

Parks & Public Landscaping Advisory Board

Agenda

**May 7, 2025
Library Meeting Room
951 Spruce Street
6:30 PM**

Members of the public are welcome to attend and give comments remotely; however, the in-person meeting may continue even if technology issues prevent remote participation.

- You can call in to **+1 408 638 0968 or 833 548 0282 (Toll Free)**, Webinar ID # 885 1622 9475
- You can log in via your computer. Please visit the City's website here to link to the meeting: www.louisvilleco.gov/pplab

The Board will accommodate public comments during the meeting. Anyone may also email comments to the Board prior to the meeting at AMcneal@LouisvilleCO.gov.

- I. Call to Order
- II. Roll Call
- III. Approval of Agenda
- IV. Approval of Minutes
- V. Public Comments on Items Not on the Agenda
- VI. Cornerstone Community Landscape Bed Renovations at Eldorado Lane
 - Review design and planting list
- VII. Review of Louisville Municipal Code Ordinance 08.08.010
 - Monarch Butterflies and Milkweed submittal- review

Persons planning to attend the meeting who need sign language interpretation, translation services, assisted listening systems, Braille, taped material, or special transportation, should contact the City Clerk's Office at 303.335-4536 or 303.335.4574 or clerksoffice@LouisvilleCO.gov. A forty-eight-hour notice is requested.

Si requiere una copia en español de esta publicación o necesita un intérprete durante la reunión, por favor llame a la Ciudad al 303.335.4536 o 303.335.4574 or email Clerksoffice@louisvilleco.gov

- Vote on memo statement

VIII. Pesticide Usage- discussion

IX. Board Report

X. Staff Report

- Follow up items:

i. Updated Planting List: [2025 Perennial-Shrub list.xls](#)

ii. Arboretum – 2026 Capital Improvement Project

XI. Discussion Items for Next Meeting

XII. Adjourn

Parks and Public Landscaping Advisory Board Meeting Minutes

Wednesday, April 2, 2025, 6:30pm

City Hall Spruce Room

749 Main St.

1. Call to Order**2. Roll Call**

Ash, Jody, Chair

Buck, Signe Maria (remote)

Denat, Julien, Co-Chair (remote)

Kelsey, Kathy, Co-Secretary

Kutscher, Gene

Webb, John, Secretary

McNeal, Abby, Parks Superintendent

Langley, Diana, City Manager

3. Approval of Agenda

Moved and approved

4. Approval of Minutes

Moved and approved

5. Public Comments on Items Not on the Agenda

Beth Armbruster; comments regarding a native plant garden at the Arboretum:

- Important to establish native species at the Arboretum to increase diversity, appeal, interest and educational values. Specifically, return native species to rather than turf grass that depletes resources - favoring blue gramma, buffalo grass.
- Could be included as a native plant demonstration garden
- A suggested location would be on the east side of the pavilion; remove grass near the flagstone walkway. The Flagstone walkway there is a good location for viewing Arboretum and creating a more attractive view to the east compared to the rainwater retention area.
- This location is visible to visitors.
- Proposed species include blue stem, rabbit brush, cone flower, wild rose, native shrubs, etc.
- Also, the west perimeter adjacent to police station could be planted with natives that blend with foothills backdrop looking west, prairie sage, golden rod, yucca, prairie grasses.

Jean Morgan, Louisville resident and homeowner living near Miner's field on Spruce Street, maintains a native garden that supports butterflies and bees, all are welcome!

- Would also love to see the area east of the pavilion developed with a native plant garden. Now there are only trees, a new native plant garden would improve habitat for birds and insects. Xeric plants would not require much water.
- For this large project, there are many information resources available.
- She offered to help with suggested plants.

Anne Brennan, 30 year resident of the Cornerstone neighborhood in Louisville; SE corner of Via Appia and McCaslin.

- This neighborhood was destroyed during Marshall fire. It has been mostly rebuilt; ~2/3 of homes have been rebuilt. including with fire-resistant materials and landscaping.
- Neighborhood is looking forward to the city re-landscaping the undeveloped areas surrounding the neighborhood.
- Ann requests that the City consider fire-resistant and Fire-wise landscaping.
- Ann notes there is a difference between native, water-wise, pollinator friendly and 'fire resistant' vegetation. She stressed the importance of prioritizing 'fire resistant' vegetation.
- The Cornerstone neighborhood is officially a 'fire-wise neighborhood', recognized by Firewise USA in response to their written plan.

6. Comprehensive Plan – memo vote

- PPLAB must vote on memo to Council from last PPLAB meeting regarding City Comp Plan. Abby provided a copy of the PPLAB memo regarding the Comprehensive plan. Kathy read memo for review (see Packet).
- PPLAB moved and moved to approve the memo and pass on to city staff.

7. Removal of Milkweed from weed list discussion

- PPLAB previously requested that the Parks Dept and City Council to remove milkweed from City weed list originated from the city's required removal of milkweed from a community member's property. Sec code 8.8.10.
- PPLAB has prepared a memo regarding the importance of milkweed for monarch butterfly and insect population diversity. This memo was inadvertently excluded from meeting packet for discussion. PPLAB member Webb gave a brief presentation on the importance of milkweed for floral and biodiversity

- Parks Staff responded in a prior email and in person at this PPLAB meeting that milkweed has been a problem for flower bed management due to its persistence and spreading by underground roots, particularly Showy Milkweed. Staff brought Parks memo to Acting City Mgr. Fox, requesting the City leave showy milkweed on the weed list due to issues maintaining some of the gardens where it has established. Staff agrees the other varieties are OK as they adheres to weed ordinance for Parks and public landscaping. When plants exceed weed height ordinance causes a problem. Golf course has planted milkweed for Audubon certification. However Showy Milkweed is not the right plant in City gardens due to invasive issues.
- PPLAB Chair requests that PPLAB be able to review the ordinance at the next meeting. Abby will also provide initial Code enforcement action that prompted this issue. Look at ordinance and document supporting Showy milkweed for next meeting.

8. Budget consideration for 2026

Abby presenting approved (2025-2026) capital improvement budget: *Note: all budget material was included to new board members in January, and continuing members from last year.*

The Capital Improvements budget includes:

- Memory Square Park playground equipment replacement summer 2025. Park signs, Cemetery fund, parks technology, athletic field maintenance from recreation fund.
- Replacement plan is based on the age of the playground and other issues.
- Streetscapes – continue to improve old trees and landscapes (some landscape improvement funds are in other parts of the budget as well).
- Looking to replace equipment with alternative fuels source equipment.
- Cemetery – ask for the long range plan to have a good program for management, at capacity in 10-15 years, looking for way to free up more land.
- Restroom improvements, requested in 2026.
- Infield renovations – Miners, Heritage, Cleo-Mudrock.
- Technology improvements – tablets, soil moisture sensors, weather station.
- Horticulture
- Fleet tracking components on all equipment which would provide asset management and tracking (trucks, trailers, mowers).
- Concrete replacement funding at Sports Complex – includes ramps to access dugouts, and concreting plaza space.

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- No line item for replacements for the playgrounds, can be up to more than \$3000. Parks can extend playground replacement by only replacing specific playground features at one time.
- Irrigation – replacing irrigation controls, back flow cages, pumps.
- Median Renovations – this will be coming back to PPLAB 2026.
- Park Furnishing replacements.
- Court resurfacing – in budget for 2026.
- Centennial Tennis court project – money to add a court in 2026.
- Drainage and in field replacements (Garfield and Griffith) – occasionally field is flooded and un-usable.
- Miners field – backstop extension, in conjunction with Highway 42 work.
- Replacement for fleet vehicles.
- Line item for new equipment.
- Renovations of Arboretum - \$50,000 in 2026. First there will be talks 'at leadership' and then ask PPLAB for feedback.
- Landscaping improvements – areas with deferred maintenance (i.e. Juniper removals along Hoover).
- Surfacing material – in capital (no line item), crusher fine trails, playground safety surfaces.
- Feasibility study to potentially redesign ball fields at Cleo Mudrock.

9. Board Report

- Gene and Julian attend a sub-committee meeting between PPLAB and Recreation. The subcommittee is interested in how to get Lafayette to fulfil the tri-part agreement (Intergovernmental Agreement).
- Bee City helped write a proposal for a pollinator garden at Louisville Elementary but was not funded. Josh Cooperman will work with PTO and staff at LES. Plants will be focus on pollinators. The pollinator art contest will start in May; entries will be displayed at the library. Promotion is underway via school and city channels. City will provide Sweet Cow gift cards to all entries. Aiming for a booth at Superior 'Earth Day' celebration. Organizing a 'Garden Tour' June 29 Louisville; wildflower walk at Davidson Mesa on Sunday, June 29.

A note that on April 19 there is a tree planting event at the Louisville Arboretum.

10. Staff Report

- **Transformation Landscape Grant award**
- **Arboretum improvements**; replaced 14 trees.

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- i. Turf will be taken out at the Arboretum (turf grass to the west of the Arboretum) 1600-2500 square feet of turf grass replaced with Resource Central “Garden in a Box.” On the east side the irrigated blue grass locations will be replaced with Bermuda grass (low water) from Mile High Food District. Demonstrations space for a low water, heat tolerant grass.
- **Arbor Day April 18, 2025**; will be planting 12 new trees.
 - i. Girl Scouts will be doing a clean-up of Arboretum
- If we collect 1000 pieces of #2 plastic by April 15, Louisville will win a free bench – collecting at the branch site this Saturday.
- Sunflower and Enclave Park Projects updates – open by mid to late May. There will be an opening ceremony for both. Playground equipment arriving in mid-April. Pouring concrete in both locations.

11. Discussion Items for Next Meeting

- Arboretum native garden suggestions
- Milkweed status on noxious weed list
- Quasi-judicial design review; there is a design review plan that will be reviewed by PPLAB in May.
- Pesticide conversation – May or June. John underscores importance of protecting pollinators, including from pesticides.
- Augment plant lists on city website – add ‘host’ plants for butterflies, add more to other categories so that people have more choices – perhaps revisit in June.

12. Adjourn

Motion to adjourn, passed, meeting adjourned 7:54PM

Plant list for Cornerstone

Plant selections for landscaped designs

<i>Scientific Name</i>	<i>Common Name</i>	<i>Height</i>	<i>Width</i>	<i>Water</i>	<i>Exposure</i>	<i>Color</i>	<i>Bloom time</i>	<i>Fire rating</i>	<i>Native</i>
Syringa meyeri	Korean Dwarf Lilac	7'	4'	medium to high	sun	purple	May	1	N
Rhus typhina	Staghorn Sumac	15-25'	20'	low to medium	sun/part shade	red	June-July	1	N
Amelanchier x grandiflora	Autumn Brilliance Serviceberry	15-25'	4-8'	very low- medium	sun	pinkish	May-July	1	Y
Diervilla	Bush Honeysuckle' Kodiak'	3-4'	3-4'	low	sun/part shade	orange	June-July	2	N
Diervilla	Bush Honeysuckle' Kodiak'	3-4'	3-4'	low	sun/part shade	yellow	June-July	2	N
Yucca	Golden Sword Yucca	3-4'	4-6'	low	sun	white	July-Aug	3	Y

Alternative plant options

Chaenomeles speciosa	Flowering Quince	6'	6-10'	medium	sun	scarlet to red	Mar-April	2	N
Cotoneaster apiculata	Cranberry Cotoneaster	2-3'	3-6'	medium	sun	pink	May-June	2	N
Philadelphus lewisii	Cheyenne Mock Orange	2-3'	2-3'	medium	sun	yellow	April	1	Y
Symphoricarpos albus	Snowberry	2-3'	2-3'	medium	sun/part shade	white/pink	May-July	1	Y
Centranthus ruber	Jupiter's Beard	1.5-3'	1-2'	medium	sun/part shade	pale to crimson red	May-Aug	1	N

Firewise rating:

1 = Firewise

2 = Moderately firewise

3 = At Risk firewise

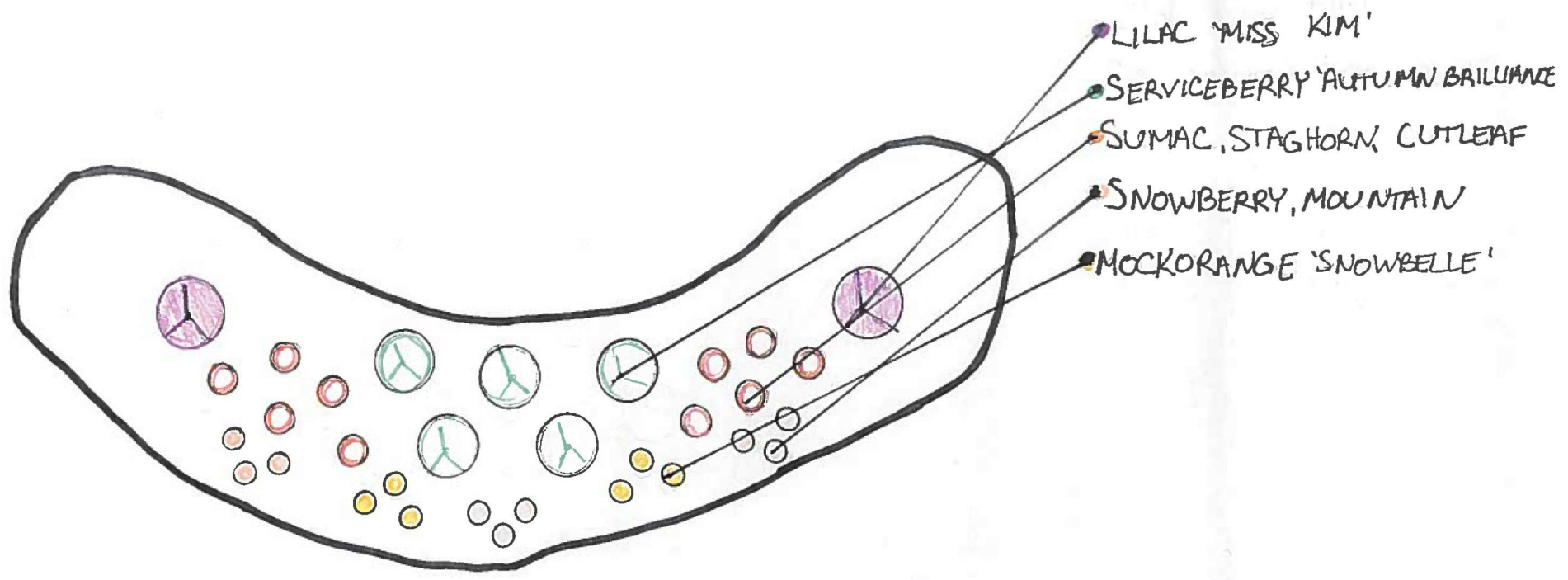
4 = Not firewise

Firewise rating sourced from:

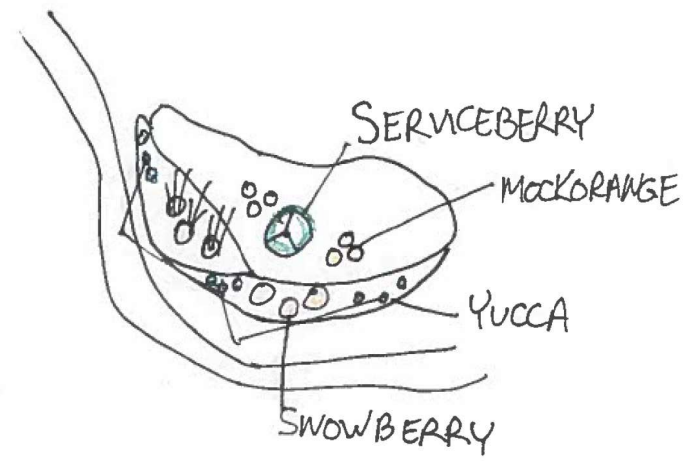
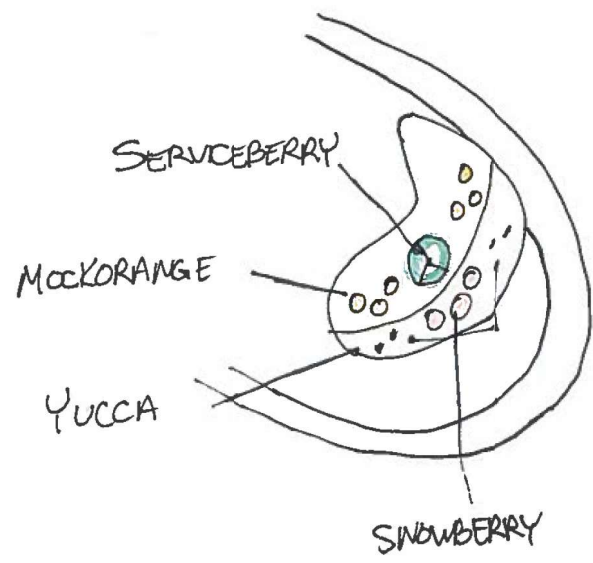
[Welcome to the Fire Performance Plant Selector — Fire Performance Plant Selector](https://fire.sref.info/selector/)

<https://fire.sref.info/selector/start>

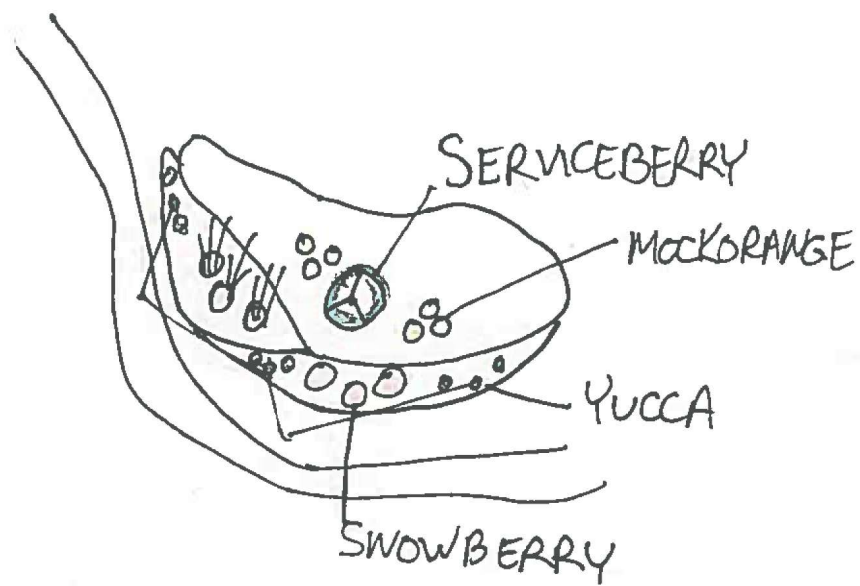
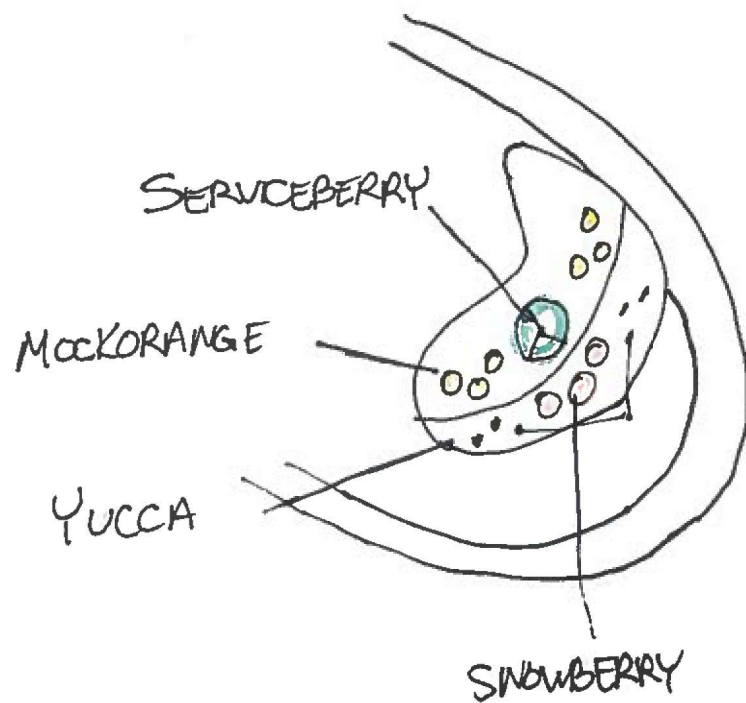
CORNERSTONE - lower tier.



EIDORADO LANE
2025



EIDORADO LANE 2025



Korean Dwarf Lilac



Staghorn Sumac



Staghorn Sumac

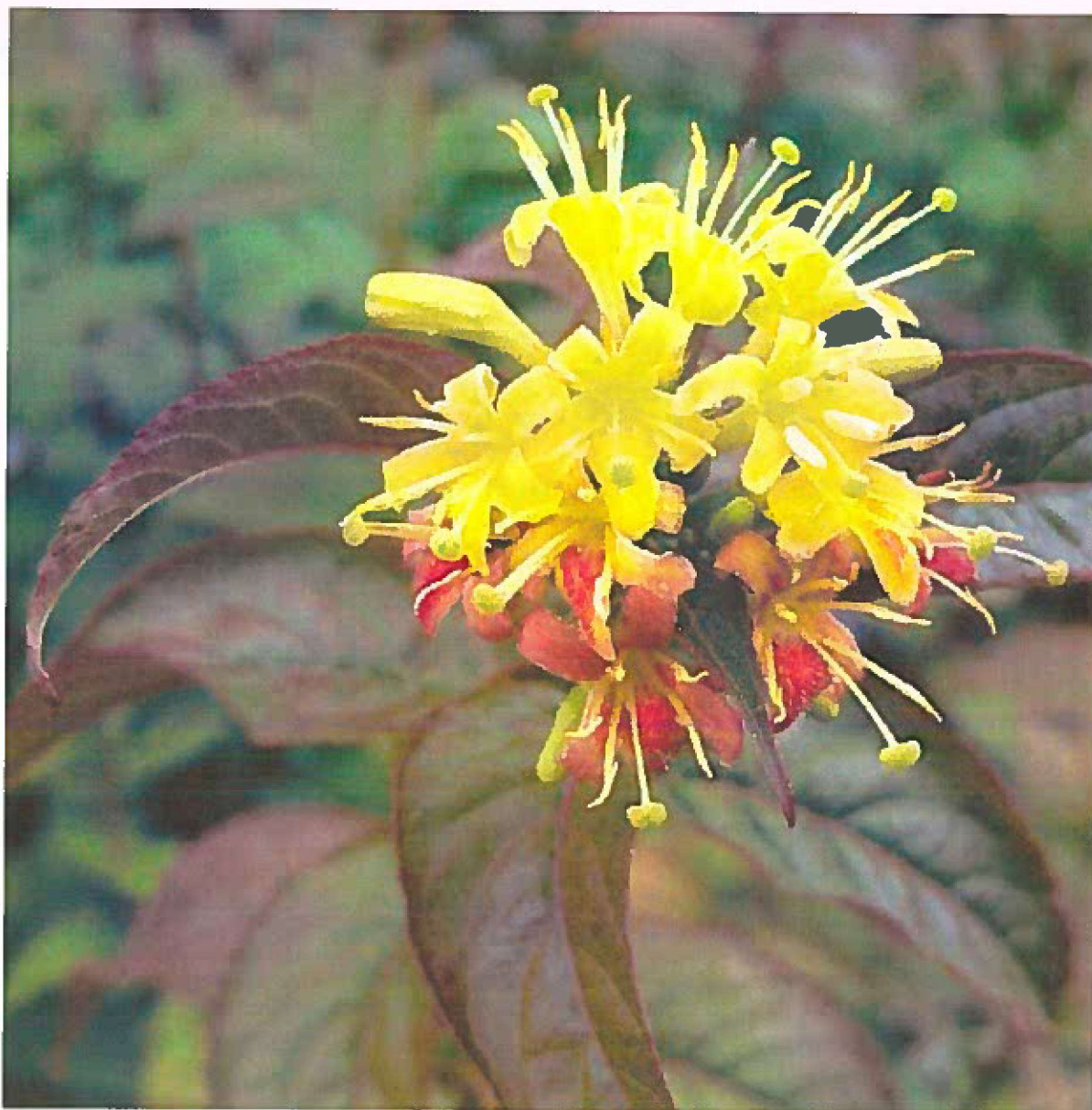


Serviceberry Shrub

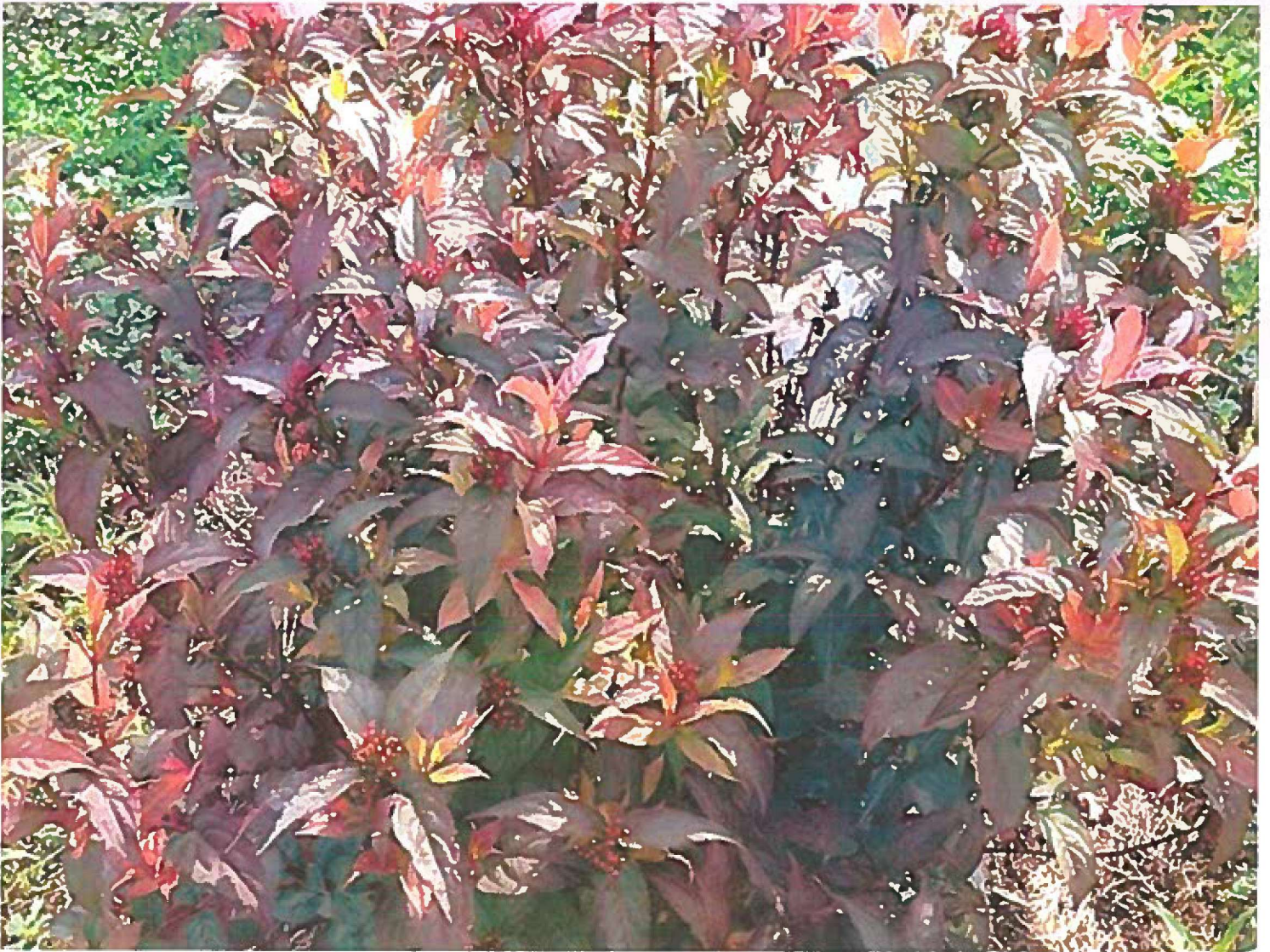




Bush HoneySuckle
'Orange'

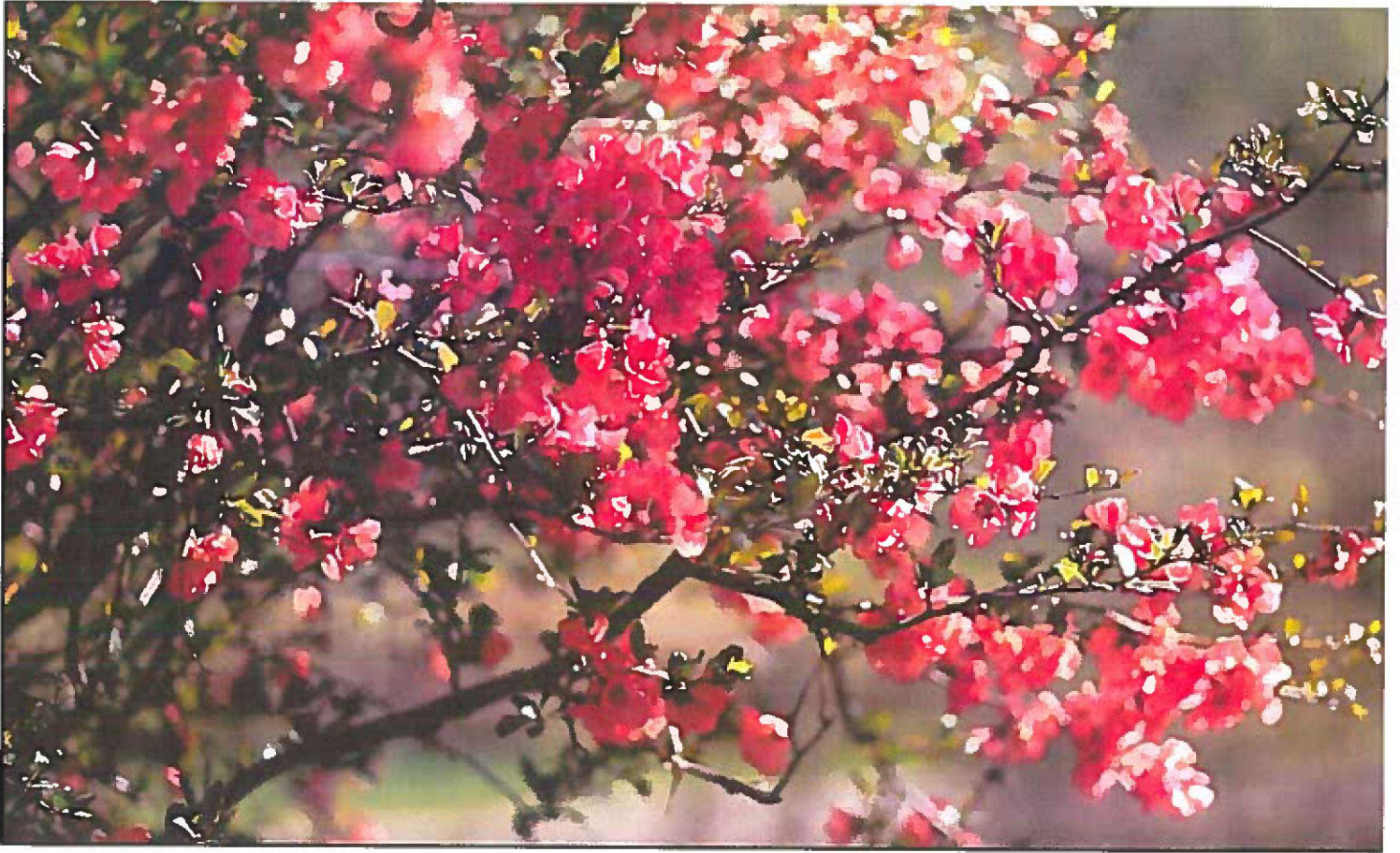


Bush Honeysuckle
'Black'



Bush Honeysuckle
'Black'

Flowering Quince



Flowering Quince



Cranberry Cotoneaster



Home
Nursery

Cranberry Cotoneaster



Cheyenne Mock Orange

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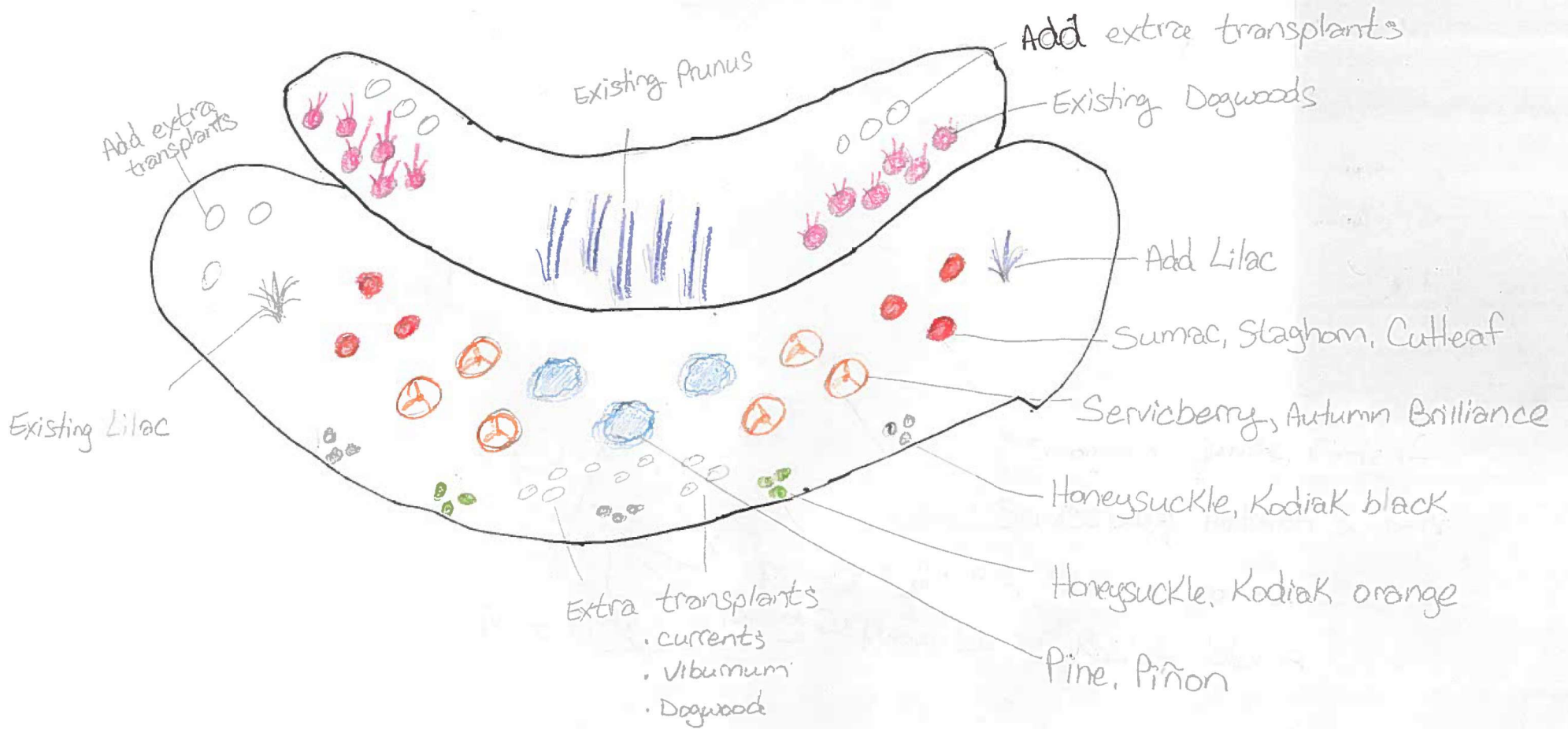
Snowberry



Jupiter's Beard



CORNERSTONE



Footnotes:

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State Law reference— Authority to abate, C.R.S. § 31-15-401(1)(d).

Sec. 8.08.010. - Definitions.

For the purposes of this chapter, the following definitions shall apply:

Chemical management means the use of herbicides or plant growth regulators to disrupt the growth of weeds.

Director means the director of planning of the city, his successor in office, or designee.

Mechanical control means those methodologies or management practices that physically disrupt plant growth, including but not limited to tilling, mowing, burning, mulching, hand pulling, and hoeing.

Owner, agent or occupant means and shall be construed to include tenants as well as landowners and shall include and be applicable to the city and all subdivisions and agencies thereof.

Plant growth regulators means a substance used for controlling or modifying plant growth processes by retarding the rate of growth or rate of maturation or otherwise altering the behavior of plant growth; except that it shall not include substances to the extent that they are intended as plant nutrients, nutritional chemicals, plant inoculant, and soil amendments.

Property means any real property located within the city limits.

Weeds means and includes, but is not limited to, Canada thistle, common ragweed, fireweed, milkweed, perennial sowthistle, Russian knapweed, Russian thistle, sandburs, woollyleaf, povertyweed, curly dock, Johnsongrass, leafy spurge, dalmatian toadflax, yellow toadflax and any other type of noxious weeds specified by the U.S. Department of Agriculture; but not to include flower gardens, vegetable gardens, plots of shrubbery, grain plots, pastures used for feed, pastures used for wildlife, fodder, forage or crops grown for consumption or commercial purposes.

(Code 1977, § 8.08.010; Ord. No. 857-1985, § 2; Ord. No. 1149-1994, § 1)

Sec. 8.08.020. - Control of weeds required.

- A. It is unlawful for the owner of any property, except property zoned agricultural or property developed for residential use, to permit weeds to grow to a height in excess of 12 inches. It is unlawful for the owner of property developed for residential use to permit weeds to grow to a height in excess of six inches. It shall be the duty of the owner, agent, or occupant of any property

to control the growth of weeds on such property as required by this section, on alleys abutting the property to the middle of the alley, and on sidewalk areas abutting the property, including all parking areas.

- B. It is unlawful for the owner of any property zoned agricultural to permit weeds to grow to a height in excess of 12 inches if such property is located within a distance of 100 feet from:
 - 1. Any dedicated street;
 - 2. Any property which is not zoned agricultural; or
 - 3. Any property which is zoned agricultural but is not used solely for agricultural or commercial crop purposes, solely for animal production purposes, or solely as a horse stable. In such event, it shall be the duty of the owner, agent, and occupant of such property to control the growth of the weeds as required under this section a distance of 100 feet from the adjacent property line or dedicated street.
- C. Any wildlife preserve, wildlife area, or open space designated by the city shall be exempt from the requirements of this section.

(Code 1977, § 8.08.020; Ord. No. 857-1985, § 2; Ord. No. 1149-1994, § 1; Ord. No. 1160-1994, § 1)

Sec. 8.08.025. - Control of weeds on agricultural property.

- A. In agricultural zones, on real property actively used for agricultural purposes, the control and abatement of the growth of weeds may be accomplished by the use of chemical management or mechanical control, except that control by burning on such property shall only be permitted for irrigation ditches or irrigation ditch rights-of-way.
- B. The use of chemical management shall be accomplished in accordance with applicable state and federal law.
- C. Written notice of irrigation ditch or ditch right-of-way burning permitted by subsection A of this section shall be given to the city and to the fire protection district in which the property is located at least seven days prior to the proposed burning. Such notice shall include the date, time and place of the proposed burning.
- D. Nothing in this section shall be construed to authorize the maintenance of any nuisance or of any violation of any state or federal law or regulation.

(Code 1977, § 8.08.025; Ord. No. 1149-1994, § 3)

Sec. 8.08.030. - Owner liable for cost of cutting weeds by city.

If weeds exist on any property to heights greater than permitted by this chapter, the director, no less than ten days after notice by mail to the last known address of the owner, agent, or occupant of the property, may order the cutting and removal of the weeds by the city. The city shall assess the costs therefor, plus an additional amount to cover administrative costs, against the lots or tracts of land from

which the weeds are removed. The amount of the additional charge to cover administrative costs shall be as established by resolution of the city council. In the event that such owner, agent or occupant cannot be contacted under this section, his address is unknown or a mailed notice is returned undelivered, the director may post such property with a notice giving such property owner, agent or occupant five days to cut the weeds.

(Code 1977, § 8.08.030; Ord. No. 857-1985, § 2; Ord. No. 1160-1994, § 2; Ord. No. 1594-2011, § 18, 6-7-2011)

Sec. 8.08.040. - Lien to be assessed when owner fails to pay.

In the event an owner, agent, or occupant, within 30 days after billing for weed cutting by the city, as provided for in section 8.08.030, fails to pay the costs and expenses of such weed cutting, a lien shall be assessed by the city clerk against the property for such costs and expenses. The city clerk shall certify such assessment to the treasurer of the county, who shall extend the assessment upon the tax roll and collect the assessment in the same manner as other taxes upon such property.

(Code 1962, § 28.11(d); Code 1977, § 8.08.040; Ord. No. 519-1977, § 4)

Sec. 8.08.050. - Penalty.

Violation of any provision of this chapter is civil for which imprisonment is not a possible penalty and for which the sole penalty provided shall be a fine. Any person who shall violate any of the provisions of this chapter against whom judgment is entered shall be subject to a fine of not more than \$500.00 and shall not be subject to imprisonment on account of such judgment. For any violation of any provision of this chapter, the court may enter a judgment of liability by default against the defendant for failure to appear or to pay, and may assess such penalty, together with such court costs and surcharges, as are established by law.

(Ord. No. 1236-1996, § 2, 11-19-1996)

Monarch and Milkweed Information:

We know that the migratory Monarch butterflies are a threatened species,* due to habitat fragmentation (development and modern agricultural practices) and destruction of their only larval food source by agricultural practices, herbicide use and the effects of climate change (increased severity of drought, tropical storms, cold breakouts of arctic cold snaps, illegal logging and bark beetle infestations of the fir trees that serve as roosting areas in their winter habitat in Mexico. But the loss of the Monarch's only larval host plant, milkweed, affects many other species of insects that deserve protection as well. Milkweeds are an integral part of the native wildflower and Prairie ecosystem and are habitat for many other insects including Milkweed bugs and Milkweed beetles. Milkweed blooms are a source of nectar for a large number of pollinators including butterflies, native and managed honeybees, hovering (Syrphid) flies and moths, and provide shelter and shade for other creatures in our increasingly hot and dry environment. Lady bugs and other predatory insects live and hunt in milkweed patches.

There are 72, to as many as 100 species by some estimates of milkweed that are native to North America. Of these, Monarchs use about 30 species as host plants for their caterpillars. Ten to as many as 19 milkweed species are native to Colorado. Indigenous people in the SW used the stem fibers for textiles before the arrival of Europeans, and their descendants still use the stem fibers for string and rope making, and the silky seed fibers for weaving. Ancient Pueblo people ate the green pods and uncooked roots of one of the species that forms fleshy tubers underground (Stevens, 2000, USDA/NRCS Plant Guide, Showy Milkweed). Indigenous people of California used large quantities of milkweed fiber in construction of nets, regalia, and cordage. Shoots, green stems, flower buds and leaves of Showy milkweed were eaten boiled and as greens. The milky white sap was also heated and mixed with salmon or deer fat to make chewing gum. The sap, seeds and roots were used for various medicinal purposes. In the past (and present in some locales!), milkweed was classified as a noxious weed due to reported toxic effects on livestock and are reported to be poisonous to cows and sheep.

According to the Xerces Society for Invertebrate Conservation, the more common milkweed species in Colorado include:

Showy milkweed (*Asclepias speciosa*, common throughout Colorado, as the common name indicates, the blooms are exotic, fragrant, multi-flowered clusters of pink star-shaped blooms, which are attractive to moths, butterflies and other insects, CSU Extension and USDA Plant of the year.),

Swamp milkweed (*Asclepias incarnata*, tolerates a wide range of soil types, 2017 Plant of the Year, Xerces Society for Invertebrate conservation),

Spider milkweed (*Asclepias asperula* ssp. *asperula*, common in SE Colorado and on the Western Slope),

Plains milkweed (*Asclepias pumila*, NE and SE Colorado), Horsetail milkweed (*Asclepias subverticillata*, upright, branching, with whorled, narrow to linear leaves, more common in wetland and disturbed areas of SE, SW, NC Colorado).

Plus, another five species that are less common or restricted in occurrence:

Hall's milkweed (*Asclepias halli*, SC WC, and Central Colorado)

Narrow Leaf milkweed (*Asclepias syriaca*, commonly found in plains, valleys, roadsides and disturbed areas in the west).

Broadleaf milkweed (*Asclepias latifolia*, SE and extreme far EC Colorado)

Butterfly milkweed (*Asclepias tuberosa*, orange or yellow flowered milkweed, sparsely present in SE, WC, extreme NE and central Colorado (Boulder County ?) that is welcome in many gardens and is less aggressive than Showy milkweed)

Green comet milkweed (*Asclepias viridiflora*, eastern Colorado), and *Asclepias arenaria*, *A. cryptoceras*, *A. engemanniana*, *A. involucrata*, *A. latifolia*, *A. macrotis*, *A. oeneotheroides*, *A. rysbyi*, and *A. unicalis*.

Other sources have reported these species in Colorado:

Common milkweed (*Asclepias syriaca*, a tall perennial plant with pink or purple flowers, more typical in the Great Plains east of Colorado), and

Whorled milkweed (*Asclepias verticillata*, a very toxic variety).

Importance of Milkweed to Monarch Butterflies

Monarchs migrate northward from their winter home in the Fir forests of mountainous tropical Mexico along broad flight paths through North America's heartland. Along the way, they breed and produce successive generations by laying their eggs on milkweed that grows along roadsides, in abandoned pastureland and agricultural fields where milkweed, their singular host plants are still growing. This epic migration is described in the book "Bicycling with Butterflies," by Sarah Dykman. Successive generations carry on their northward travels, reaching as far north as the southern parts of Canada, which are the northern limits of milkweed occurrence. In late Summer and early Fall, the fourth or fifth generation of Monarchs turns southward. Instead of laying eggs and raising new generations as they go, they strike out for their winter range, a distance of 2,500 to as much as 3,000 miles. None of these southward migrating Monarchs have ever been to their Winter roosting habitat, but scientists think they use the angle of the sun, earth's magnetic field to navigate, and instinctively follow favorable weather and topography to make their epic journey. Much of this process is still a mystery! They can travel as much as 100 miles in a day, soaring as high as 800 to 1,200 ft in the air, coasting and soaring on air currents to save energy for their long flight. Much of what we know of Monarch migration is the result of years of Citizen Science programs, where concerned community members from school children to retired adults have banded together to collect information about Monarch populations, domestic and international travel routes, over-wintering sites, and nectar plant distribution (e.g. Monarch Watch and Monarch Join Venture). What we do know for sure is that the Monarchs need connected habitat with abundant host plants and nectar sources to fuel their arduous journey in both directions.

In Colorado, although we are on the western edge of the Spring migration route, we see monarchs breeding and laying eggs on milkweed plants in the Spring and Summer as they make their way northward. We know this from data collected by community scientists participating in

the national Monarch Larva Monitoring Project (MLMP). We also see monarchs in Colorado on their Fall journey, as the fourth or fifth generation makes their way back to Mexico, gathering in temporary roosts and nectaring on fall flowers (e.g. rabbitbrush) along the way. Adult Monarchs and their caterpillars are at risk from pesticides and herbicides in the suburban and agricultural landscape.** As good hosts, we need to be sure that their travels through Colorado have healthy and pesticide-free host plants and floral nectar sources to help them along their way and ensure the successful growth of their larvae.

The U.S. Fish and Wildlife Service in the publication "Spreading Milkweed, not Myths" wrote:

"Milkweed is a beneficial wildflower. It may have "weed" in its name, but there are over 100 species of milkweed native to the United States and none of them are considered "noxious weeds."

Milkweed is not a problem within the City of Louisville. We are not being overrun by Milkweed (unlike Dandelions in irrigated turf areas, Canadian thistle in yards or open space, or our suburban rabbits!). Milkweed is only locally present in our open space, neighboring agricultural areas, roadsides, or suburban landscapes. The scarcity of suitable habitat alone reduces the abundance of milkweed in our local environment. While the locally adapted Showy Milkweed *can* become overwhelming in the well-watered garden or suburban landscape, new Milkweed plants in undesired locations are easily removed by pulling or shallow digging. Established plants will take a little more digging but are also unlikely to return. Showy Milkweed and Common Milkweed are two Colorado native species that were selected as the August Xeric Plant for August 2020, CSU Broomfield Extension post. The ecologic community of milkweed includes numerous pollinators, beneficial insects, and other creatures that run the gamut from beautiful to bizarre, interesting to entertaining, and most of all, are deserving of preservation regardless of their "utility."

Taking Action:

Plant, foster and maintain native milkweed species in local gardens, open space, road and utility right of ways.

Encourage Louisville residents to participate in volunteer community science monitoring programs like MLMP, either in their own gardens or in milkweed patches in city open space or county roadsides. Permission from City or County Open Space may be necessary for monitoring efforts on Open Space property.

Remove Milkweed species from municipal "noxious weed" and undesirable plant lists.

To avoid unintentional killing of Monarchs and other beneficial pollinators from Pesticide use:

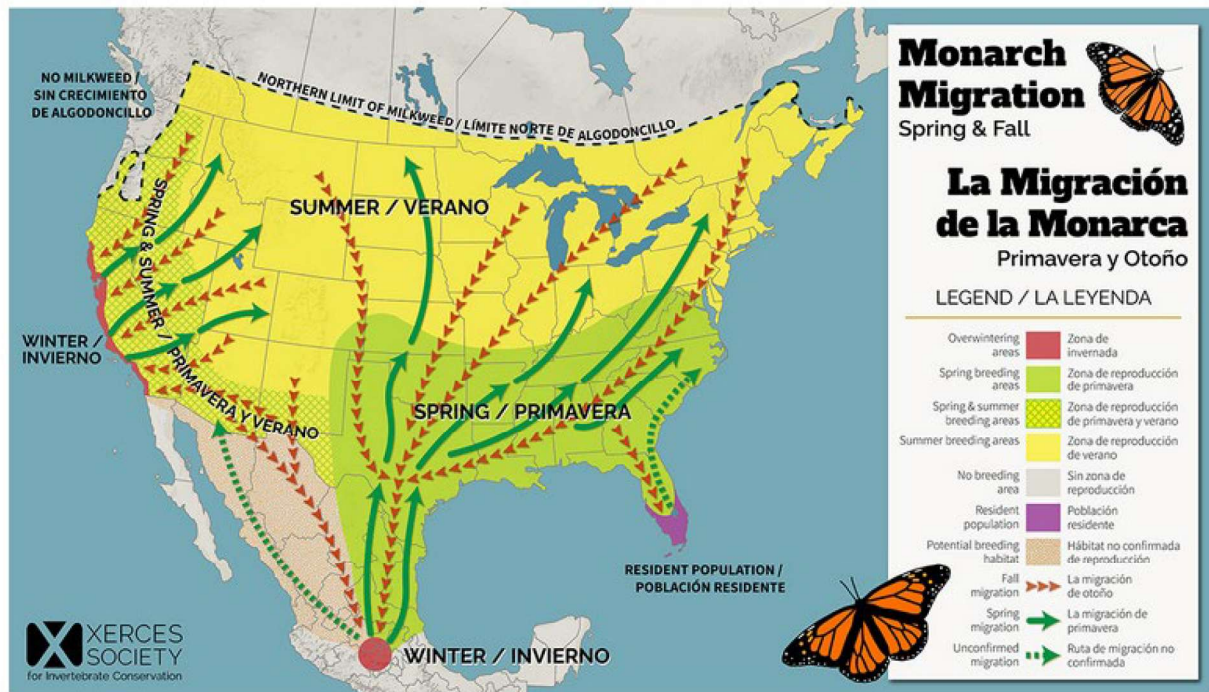
Here are some actions you can take at home to protect monarchs and other pollinators from pesticide exposure from the Xerces Society:

- Buy native nectar and milkweed [plants that are grown without long-lived, persistent insecticides](#) (such as neonicotinoids), and do not apply pesticides to these plants.
- Reconsider whether pesticides are truly necessary. Accept that [some ‘pest’ activity is a normal part of a healthy ecosystem](#).
- [Avoid preventative pesticide treatments](#), foster habitat for natural enemies, and use non-chemical prevention methods whenever possible.
- Do not apply pesticides to open flowers or when monarchs and other pollinators are active.
- Keep in mind that organic pesticides are not necessarily safe for monarchs and other pollinators. For example, the organic pesticide, *Bacillus thuringiensis* (Bt), is highly toxic to monarchs and other butterflies.
- Remember that pesticides applied to impervious surfaces (such as driveways, walkways, patios, and building exteriors) can wash into vegetated areas and contaminate plants and soil.
- Be aware that pesticides used to control “household” pests such as termites, ants, cockroaches, and spiders can also be deadly to pollinators and other beneficial insects.
- If pesticide use is necessary, always choose the least toxic chemical and most targeted application method possible to reduce exposure risks. For example, if you have an ant infestation, try using ant bait stations rather than a spray.

Other recommendations to avoid the dangers of pesticides:

- Select plants grown from local seeds and local sources, without pesticides.
- Remember that many night-flying insects also visit flowers for nectar or pollination activities. They are also at risk!
- *Bacillus thuringiensis* (Bt) is commonly used as a remedy for Japanese Beetle infestations, but as noted above, is highly toxic to Monarchs and other butterflies.

Images:



Monarchs spread out and breed through North America in the spring and summer, then return to California and Mexico. The northern limit of milkweed prevents monarchs from breeding in many parts of the US Pacific Northwest and most of Canada. Migratory monarchs also do not breed in Baja California or in southern Mexico below overwintering zones. Western Mexico contains potential but unconfirmed breeding habitat.



Monarchs have an amazing ability to locate the exact overwintering groves that their ancestors used, despite never having been there themselves. (Photo: Candace Fallon / Xerces Society).



Several months of long flights and perilous winter is a long and hard lifespan for a butterfly that would have lived just a few weeks if born earlier in the summer. (Photo: Isis Howard / Xerces Society.)



Community science is a form of research that invites everyone—with or without a scientific background—to participate in generating data to further understanding. This methodology harnesses the power of numbers, often enabling larger data sets over a wider geographic range in a shorter amount of time. (Photo: Isis Howard / Xerces Society.)

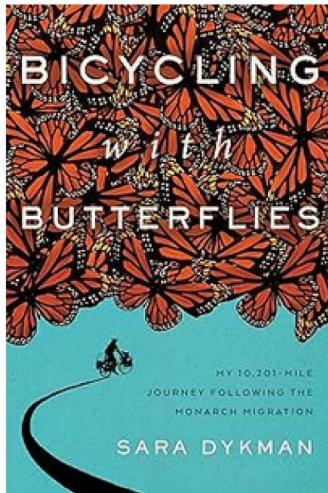


Monarchs sometimes pass away from exhaustion or age on their way to overwintering sites. But clusters of dying individuals in one place are a troubling sign. (Photo: K. Morgan)

"On January 25, 2024, volunteers stumbled upon a devastating scene: scores of dead and dying monarch butterflies scattered across the lawn of a private property adjacent to the Pacific Grove Monarch Sanctuary overwintering grove in California. Xerces' partners at the Pacific Grove Museum of Natural History immediately reached out to inform the Xerces Society about the incident, and in coordination with the California Department of Fish and Wildlife (CDFW), the United States Geological Service (USGS) and Pacific Grove city staff, decided that a sample of the deceased butterflies should be collected for pesticide residue testing.

The analysis by USGS revealed that the monarchs had been exposed to a variety of pesticides including multiple insecticides, fungicides, and herbicides. On average, each butterfly contained residues of 7 different pesticides in their bodies. Three extremely toxic pyrethroid insecticides were each found at or near lethal levels in the tested butterflies. These findings confirmed suspicions that pesticide poisoning was likely the cause of the butterflies' deaths." (Xerces Society**).

Previous images and notes from the Xerces Society - <https://www.xerces.org/blog/5-monarch-migration-facts>



Bicycling with Butterflies: My 10,201-Mile Journey Following the Monarch Migration Hardcover – April 13, 2021

by **Sara Dykman** (Author)

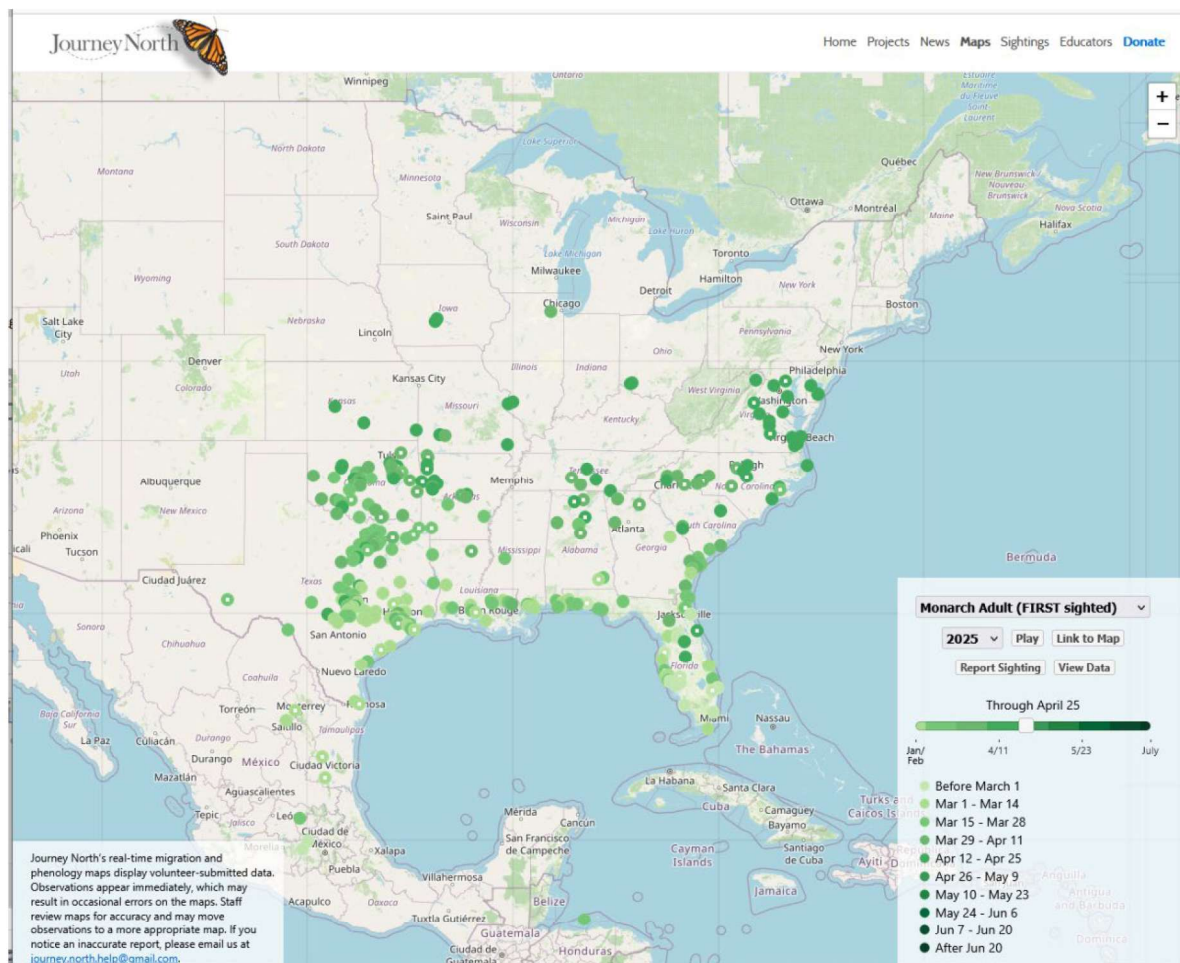
4.5 ★★★★★ 507 ratings [See all formats and editions](#)

S Available elsewhere

Winner of the 2021 National Outdoor Book Award

Sara Dykman made history when she became the first person to

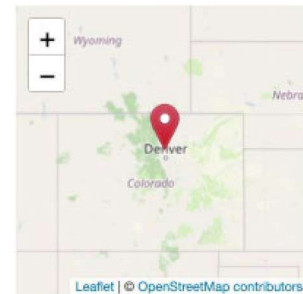
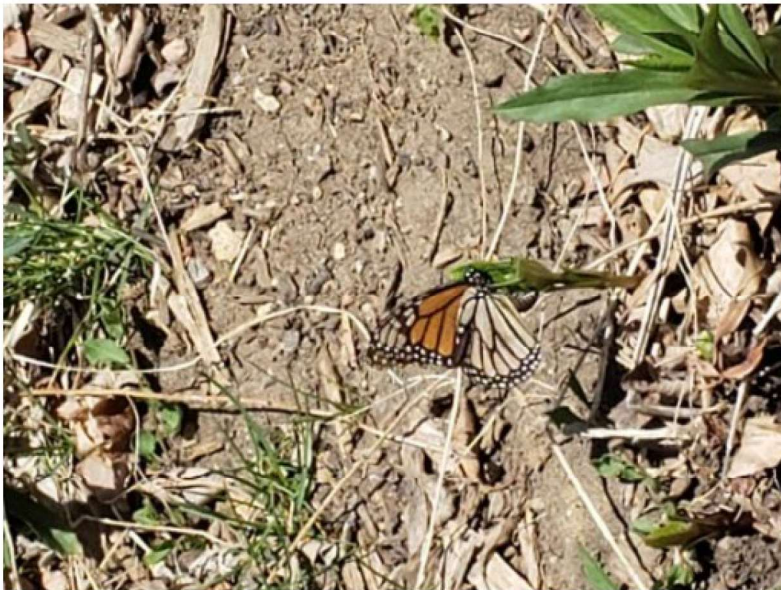
Journey North migration maps and sightings:



Spring Migration, Adult first sighting (earliest recorded) April 28, 2022



Monarch Adult (FIRST sighted)



Broomfield, CO

Latitude: 39.9 Longitude: -105.1

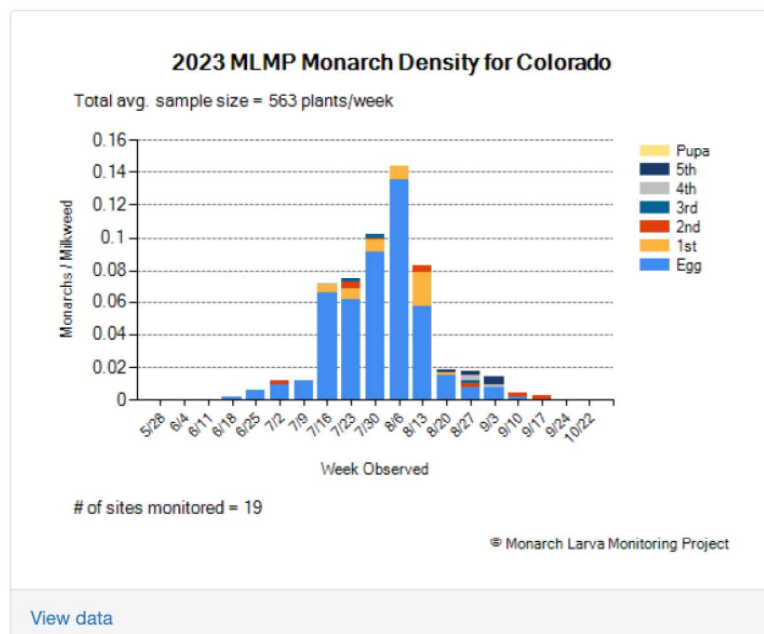
Observed by: Marlin

Female laying eggs on emerging Showy Milkweed, Broomfield, CO

MLMP Summer breeding data:

In 2023, 19 sites in Colorado were monitored through the breeding season yielding the following data:

Activity 1: Measuring Monarch Density



Monarch Watch website:

Our 2025 Spring Plant Fundraiser will be online this week at spring.monarchwatch.org



SUBMIT YOUR TAGGING DATA **REPORT TAG RECOVERY**

BLOG **MILKWEED MARKET** **FREE MILKWEEDS** **SHOP** **DONATE**

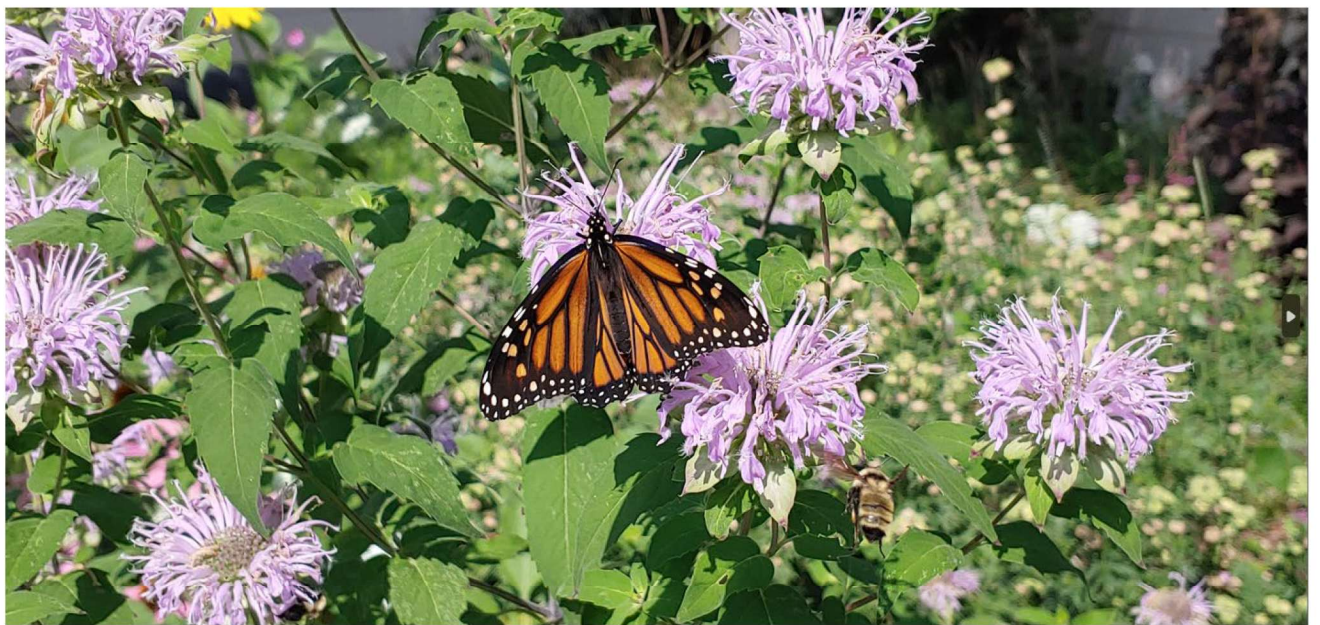
Accepting Applications for 2025

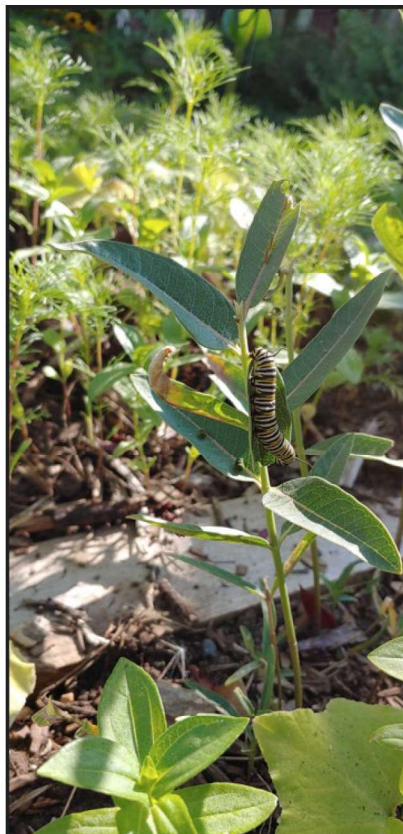
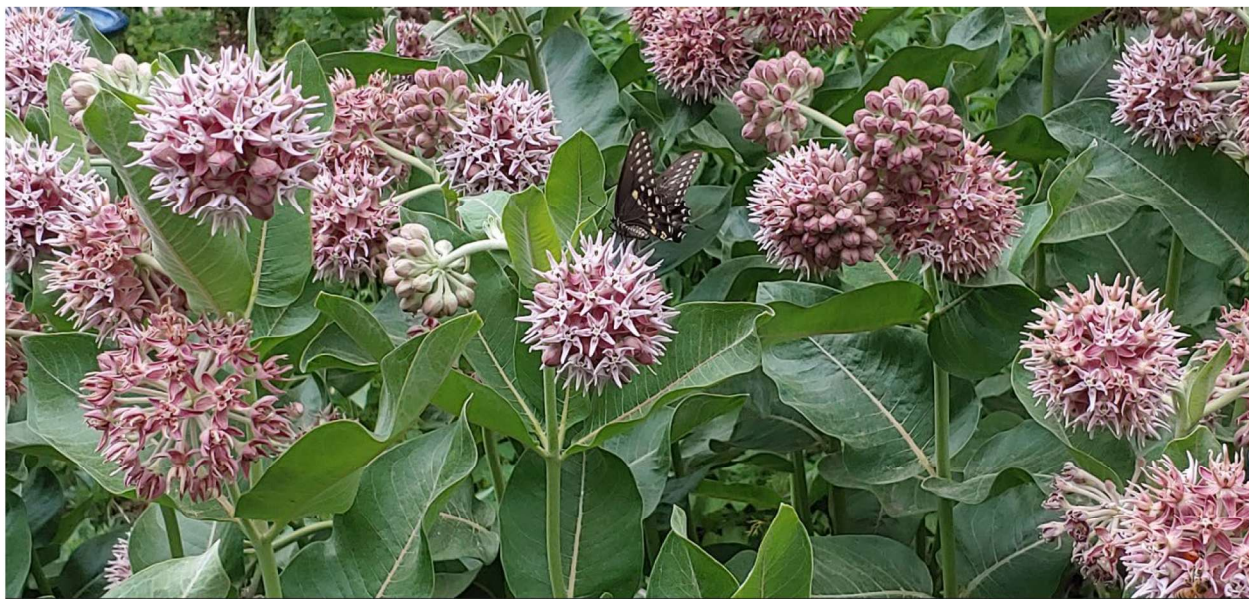
[Monarch Tagging Program](#) • [Monarch Calendar Project](#) • [Monarch Watch Tag Recoveries](#) • [Report a Tagged Monarch Sighting](#) • [2022 Monarch Watch Symposium](#) • [Monarch Population Status](#) • [Monarch Conservation Specialists](#) • [Bring Back The Monarchs](#) • [Monarchs in Space Project](#) • [Monarch Butterfly Press Materials](#) • [Monarch Conservation Articles](#) • [Weather near the Overwintering Sites](#) • [Chip in for Monarch Watch](#) • [Share with Monarch Watch](#) • [Monarch Listing Decision](#)

EVENTS: [Spring Open House & Plant Fundraiser](#) • [International Monarch Science Symposium](#) • [All upcoming and past events](#)

Photos from Louisville garden:

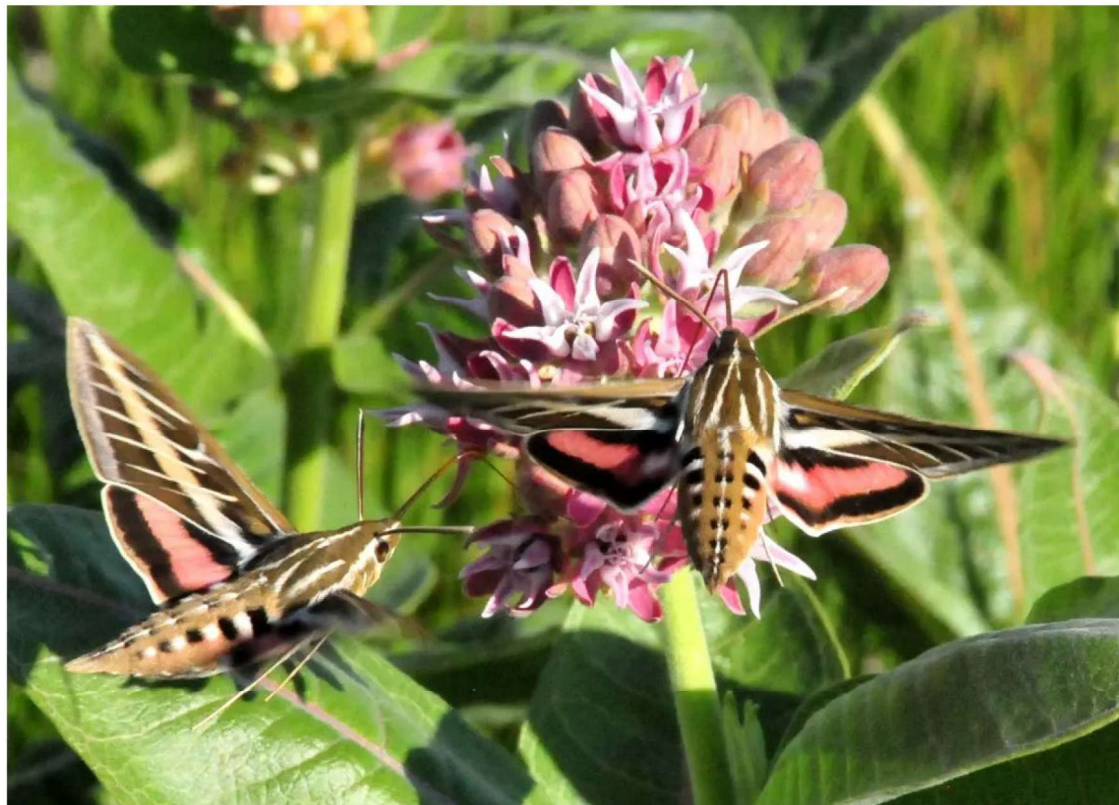








Photos from U.S. Fish and Wildlife ("Spreading Milkweed, not Myths"):





References

* The U.S. Fish and Wildlife Service recently [proposed to list the monarch as a threatened species](#) under the Endangered Species Act (ESA).

[MILKWEEDS OF COLORADO, Xerces Society, Milkweeds of Colorado:](https://www.xerces.org/sites/default/files/publications/19-019.pdf)

<https://extension.colostate.edu/topic-areas/yard-garden/milkweeds-fascinating-plants-home-to-colorful-insects/>

<https://www.amazon.com/Bicycling-Butterflies-201-Mile-Following-Migration/dp/1643260456>

** <https://www.xerces.org/blog/how-urban-pesticides-can-harm-monarch-butterflies-cautionary-tale-from-california>

<https://www.xerces.org/blog/2017-perennial-plant-of-year-and-other-milkweeds-you-should-know>

<https://www.xerces.org/blog/5-monarch-migration-facts>

Dykman, Sara, 2021, Bicycling with Butterflies - my 10,201 mile journey following the Monarch migration

Stevens, Michelle, 2000, National Plant Data Center, Plant Guide: Showy Milkweed, 4 pgs. (Includes description for successful propagation and management)

<https://monarchwatch.org/bring-back-the-monarchs/milkweed/milkweed-regions-seed-needs/>

Xerces:

https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://xerces.org/sites/default/files/2018-05/12-047_01_XercesSoc_NativeMilkweeds_Great-Basin_web.pdf&ved=2ahUKewim1cub7OyLAXWiOTQIHTQLEJAJAQFnoECCkQAQ&usg=AOvVaw0kLRmT3s9xD0FwSK2ovYKZ

US Fish & Wildlife:

<https://www.fws.gov/story/spreading-milkweed-not-myths>

<https://www.mycoloradogarden.com/blog/support-the-monarch-butterfly-in-colorado>

USDA Milkweed map and species finder:

https://www.google.com/search?q=usda+wildflower+milkweed+map&oq=usda+wildflower+milkweed&gs_lcrp=EgZjaHJvbWUqCggBECEYoAEYwwQyBggAEEUYOTIKCAEQIRigARjDBDIKCAIQIRigARjDBDIKCAMQIRigARjDBDIKCAQQIRigARjDBNIBCTI4OTE5ajFqOagCDrACAQ&client=ms-android-verizon&sourceid=chrome-mobile&ie=UTF-8

USDA Plant Milkweed for Monarchs:

https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.fs.usda.gov/wildflowers/pollinators/Monarch_Butterfly/documents/MilkweedInfoSheet.pdf&ved=2ahUKEwjgvMct6uyLAXVrFzQIHf4_NwEQFnoECBUQAQ&usg=AOvVaw3Pb1490s4GfTfk52OUZ71D

Individual Milkweed species:

Asclepias speciosa (Showy milkweed) Native Plants of North America Lady Bird Johnson Wildflower Center https://www.wildflower.org/plants/result.php?id_plant=ASSP

https://www.fs.usda.gov/wildflowers/plant-of-the-week/asclepias_tuberosa.shtml

https://www.fs.usda.gov/wildflowers/plant-of-the-week/asclepias_incarnata.shtml

<https://www.fs.usda.gov/managing-land/wildflowers/plant-of-the-week/asclepias-uncialis>

INTEGRATED WEED MANAGEMENT (IWM)

Established turfgrass that is used for activities and events is expected to provide dense, uniform, and safe playing surfaces all season long. However, when natural grass faces excessive stress from wear or environmental conditions such as heat or drought, pest pressures can become a serious problem. Park staff can implement comprehensive and effective approaches to pest management, using IWM programs. An IWM approach considers all strategies to reduce pest damage to manageable and acceptable levels in the most economical means, while simultaneously considering potential impacts on humans, property, and the environment. In parks operations, these programs involve various agronomic practices, as well as the option to consider the use of chemical applications in situations when other means have been exhausted or deemed ineffective.

Where allowed, pesticide use can be incorporated into an overall IWM strategy that also includes non-chemical control methods such as biological controls, cultural methods, or pest monitoring. The judicious use of pesticides, when needed, helps to control diseases, insects, and weeds that can compromise the quality and safety of the playing surface. The safe and effective use, storage, and handling of pesticides is highly regulated, which helps to ensure that their relative risk is largely mitigated. Licensed professional applicators are subject to a certification process and must be regularly recertified, further ensuring the safety of pesticide applications.

Pests must be properly identified in order to be optimally managed. Understanding the biology of pest species and their vulnerable life stages assists with management. Park staff should continually hone their diagnostic skills by attending training seminars and field days, obtaining reference materials, and providing peer-to-peer training. Communicate with university Extension specialists to confirm the identification of a pest and seek advice on appropriate control methods.

Weeds

Because of the mechanical stresses associated with normal use of parks, bare spots provide an advantageous environment for encroachment by weeds. Over time, weeds can become a persistent presence on the park surface, comprising safety, disrupting usability, harboring other pests, competitively displacing desirable turfgrass, as well as being unsightly.

Two major weed types impact field quality and function: annual weeds, such as crabgrass, annual bluegrass (*Poa annua*), and knotweed (*Polygonum arenastrum*), and perennial weeds, such as plantain (*Plantago* spp.), clover, dandelion (*Taraxacum officinale*), and ground ivy (*Glechoma hederacea*). While some weeds are easily identified, others may be more difficult. The Weed Science Society of America maintains links to university Extension specialists and other industry experts across the country that can provide more information and weed identification assistance.

Irrigation plays an important role not only in influencing weed populations, but also with efficacy of control products. Pre-emergent products form a “barrier” on the soil surface preventing germination of grassy and broadleaf weeds. Products applied to parks without a natural rainfall event or supplemental

irrigation may limit efficacy of the product. Conversely, sites that are over-irrigated may have higher densities of weeds.

Weed Control Methods

The City of Louisville's IWPM employs a combination of weed control methods, which improves efficacy and minimizes chemical applications. Control methods include:

- Prevention- avoid disturbance to established vegetation when possible, remove seed from equipment, monitoring and amending the soil prior to planting.
- Mechanical Control- physically removing all or parts of the weeds using methods such as trimming, mowing or hand pulling
- Cultural Control- Good turfgrass and Horticulture practices consist of aeration, reseeding, proper fertilizing, proper irrigation, and planting dense spaces to reduce bare soil for weed seed to establish.
- Chemical control- Chemical control involves the use of herbicides to eradicate weeds. Using the IWPM program, effective chemical applications are significantly reduced.

The Parks Division primarily utilizes mechanical methods to manage vegetation on over 90% of the land within its jurisdiction. These methods include mowing, hand-pulling, and the use of specialized tools to effectively control weed growth.

Chemical control is employed on an as-needed basis in specific, targeted areas. Applications are generally limited to hardscape surfaces (such as cracks in sidewalks), landscaped beds with rock or mulch, and roadway medians—locations with minimal human or animal interaction. In areas where human or animal contact is more likely, only organic-based products are used to ensure safety.

All chemical applications are conducted exclusively by staff licensed through the Colorado Department of Agriculture. These applications strictly adhere to product label instructions, as well as all applicable state and federal regulations.

The Parks Division maintains a strict policy prohibiting chemical applications in or within 30 feet of any playground.

2022

Weed management hours 3340

Applications 9 applications of Avenger (51 gallons Organic) – cobble beds, sidewalks, downtown

2023 *staff changes and improved products were introduced to achieve parks standards*

Weed management hours 1845.5

Applications – Avenger 104 gallons- cobble beds, sidewalks downtown (60%), landscape beds, mulch rings . Crew- to Steel Ranch and Cowboy (ONLY) turfgrass and landscape bed: 190 pounds, Cool Power 2 gallons- Thistle management

2024

Weed Management Hours 2377

Applications: Avenger-19 gallons, Cool Power-50 gallon Median rock beds and Downtown

Cheetah Pro with Suregaurd- 1.25 gallons- downtown sidewalks, tree rings, rocks bed, landscape beds

Snapshot (pre-emergent)- 24 cups all city managed landscape perennial and annual beds

Cool Power: Cleo Mudrock and Heritage outfield (ONLY) and Steel Ranch (target thistle control, applied at lowest rate) 1 gallon

Staff qualifications: 6 Qualified Supervisor Applicators- that include 108, 206,207 endorsements

Parks Pesticide

Cheetah Pro

Avenger (organic)

Cool Power

Surguard Herbicide Activator

Pendulum Aqua Cap

Crew Specialty (granular)

Snapshot (granular)

Application Locations: hardscape – park sidewalks, courts, and downtown, rock and mulch landscape beds and medians, turfgrass space with 30% or greater weed cover, infields, and fence lines – as identified.

NO PLAYGROUND space or any land within 30 feet of a playground is treated with chemical.

Since 2020 Memory Square, Pirates Park, and Elephant Park have been herbicide free.

Forestry Pesticide

Treeazin (organic for EAB)

Garlon (last used in 2022)

6 Parks staff members hold Qualified Supervisor Applicator License's with 108,206, 207 endorsements by Colorado Department of Agriculture.

Memorandum

To: Parks Public Landscape Advisory Board (PPLAB)
From: Abby McNeal, CSFM, CPRP
Date: 05/07/2025
Re: Parks Division Monthly Report

Streetscapes/ Horticulture:

Staff working on enhanced plant designs at Cornerstone, Cherry Street underpass, and Community Park landscape beds.

Project: Transformative Landscape Change Challenge grant from Resource Central and the Colorado Water Conservation Board Sunlit Fiesta ([Sunlit Fiesta](#)) and Color Pop ([Color Pop](#))

Preparing for annuals for downtown pots and patio hanging baskets

Parks, Athletic Fields, Cemetery:

Supporting general parks maintenance: shelter permits and special events started

Mowing and trimming weekly.

Athletic Fields work on preparing infields for tournaments and permitted play

Forestry:

Rescheduled Arbor Day planting 12 trees at the Arboretum: Star Magnolia, Yellow Dogwood, Heartland Catalpa, European Pyramidal Hornbeam, Texas Red Oak, Princess Kay Canadian Plum, Discovery Elm, Urban Pinnacle Oak, Douglas Fir, Lodgepole Pine, Bristlecone Pine, Nanking Cherry

Preparation for PLAY Boulder/ Boulder Youth Corp tree planting 3 locations (25 trees):

Washington Ave, S Boulder Road, Cleo Mudrock detention area

Projects:

Playgrounds/ Park Renovations (Sunflower/Enclave) –on schedule

Irrigation Improvements – controller purchased and installations 22 of 26 (targeting completion end of May)

PPLAB Development Review:

None at May meeting

Louisville List for Contractors:Approved/Suggested Species

Revised 04/21/2025

Scientific Name	Common Name	Height	Width	Water	Exposure	Color	Bloom Time	Fire Rating	Native	Pollinators	Notes
Perennials											
Achemilla mollis	Lady's Mantle	12-14"	12-14"	medium	sun/part shade	yellow/white	June-Sept		N	b,bf	accordian shaped leaves
Achillea millefolium	Common Yarrow	1-2'	1-2'	high	sun/part shade	white	July	1	Y	b,bf	extremely hardy
Agastache spp.	Hyssop	3-5'	1-3'	low-medium	sun	multi colors	June-Aug		Y	b,bf,hb	very fragrant
Ajuga reptans	Bugleweed	6-12"	6-12"	low-medium	sun/part shade	blue/violet	June-July	1	N	b,bf,hb	can spread easily
Amsonia tabernaemontana	Blue Star	2-3'	2-3'	medium-high	sun/part sun	blue/purple/white	March-May		N	b,bf,hm,m	willow like leaves
Aquilegia chrysantha	Golden Columbine	1-2'	1-2'	med-high	sun/part shade	yellow	June-Aug	2	Y	hb	reseeds readily
Asclepias tuberosa	Butterfly Weed	1-2.5'	1-2.5'	low	sun	orange/yellow/red	April-Sept		Y	b,bf,hb,m	great plant for monarchs
Astilbe spp.	False Spirea	18-24"	6-60"	low-medium	part sun	red/pink/purple/white	May-July		N	b,bf,op	don't like drought conditions
Berlandiera lyrata	Chocolate Flower	1-4'	1-2'	low	sun/part shade	yellow with maroon center	April/Nov		Y	midges	wonderful chocolate scent
Callirhoe involucrata	Poppy Mallow	5"	2-3'	low	sun	pink/white	All summer	2	Y	b,bf,op	long bloomer, heat loving
Cerastium tomentosum	Snow in Summer	6-8"	9-12"	low-medium	sun	white	May-June	2	N	b	groundcover
Coreopsis spp.	Tickseed Coreopsis	2-4'	1-2'	medium	sun	red/orange/yellow/pink/white	May-Sept	1	Y	b,bf,hb	
Delosperma basuticum	Hardy Ice Plant	2-3"	12-24"	med-high	sun	multi colors	April-June	1	N	b,op	groundcover, bright bloomer
Erigeron annuus	Daisy Fleabane	10"-2'	2'	low	sun/part shade	purple/white	May-Sept		Y	bf	daisylike flowers
Eutrochium purpureum	Joe Pye Weed	4-7'	2-4'	medium	sun/part sun	mauve pink/purple pink	June-Sept		Y	bf,op	
Gaillardia aristata	Blanket Flower	1-1.5'	1-2'	low-medium	sun	yellow/red	July-Sept	2	Y	b,bf	reseeds readily
Galium odoratum	Sweet Woodruff	6-12"	9-18"	medium	part sun/shade	white	April-May		Y	b,bf	groundcover
Gaura lindheimeri	Wandflower	36"	20"	low	sun	pink,white	May-Sept	2	N	b,bf,hb,op	long bloomer, showy plant
Geranium ibericum	Cranesbill	6-36"	1-3'	medium	sun/part sun	blue/pink/white/magenta	May-Sept		Y	b,bf	
Geum triflorum	Prairie Smoke	1.5'	1.5'	med-high	sun/part shade	reddish pink	June	2	Y	bb	pink fuzzy seedheads
Hermerocallis spp.	Daylily	1-1.5'	1-2'	low	sun	orange,pink,purple,red,white,yellow	May-Aug	1	N	bf	extremely hardy
Huechera spp.	Coral Bells	8-18"	12-24"	low-medium	sun/shade	red/white/pink/orange	May-July	1	Y	b,bf,hb	planted for foliage
Iris germanica	Bearded Iris	1-3'	12-18"	low-medium	sun	multi colors	May-June	1	N	b,bf	showy flowers
Kniphofia uvaria	Red Hot Poker	3-4'	1-3'	medium	sun	red/orange/yellow	May-Sept	1	N	b,bf,B	deadhead to rebloom
Lobelia cardinalis	Cardinal Flower	2-4'	2'	high	sun/light shade	scarlet/crimson/vermilion	July-Sept		Y	b,bf,hb,op	
Lupinus argenteus	Silvery Lupine	1-3'	1'	low	sun	blue/violet	June-July	1	Y	b,bf,op	palm shaped leaves
Nepeta spp.	Catmint	10-24"	1-2'	low	sun/part shade	purple/pink/white	May-Sept		N	b,bf,op	deadhead to rebloom
Papaver orientale	Oriental Poppy	2-3'	1-2'	high	sun/part shade	orange/pink/red	May-June	1	N	b,bf,op	need divided at some point
Penstemon strictus	Rocky Mt. Penstemon	2-2.5'	1-3'	low-medium	sun	purple/violet	May-July	1	Y	b,bf,hb	prone to powdery mildew if crowded
Platycodon grandiflorus	Balloon Flower	2-4'	2-4'	medium	sun/part shade	purple	June-Aug		N	b	can need staking
Rudbeckia fulgida	Black eyed Susan	2-3'	1-2'	medium	sun/part shade	yellow	July-Oct		N	b,bf,hb,m	
Salvia sylvestris	May Night Salvia	15-18"	18"	low	sun	purple	May-Aug		N	b,bf,hb,B	
Sedum spp.	Stonecrop	1-1.5"	12-24"	low	sun/part shade	yellow	July-Aug	1	Y	bf	tiny star-shaped flowers
Sempervivum spp.	Hens and Chicks	6"	6"	low	sun	white/yellow/pink	June-Aug	1	N	b,bf	
Sphaeralcea ambigua	Globe Mallow	1-3'	1-3'	low	sun	orange/apricot/pink	April/May		N	b,bf,op	
Solidago sphacelata	Golden Fleece Goldenrod	1-2'	2-3'	low	sun/part shade	yellow	Sept-Oct		N	b,bf,B	
Symphyotrichum laeve	Smooth Aster	1-3'	2-4'	low-high	sun/part shade	blue/lavender	Aug-Sept	2	Y	b	good prairie plant
Tricyrtis hirta	Toad Lily	2-3'	1-2'	medium-high	part sun/shade	purple/white	May-Aug		N	b,hb	prefer moist soils
Verbena peruviana	Verbena Red Devil	8"	1-2'	medium	sun	red	June-Aug		N	b,bf,bb	groundcover
Veronica oltensis	Thyme Leaf Speedwell	1"	2-24"	low	sun	blue/purple	Mar-May		N	b	groundcover
Vinca minor	Common Periwinkle	3-6"	18"	low-medium	sun/part shade/shade	blue/lavender	March-April		N	b,bf,op,hb	groundcover, purple flowers
Shrubs											
Amelanchier spp.	Serviceberry	4-15'	4-8'	very low-med	sun	white	May	1	Y	B,wl	usually multi-stemmed
Amorpha nana	Dwarf False Indigo	1-3'	1-3'	low	sun/part shade	purple	May-June	2	Y	bf,b,hb	
Artemesia spp.	Silver Mound	1-5'	1-10'	low-medium	sun	silver	June-Sept		Y	b,bf,op,B	planted for foliage
Buddleja davidii	Butterfly Bush	3-12'	3-8'	low-medium	sun	purple/pink/blue/white/yellow	May-Aug		N	b,bf,hb,m	fragrant
Cercocarpus betuloides	Mountain Mahogany	8-20'	10-12'	very low	sun	yellow/cream/white	May-June		Y	b,bf,hb	
Cornus sanguinea	Redtwig Dogwood	6-9'	8-12'	low-medium	sun/part shade	white	April-May	1	Y	B	showy red branches
Cylindropuntia spp.	Cholla	3-5'		very low-med	sun	pink	June	3	N	b,hb	cactus-like
Cotoneaster	Cotoneaster	1-3'	5-15'	low	sun/part shade	white/pink	May-June	2	N	b,bf,op	

Ericameria nauseosa	Dwarf Rabbit Brush	1-3'	1-3'	low	sun	golden yellow	June-July		Y	b,bf,op,B	can be aggressive
Euonymus alatus compactus	Dwarf Burning Bush	3-20'	3-12'	low-medium	sun/part shade	yellow/green	May-June		Y	b,B	red fall color
Jamesia americana	Waxflower	4-6'	4-6'	low-medium	sun/part sun/shade	white	May-June		Y	b,bf,hb,m	fragrant blooms
Philadelphus lewisii	Cheyenne Mock Orange	6-9'	5-8'	medium	sun	white	April-June	3	Y	b,bf	fragrant
Rhus glabra	Smooth Sumac	3-5'		low	sun/part shade	yellow	April	1	Y	B,wl	outstanding fall color
Ribes aureum	Golden Currant	6-10'	5-10'	very low-med	sun	yellow/orange	March-April	3	Y	hb,B,wl	berries are food for wildlife
Sambucus canadensis	Common Elderberry	5-12'	5-12'	medium	sun/part sun	white	June-July	3	Y	b,bb,B,op	berries good for jam
Symphoricarpos albus	Snowberry	2-3'	3-6'	medium	sun/part shade	white/pink	May-Aug	3	Y	b,bf,B	impressive white berries
Syringa pubescens patula 'Miss Kim'	Miss Kim Lilac	6-8'	6-8'	medium	sun	lavender/purple	April-May	1	N	b,bf,hb	bloom on old wood
Viburnum carlesii	Korean Spice Viburnum	4-6'	4-7'		sun/part sun	pink turning white	April-May	2	N	B	ornamental fall color
Viburnum opulus var. americanum	Amercian Cranberry Bush	3-20'	3-12'	medium	sun/part shade	white/pink	April-June	1	N	b,bf,B	bloom on old wood
Weigela florida	Weigela	6-10'	9-12'	medium	sun	pink	May-June	2	N	b,bf,hb	bloom on old and new wood
Yucca glauca	Soapweed	2-3'		very low-low	sun/part shade	white	June	3	Y	m	drought tolerant
Ornamental Grasses											
Calamagrostis x acutiflora 'Karl Foerster'	Feather Reed Grass	5-6'	1-2'	medium	sun/part sun	pinkish purple	May-July		N	B	tendency to be overused
Festuca glauca	Blue Fescue	6-12"	6-18"	low	sun	green/yellow	May-July		N	B	
Helictotrichon sempervirens	Blue Avena Grass	2-5'	1-2'	low	sun	bluish green	May-July		N	Bf	
Miscanthus gracillimus	Chinese Silver Grass	5-6'	3-4'	medium	sun	purple	June-July		N	B	grass blades are sharp
Miscanthus sinensis 'Zebrinus'	Zebra Grass	5-7'	4-6'	medium	sun	pinkish copper	July-Sept		N	B	grass blade color is striped
Muhlenbergia capillaris	Pink Muhly Grass	1-3'	2-3'	low-med	sun/part sun	pink/pinkish red	Aug-Sept		Y	B,bf	pretty,showy blooms
Panicum virgatum	Switch Grass	3-6'	2-3'	medium	sun/part sun	pink	June-July		Y	B,bf	personal favorite
Pennisetum alopecuroides	Dwarf Fountain Grass 'Hameln'	1-3'	1-3'	medium	sun/part sun	yellowish brown	May-July		N	B	great for smaller areas
Schizachyrium scoparium	Little Bluestem	2-5'	2-5'	low-med	sun	purple	June-Sept		Y	B,b,bf	
Sorghastrum nutans	Indian Grass	5-7'	1-2'	low	sun/part sun	yellow/orange	Aug-Sept		Y	B	
Sporobolus heterolepis	Prairie Dropseed	2-3'	2-3'	low	sun/part sun	pink/brown/copper	july-Sept		Y	B	

Key: Water requirements
very low = .5" per week
low = 1 " per week
medium = 1.5" per week
high = 2" + per week
Note - dependent on weather conditions water needs may be increased by 50%.

Key: Pollinators
Bees = b
Bumblebees = bb
Butterflies = bf
Hummingbirds = hb
Moths = m
Other pollinators = op
Birds = B
Wildlife = wl

Key: Fire rating
1 to 4 number scale
1 = Firewise
2 = Moderately Firewise
3 = At Risk Firewise
4 = Not Firewise