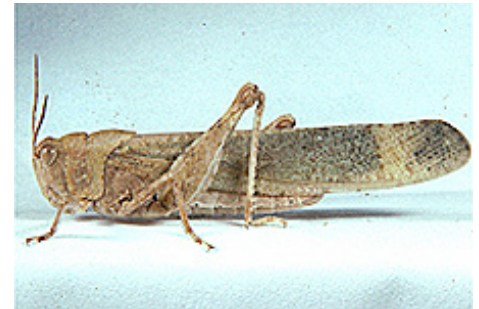
- Appearance
 - Large ground-dwelling insect with powerful hind legs that allow for jumping. Typically green, brown, grey, or black in color. Have chewing mouth-parts, two pairs of wings, and large eyes.
- Life Cycle
 - Typically experience one generation per year.
 - After reproduction occurs in the summer, females deposit eggs 1-2" into the ground for incubation. Nymphs will hatch in the spring.
 - Eggs are shaped like elongated ovals, color and amount can be variable depending on species. The eggs are also very freeze-tolerant, snowpack can actually act as further insulation during the winter.
- Common Species



Two-Striped Grasshopper
(*Melanoplus bivittatus*)
Generally green/tan with two pale yellow stripes.
Common crop and ornamental pest.



Green-Striped Grasshopper
(*Chortophaga viridifasciata*)
Green/yellow with a dark tan dorsal stripe.
Commonly found in high moisture areas of mixed grass habitats.



Carolina Grasshopper
(*Dissosteira carolina*)
Large, tan, and band-winged species. Typically found in Western grasslands.

Density Parameters

- Measured by # of Grasshoppers/Square Yard
 - Normal: 1-2
 - Outbreak Potential: 3-7
 - Outbreak: 8+

Your Local Resource Spotlight

Institute for Managing Annual Grasses
Invading Natural Ecosystems
(IMAGINE)

IMAGINE

IMAGINE uses coproduced science, outreach, and education programs to develop, implement, evaluate, and adjust statewide and regional strategies for mitigating impacts of invasive annual grasses in rangelands while empowering informed decision making by landowners and managers.



Visit invasivegrasses.com for online workshops, monitoring resources, and more information on invasive annual grass control!

Discussing Cheatgrass Impacts

A Q&A with Ian Tator-**Wyoming Game & Fish**
and Shelby Stith-**Laramie County Weed & Pest**

Shelby: “How much of Wyoming is affected by cheatgrass?”

Ian: “Wyoming covers about 62 million acres, and cheatgrass is now found on more than 15 million of those acres—roughly one out of every four acres in the state. Even more concerning, about 6 million acres have enough cheatgrass to significantly change how the land functions. In these areas, it affects wildlife habitat, reduces forage for livestock, and complicates land management.

Here in Laramie County, which spans about 1.7 million acres, we’ve seen cheatgrass steadily increase over time. Our soils, elevation, and precipitation patterns make this area especially vulnerable if we don’t stay proactive.”



Shelby: “This sounds costly—how much are we spending?”

Ian: “Managing cheatgrass is a major investment. The Wyoming Game and Fish Department and partners spend millions of dollars each year to address it, largely to benefit wildlife habitat. On average, treatments cost about \$75 per acre.

One of the most important ways we make this work is through partnerships. By working with Weed and Pest Districts, Conservation Districts, private landowners, nonprofit organizations, and federal agencies, we’re able to stretch those dollars further and make a meaningful impact across larger areas.”

Shelby: “Are these efforts actually working?”

Ian: “Yes—especially when we act early and stay committed. There’s no quick fix for cheatgrass, but we are seeing real progress in many areas. The most effective strategy combines prevention with follow-up treatments that allow native plants to recover. When conditions are right and we stay consistent, we can slow the spread of cheatgrass and improve habitats over time. There are several examples across the state where sustained efforts have led to noticeable improvements.”



Shelby: “Why do dry winters and fires make cheatgrass worse?”

Ian: “It’s a common misconception that fire helps control cheatgrass. While fire may temporarily remove it, it often makes the problem worse in the long run.

Cheatgrass seeds are small and usually survive fires. After a burn, they germinate quickly and take advantage of the lack of competition from native plants. Because cheatgrass grows faster than native vegetation, it fills in rapidly—setting the stage for more frequent fires. This creates a cycle that becomes increasingly difficult to break, especially during dry years.”

Shelby: “How does cheatgrass affect mule deer?”

Ian: “Cheatgrass reduces the quality of habitat that mule deer depend on. It replaces the diverse mix of native plants—especially shrubs like sagebrush—that deer rely on, particularly in the winter. It also increases wildfire risk, which can remove critical habitat for decades. Research shows that mule deer tend to avoid areas where cheatgrass becomes dense—generally when it exceeds about 20% of the plant cover. Over time, this can impact population levels.”



Shelby: “How important is prevention?”

Ian: “Prevention is one of the most important—and cost-effective—tools we have. It’s far easier and less expensive to protect healthy landscapes than to restore them after they’ve been heavily invaded.

Moving forward, a big part of our effort is focused on keeping intact habitats healthy and preventing the spread of cheatgrass and other invasive species.”

Shelby: “What is Game and Fish doing about it?”

Ian: “Our approach focuses on three key areas:

- Prevention: Helping people understand how cheatgrass spreads and how to avoid unintentionally moving seeds.
- Early detection: Finding and treating new infestations before they become widespread.
- Targeted treatment: Working with partners to apply herbicide treatments where they will have the greatest benefit.

Because we can’t treat every acre, we prioritize areas where we can make the biggest difference for wildlife and habitat.”

To learn more, you can explore the Department’s habitat plans, including the Invasive Annual Grass Implementation Plan on the Wyoming Game and Fish Department website.

GOT WEEDS OR PESTS? TRYING TO PREVENT THEM? CALL US!!

- ▶ Treatment Recommendations
 - ▶ Infestation Assessments
 - ▶ Cost-Shared Herbicide for Purchase
 - ▶ Educational Resources Available
- ▶ **Regular Cost Share Program** - Listed Weed & Pest Species
- ▶ **Special Management** - Additional Cost Share for High Priority Species (Leafy Spurge, Dalmatian Toadflax, Diffuse/Spotted/Russian Knapweed)



Laramie County Weed & Pest
Control District

Archer

307-634-5348

13887 Bullseye Blvd, Cheyenne, WY

Pine Bluffs

307-245-3213

801 Muddy Creek Dr, Pine Bluffs, WY

Laramie County Extension Office
1400 East College Drive
Pathfinder 406
Cheyenne, WY 82007

OR CURRENT RESIDENT



UNIVERSITY
OF WYOMING

Extension
Laramie County

Laramie County
Extension Office

1400 East College Drive
Pathfinder 406
Cheyenne, WY 82007
307-633-4383
LaramieCountyExtension@uwyo.edu

Laramie County
Weed and Pest

Headquarters
801 Muddy Creek Drive
Pine Bluffs, WY 82082
307-245-3213
larcoweed@rtconnect.net

Archer Office
13887 Bullseye Blvd.
Cheyenne, WY 82009
307-634-5348