

City of Fort Collins

Design Guide



Chapter 2: Pollinator Gardening April 2024

An Introduction to Diversifying Urban Landscapes in Fort Collins

Acknowledgments

City of Fort Collins

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Design Guide:

An Introduction to Diversifying Urban Landscapes in Fort Collins

Introduction

Overview of the Guide

The purpose of this guide is to showcase a wide variety of diverse urban landscape options in Fort Collins. This guide will help you determine which landscape options are best for you, whether you are a homeowner, renter, business owner, school, developer, or part of a Homeowners Association. The overarching goal is to provide inspiration for your next dream landscape.

The examples in this guide apply to Northern Colorado Front Range ecosystems, however the context may be appropriate for projects in other regions, as well.

In this guide, you will find an introduction and the main considerations needed for installing each landscape option. Tips for design, installation, and maintenance are included in each chapter. In addition, each landscape option comes with its own curated plant list to help you select plants that will thrive in your landscape.

[Thank you for creating diverse, beautiful, and resilient landscapes!](#)

Why Diversify Landscapes?

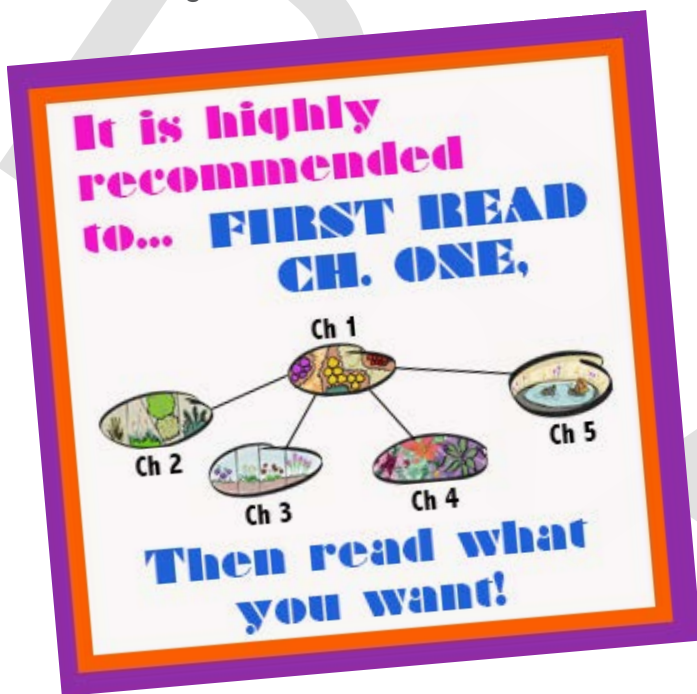
Diverse landscapes are beautiful and resilient. They contain a variety of native and adapted species that provide important habitat and resources for wildlife and pollinators. They are naturally adapted to the Front Range's semi-arid climate and native soils, which translates to lower water and chemical inputs, and a better ability to withstand short- and long-term changes in climate. They invoke a Colorado landscape aesthetic and establish a sense of place. Spending time in them benefits our physical and mental health. In short, moving towards diverse landscapes is more sustainable and brings nature into the city, which provides considerable ecological, economic, and social benefits.

The use of plants that are native to Colorado is highly encouraged when you diversify your landscape. Native plants have evolved here and are adapted to our climate and soil types. In addition, our local pollinators and wildlife co-evolved with these plants and many are dependent on specific native plant species for survival. As such, native plants form the base of local food webs. However, it is also important to recognize that native plants may not be appropriate in all situations, e.g., your aesthetic preferences, the level of activity on site, HOA policies.



Navigating the Guide

This guide is broken into chapters (see Table of Contents), which primarily revolve around different landscape options (e.g., Pollinator Gardening, Lw Water Lawn). The guide also includes chapters on other relevant landscaping topics (e.g., Soil Amendment, Weed Management). It is highly recommended to start with Chapter One – Site Characteristics and Planning.



Within each chapter, you will find information on the following (when applicable):

- Overview of topic
- Physical requirements
- Design examples or case studies
- Irrigation
- Maintenance
- Plant list
- Additional resources
- Installation tips
- Fun fact!

FUN FACT

Converting your yard from turf to a xeriscape and or native garden is **On TREND!**

Over 390 residential projects in Fort Collins were granted Xeriscape Incentive Program (XIP) funding for a total of 462,100 square feet of converted landscape. That is 10 acres or approximately 7.5 football fields!



fcgov.com/xip

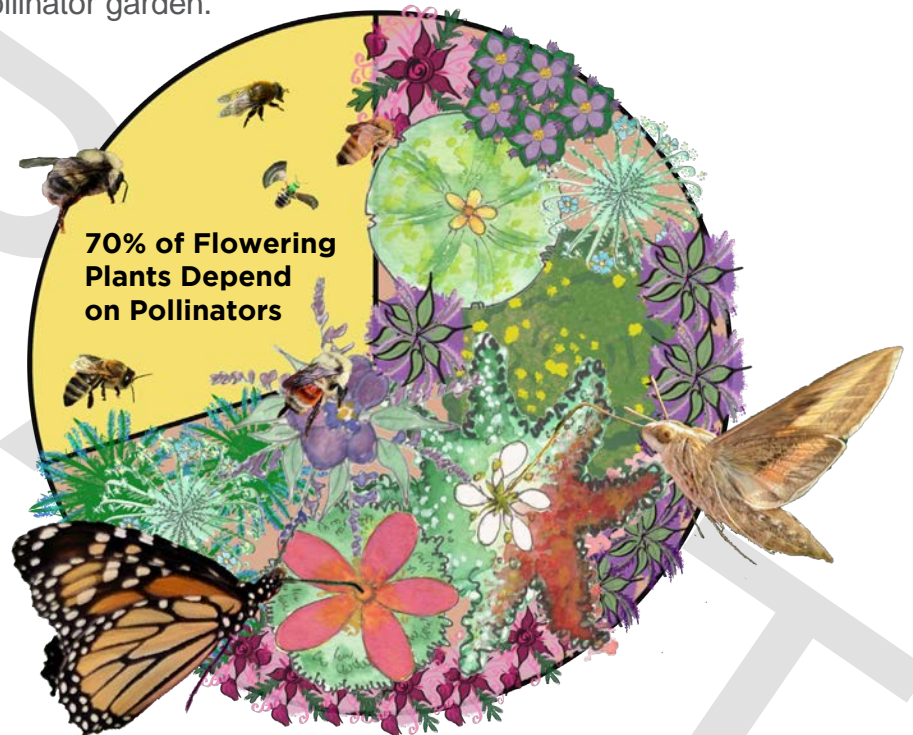
Definitions

Adapted Species	Non-native species that grow well in a given habitat with human adjusted changes to the environment such as water or nutrients.
Aggregate	A material or structure formed from a loosely compacted mass of larger soil or rocks.
Aspect	The direction the land is facing. eg: north, south, northeast etc.
Cues to Care	(CTC) are landscape elements that are immediately recognizable as designed, and that signal continuing human presence to care for a landscape.
Complementary Colors	Colors opposite from each other on the color wheel. They have a strong contrast that increases how noticeable they are when placed close together.
Exotic Plants	Plants not native to the area where they are planted.
Forb	A herbaceous flowering plant that is not a grass.
Hydrozone	Areas where plants with similar water needs are grouped together - very low water, low water, medium water, and high water plants should be grouped by water needs.
Impervious Surface	A hard surface that does not let water soak into the ground, causing puddling or resulting in runoff.
Larval Host Plants	Plants required for the growth and development of insect larvae such as caterpillars. Butterflies are often particular about the species where they host their eggs to support the larva.
Microclimate	Small areas that have a different climate than the overall climate of a site. They can be created by structures, topography, water, boulders, and impervious surfaces.
Native Plant	A plant species that grew in an area before colonization of that area.
Organic Matter	Any of the carbon-based compounds that exist in nature or material that comes from living things. This can include carbon-rich soils, manure, mulch, or compost.
Perennial	Any plant that persists for several years, usually with new herbaceous growth from a part that survives from growing season to growing season.
Permaculture	Permaculture stands for permanent agriculture. It uses whole systems thinking to create spaces for planting that encourages naturally flourishing ecosystems.
Pruning	Selective removal of certain parts of a plant such as branches, buds, or roots.
Resilient	Ability to bounce back after experiencing a setback.
Slope	A surface of which one end is at a higher level than the other; a rising or falling surface.
Soil Amendment	Anything that is added to a soil to improve water retention, nutrients, or drainage.
Xeriscape	Principles of sustainable design including use of low water plants, and sustainable gardening techniques.

Chapter 2 Pollinator Gardening

About pollinator gardening

Pollinators make the world go around! Over 70 percent of the world's flowering plants require a pollinator to produce fruit or seeds. This amazing service allows plants that we depend on, for food and the economy, to thrive and makes our world a more vibrant place. You can help pollinators flourish by creating a pollinator garden.



Most outdoor spaces can be transformed into a pollinator garden. Here are key elements that should be considered when designing and installing your pollinator garden:

- Use as many native plants as possible. Many local pollinators need specific native plants that they evolved with to survive. However, some adapted plants can also provide resources to pollinators.
- Use a variety of plants so there is always something in bloom from early spring through fall.
- Choose plants with a variety of flower colors and shapes that will attract different pollinators. ([Learn more¹](#))
- Make sure to include larval host plants in your landscape or bunchgrass for overwintering sites. [Here is a list²](#) of critical host plant species for Larimer County pollinators.

1. <https://www.fws.gov/pollinators/pdfs/PollinatorBookletFinalrevWeb.pdf>

2. <https://www.fcgov.com/natureinthecity/files/nativeplant-handout-final-outline4.24.pdf?1619107014>



- Plant the same species of plants in clumps or swaths. This allows pollinators to work more efficiently.
- Be wary of cultivars or hybrid plants. They are often bred for showy flowers or leaf colors that pollinators can't access or don't like.
- Do not use weed barrier fabric! This fabric is detrimental to the health of your soil and prevents ground nesting bees from being able to find a home.
- Leave bare soil spots, free from mulch, for ground nesting bees.
- Keep dead trees or limbs in your garden for bees that nest in wood.
- Insects need to drink water too! Leave out a shallow bowl of water or bird bath, and place rocks in it so they have a safe place to land.
- Don't use pesticides, insecticides or herbicides. These can directly or indirectly kill pollinators.

Factors to Consider When Selecting Plant Species

Pollinator gardens can be installed in a wide range of conditions since many plants can be used to support pollinators. In general, the following physical factors should be considered:

SUN REQUIREMENTS: Full sun or part sun (Have full shade? (Check out Chapter 3 – Dry Shade)

SOILS: Variable – can be rocky, loam, clay, etc. it just needs to be able to support plants.

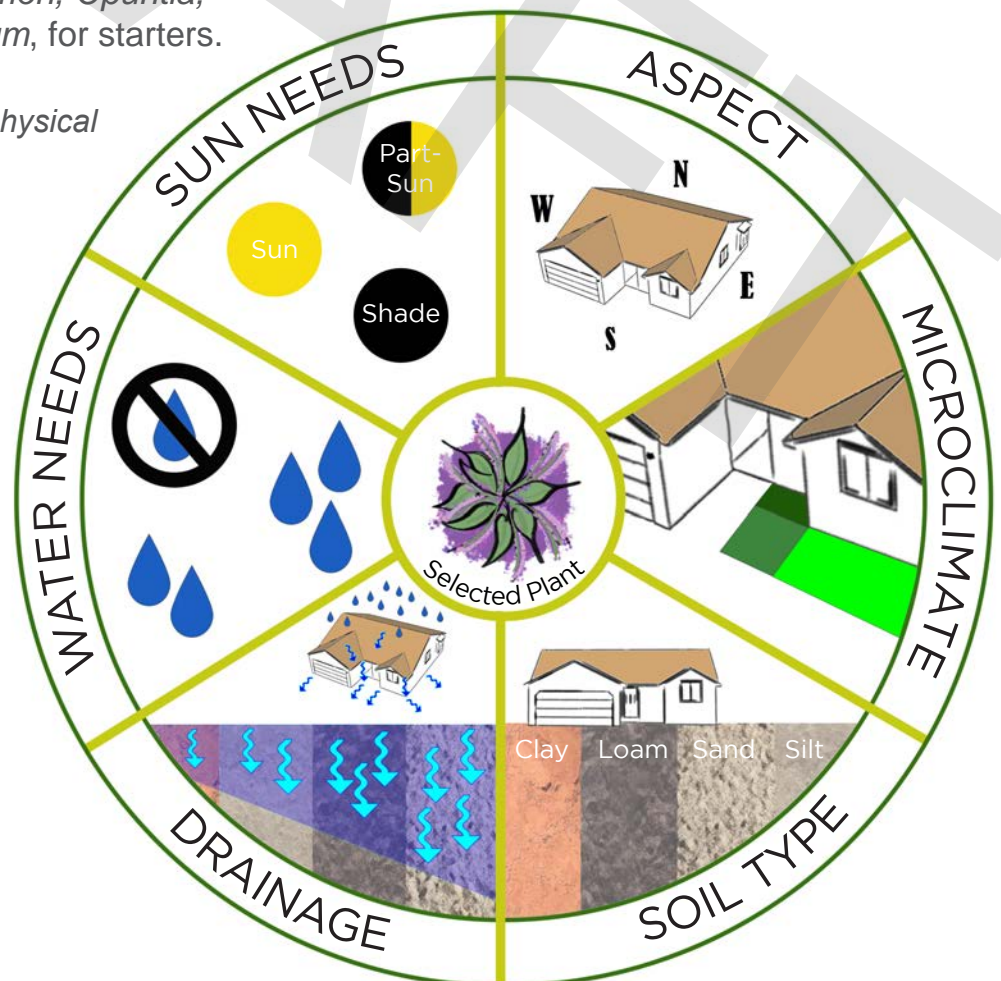
DRAINAGE: Variable – however, many native and low water plants appreciate well-drained sites.

ASPECT: Variable - east, south, west are ideal since they get more sun.

WATER: Very low to moderate.

MICROCLIMATES: Take advantage of warm microclimates around your home (e.g., south side of a building, next to pavement or on a south facing slope) to expand the palette of successful pollinator plants in your garden. Warm microclimates can be excellent sites for plants in the genera *Penstemon*, *Opuntia*, *Echinocereus*, and *Eriogonum*, for starters.

Not sure what these different physical requirements are?
Check out Chapter 1 – Site Characteristics.



Design Examples

Small Project Design

This pollinator garden will fit snugly into a corner. It measures 15' x 15' and 22' diagonally. The tall purple (when in bloom) leadplant shrub anchors the garden. The design has repeating colors and varying textures through a wide selection of native perennial forbs.



Native plants in a newly planted garden with pea gravel and cobble mulch. Photo provided by Deryn Davidson.

Small Project Design Plant List

Shrub



Dwarf Wild Indigo
Amorpha nana

Grass



Sideoats Gramma
Grass
*Bouteloua
curtipendula*



Perennials



Chocolate Flower
Berlandiera lyrata



Prairie Sage
*Artemisia
ludoviciana*



Purple Prairie
Clover
Dalea purpurea



Common Yarrow
*Achillea
millefolium*



Blue Mist
Penstemon
Penstemon virens



Blue Flax
Linum lewisii

Groundcovers



Pussytoes
Antennaria spp.

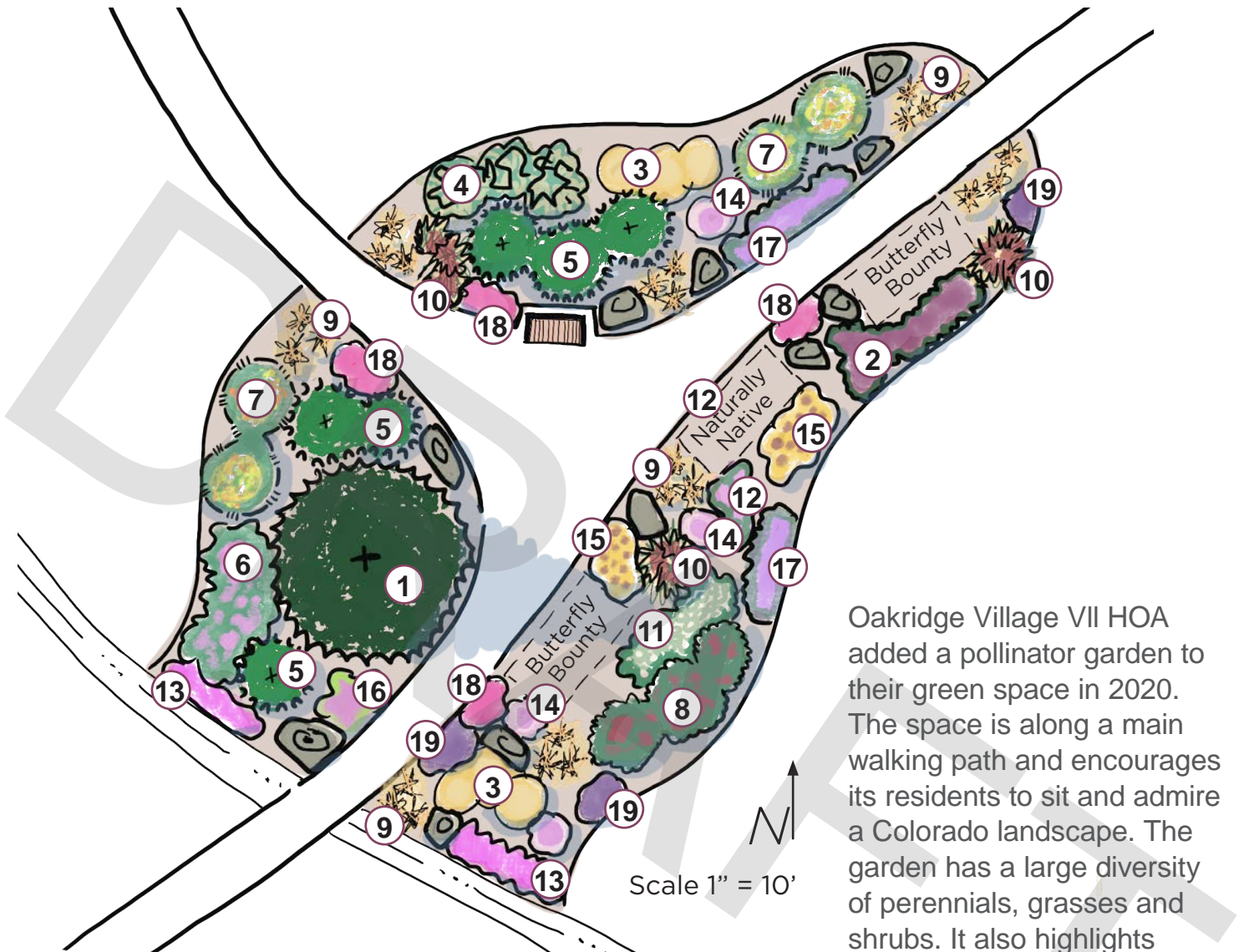


Evening Primrose
*Oenothera
caespitosa*



Spreading Daisy
*Erigeron
divergens*

Medium Project Design - Oakridge Village



Designed by Angie Milewski, BHA Design, and adapted by Jennifer Torrey, City of Fort Collins. ▲

Oakridge Village VII HOA added a pollinator garden to their green space in 2020. The space is along a main walking path and encourages its residents to sit and admire a Colorado landscape. The garden has a large diversity of perennials, grasses and shrubs. It also highlights several [Garden in a Box designs](#).³ The garden uses pea gravel as mulch and has large boulders.

Oakridge Village Garden image:



3. <https://resourcecentral.org/gardens/>

Medium Project Design - Oakridge Village Plant List

Tree



1
Rocky Mountain Juniper
Juniperus scopularum

Shrubs



2
Lead Plant
Amorpha canescens



3
Rubber Rabbit Brush
Chrysothamnus nauseosus var. *nauseosus*



4
Green Ephedra
Ephedra viridis



5
Slowmound Mugo Pine
Pinus mugo 'Slowmound'

Shrubs



6
Woods Rose
Rosa woodsii



7
Shrubby Cinquefoil
Potentilla fruticosa



8
Boulder Raspberry
Rubus deliciosus



9
Blonde Ambition Blue Grama
Bouteloua gracilis 'Blonde Ambition'



10
Undaunted Ruby Muhly
Muhlenbergia reverchonii 'PUNDOIS'

Perennials



11
Western Yarrow
Achillea millefolium



12
Showy Milkweed
Asclepias speciosa



13
Purple Poppymallow, Winecups
Callirhoe involucrata



14
Rocky Mountain Bee Plant
Cleome serrulata



15
Plains Coreopsis
Coreopsis tinctoria



16
Beebalm
Monarda fistulosa



17
Little Trudy Catmint
Nepeta x Little Trudy



18
Red Rocks Penstemon
Penstemon x mexicalli 'Red Rocks'

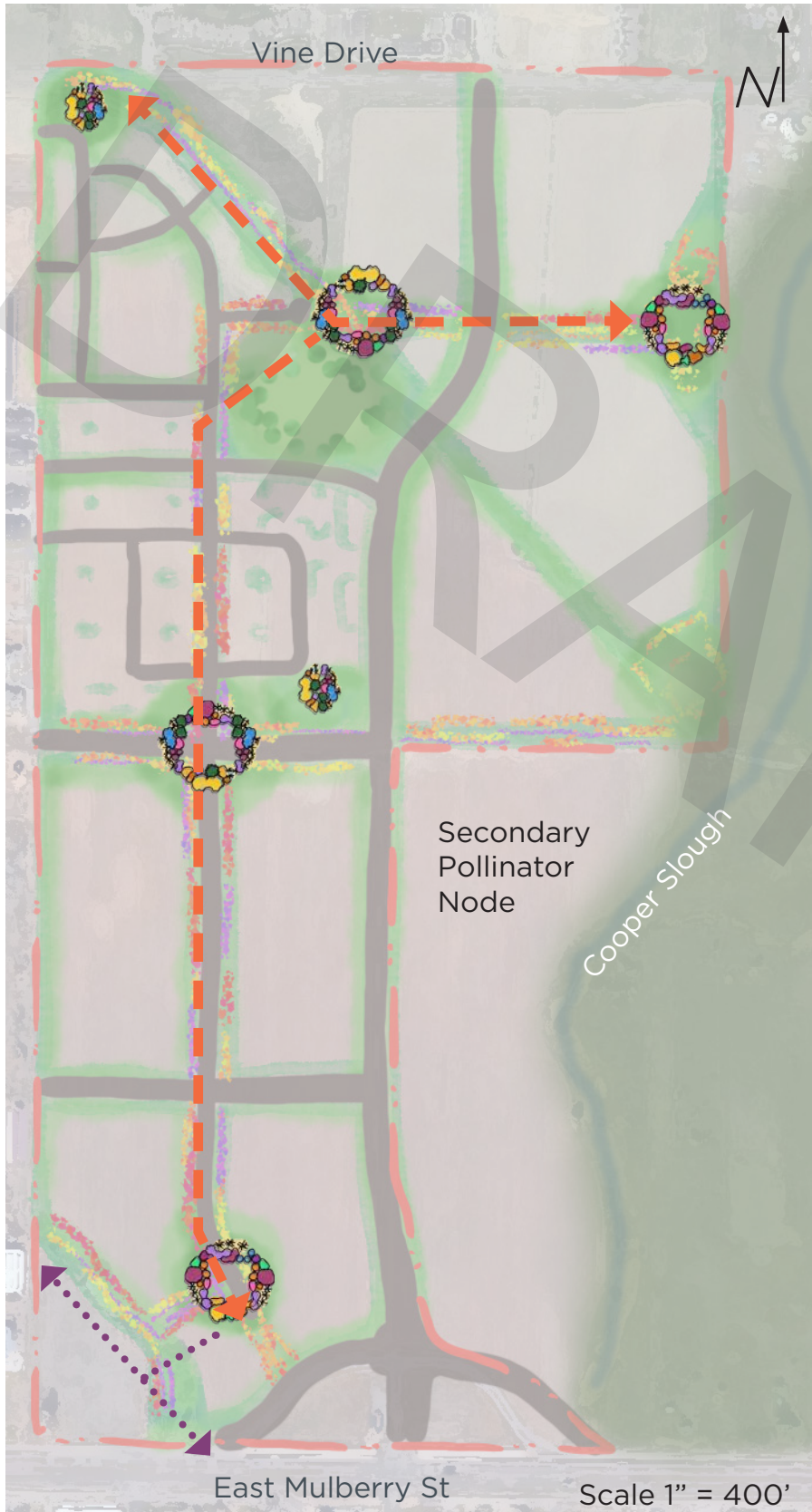


19
May Night Salvia
Salvia nemorosa 'May Night'



Large Landscape-Level Project Design - Bloom





The Bloom Pollinator Plan is an innovative community planning and site design tool meant to establish pollinator habitat at Hartford Homes' 229-acre mixed-use neighborhood in Fort Collins. It supports the City's broader goals of creating pollinator habitat, integrating natural systems, improving aesthetics, implementing sustainable landscapes and stewarding natural resources.



Norris Design collaborated with City staff to develop pollinator habitat guidelines, from planning and design through maintenance best practices. The Master Plan recommends plant species that provide both year-round and seasonal habitat for pollinator species. The Plan also identifies locations for linear pollinator corridors and site-specific design nodes for pollinators of varied species and flight distances.

All landscape throughout the development is irrigated via non-potable water stored in irrigation ponds. Pond edges create additional opportunities for riparian pollinator species within the interior of the community

Key

- 
Primary Pollinator Corridor
 Nodes to be 100 sqft provided at 100' intervals
- 
Primary Pollinator Node
- 
Secondary Pollinator Corridor
 Nodes to be 50 sqft provided at 400' intervals
- 
Secondary Pollinator Corridor

Designed by Norris Design

Large Landscape-Level Project Design - Bloom Plant List

Spring Blooming Plants for Pollinators



Blue Mist Bluebeard
Caryopteris x clandonensis 'Blue Mist'



Dwarf Pinon Pine
Pinus edulis



Prairie Smoke
Geum triflorum



Sonoran Sunset Hyssop
Agastache cana 'Sinning?'



Blue Oat Grass
Helictorichon sempervirens



Carol Mackie Daphne
Daphne x burkwoodii



Butterfly Weed
Asclepias tuberosa



Purple Poppymallow, Winecups
Callirhoe involucrata



Sulphur-flower
Erigonum umbellatum



Standing Ovation Bluestem Grass
Schizachyrium scoparium 'Standing Ovation'

Summer Blooming Plants for Pollinators



Showy Milkweed
Asclepias speciosa



Creeping Oregon Grape Holly
Berberis repens



Blanket Flower
Gaillardia aristata



Blue Flax
Linum lewisii



Indian Grass
Sorghastrum nutans

Fall Blooming Plants for Pollinators



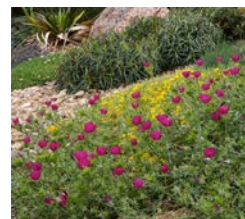
Engelmann's Daisy
Engelmannia peristenia



Giant Goldenrod
Solidago gigantea



Stonecrop
Sedum spectabile



Purple Poppymallow, Winecups
Callirhoe involucrata

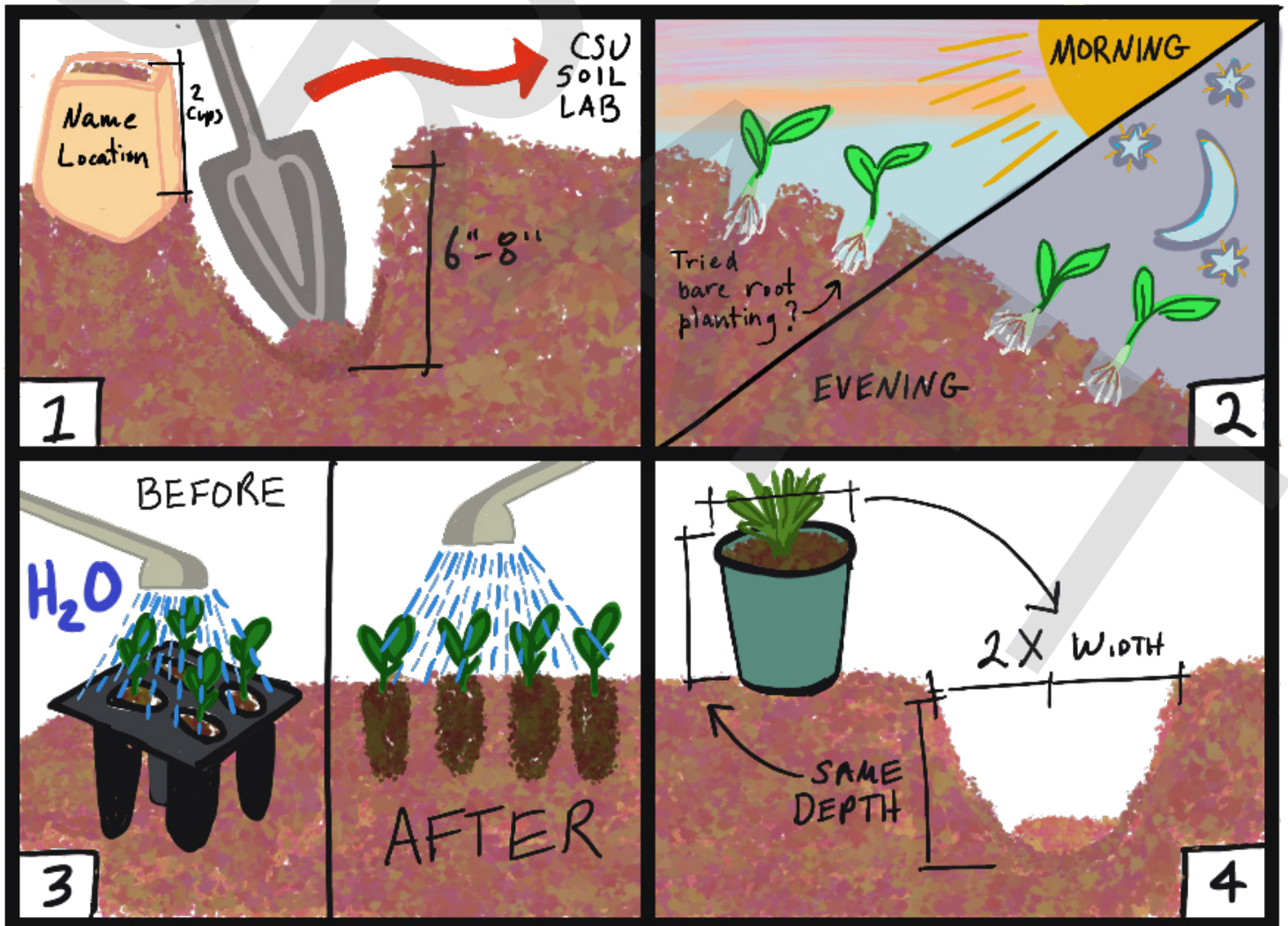


Showy Milkweed
Asclepias speciosa

Installation Tips

Getting your plants in the ground is not quite as simple as digging a hole and dropping them in. Here are a few tips that will help your plants have a smooth transition into your landscape.

- Before planting, make sure you get a soil test done. You may need to amend your soil before planting (see chapter 1 page 2) so that it can support your plants.
- Plant in the morning or evening; avoid planting during the hottest part of the day as this will stress your plants. Similarly, try to avoid planting during peak heat months, such as July and August.
- Water your plants before you put them in the ground and again after you put them in. Transplanting is stressful and they will do better if they are well hydrated.
- The width and depth of the hole you're planting will vary depending on what you are planting. In general, you should dig a hole twice the width and the same depth of the pot your plant is in. The exception to this is trees, which should be 2-3x the width of the root ball and 1-3 inches *shorter* than the root ball.



Irrigation

Pollinator gardens are typically dominated by plants adapted to Colorado's semi-arid climate and require less water than conventional landscaping. **However, all plants need water to get established for the first growing season.**

To avoid over-watering your garden, it is best to create and stick to an irrigation plan. Overwatering can kill low water plants by rotting their roots. A good irrigation plan outlines how much to water and provides a timeline to help you cut back on watering at the appropriate time. Once plants are established, watering should be infrequent and deep. The simplest way to water is using a hose, but you can also install drip irrigation to save time and reduce the amount of evaporation.

Even the best laid plans cannot address all contingencies, like excessive drought or heavy/prolonged rains. Therefore, the focus should be on results – if your plants are healthy above and below ground then your watering is likely appropriate. Frequent monitoring is key. Soil moisture monitoring devices are available to provide feedback but getting your fingers in the soil is an effective and easy way to monitor moisture levels. It is important to check the soil moisture between watering and each time you water, to ensure you are not over or underwatering.

Is the ground moist 6 inches below the surface or only at the surface? It is best to water infrequently and deeply, soaking the soil 6 inches down. Deep, less frequent watering will encourage plants to root deeply and become more drought tolerant.



Example Irrigation Plan for Establishment of a Perennial Bed for Pollinators*

	FREQUENCY	DURATION
Spring and Fall Planting	Once a day	First 3 weeks
	Once every 2-3 days	2 weeks (or end of growing season)
	Once every 7-14 days	As needed through growing season
Summer Planting	Once a day	Through peak heat
	Once every 2-3 days	Until the fall
	Once every week	Until the end of growing season

Plants should receive roughly the same volume of water as the size of the pot the plant came in, per watering event.

* Adjust as necessary given precipitation and condition of plants

Native-dominant pollinator gardens typically require less maintenance once established but some kind of maintenance is inevitable. Proper planning and installation can minimize required maintenance and increase the chances of long-term success. Refer to Chapter 1 for more on garden planning fundamentals.

Weed Management

The use of pesticides in a pollinator garden is strongly discouraged since the chemicals can be taken up by the plant and then transferred to non-target pollinators via pollen and nectar. If pesticides are used be sure to follow all application instructions to the T – the label is the law! The Larimer County Weed District ⁴ can provide advice on weed identification, management, and pesticides.

Mulching

Mulching is a critical practice for gardening to decrease soil temperature, suppress weeds, and conserve soil moisture. When adding mulch to new or existing plants, leave a buffer between the base of plants and mulch. This practice keeps the stems of plants dry and prevents rot. Learn more about the different types of mulch in the Site Characteristics and Planning Chapter.

Weed barrier is not recommended, as it has a negative effect on soil quality and wildlife habitat. Weed barrier will also begin to degrade over time allowing weeds to root through it and it becomes difficult to remove and unsightly.

Keep in mind that many native pollinators are ground-nesting species and require some patches of bare and/or minimally covered soil. You can help them out by not mulching (or only mulching to a depth of 1 inch) in a 6-12 inch circle around the trunk or stems of some plants .

Other

Don't clean up all of your garden in the Fall or Spring. The dead plant material is used by many pollinators to overwinter or nest in. Removing this plant material may expose the pollinators to harsh spring conditions that they will not be able to survive. Wait until May to start cleaning out your garden.

4. (<https://www.larimer.org/naturalresources/weeds>)

**Don't use
Pesticides...**

**They can
kill
Pollinators**



**Dead wood
makes great
nests...**

**Wood
Snags!**



**For the
cavity nesting
pollinators!**

**Don't cut back in
the fall...do less
work and...**



**Leave
Stems &
Grasses**



Appropriate Plant List

When selecting plants, make sure they meet your physical requirements and are appropriate for your space. CSU Extension recommends the following plant list, with plants separated into times of the season they bloom. This list is to help you get started – some of these plants may not be appropriate for your space and there are many more plants that are great for pollinators.

For more plant options (or information on the plants in the list), use the [Fort Collins Plant Database](#) and select filters appropriate for your project.

Additional Resources

Bringing Nature Home - Tallamy (2014), Timber Press

CSU Extension – Creating Pollinator Habitat: <https://extension.colostate.edu/topic-areas/insects/creating-pollinator-habitat-5-616/>

CSU Extension – Attracting Native Bees to Your Landscape: <https://extension.colostate.edu/topic-areas/insects/attracting-native-bees-landscape-5-615/>

Get Involved - Join the Native Bee Watch: <https://arapahoe.extension.colostate.edu/nbw/>

The Bumble Bees of Colorado: <https://www.colorado.edu/cumuseum/sites/default/files/attached-files/thebumblebeesofcolorado-2017.pdf>

Selecting Plants for Pollinators: A Regional Guide for Farmers, Land Managers, and Gardeners in the Southern Rocky Mountain Steppe – Pollinator Partnership: [pdf](#)

US Forest Service – Pollinators: <https://www.fs.fed.us/wildflowers/pollinators/>

US Forest Service – Pollinator-Friendly Best Management Practices for Federal Lands

Xerces Society for Invertebrate Conservation – <https://www.xerces.org/>

FUN FACT

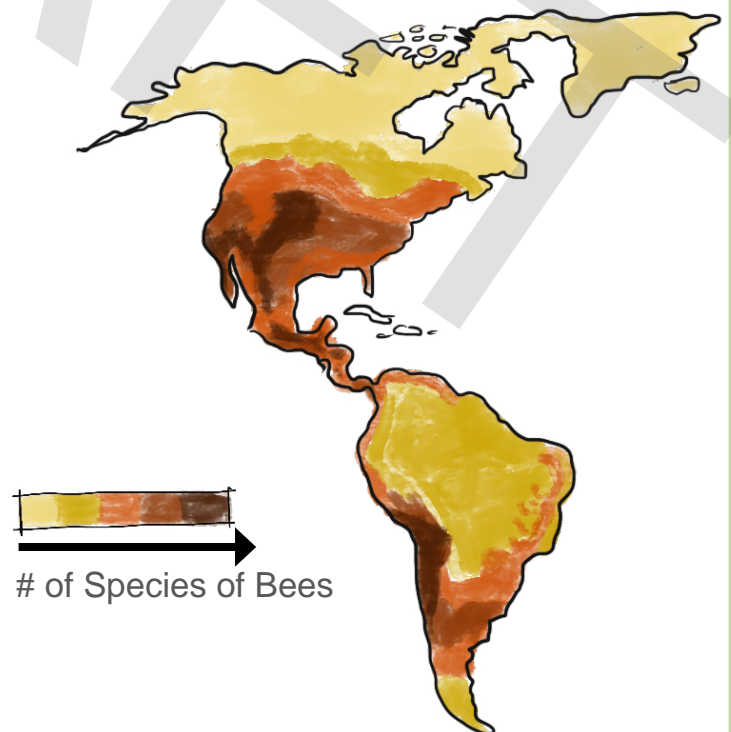
Did you know that Colorado is a bee hot spot?

That's right, we have more than 946 species of bees that call Colorado home!

And almost half (437 species) are found in Larimer County.



Most people are familiar with the European honeybee (a non-native species) and bumble bees ([Colorado has 24 species!](#)). However, there are many more to explore. You can learn more about Colorado's bees through the [Native Bee Watch](#) or Xerces Society.



Orr et al. 2020. Global Patterns and Drivers of Bee Distribution, *Current Biology*, <https://doi.org/10.1016/j.cub.2020.10.053>

How to use the Plant Lists

Tree/ Shrub			

The plant lists are divided by plant types shown in the grey bar. They include Trees, Shrubs, Perennials, Groundcovers, and Grasses.

Scientific Name	Common Name
<i>Amelanchier alnifolia</i> var. <i>alnifolia</i>	Saskatoon Serviceberry

Scientific names include the genus, species, and sometimes subspecies or variety of the plant. These are listed to help identify exact species. Some common names can be used for multiple species with different characteristics such as bloom color, size, or habitat value. If you would like to learn more about a plant listed in a chapter, find the common or scientific name in the plant list to learn more about how it grows. For more information on plants that grow in Northern Colorado check out the digital plant database here: www.fcgov.com/vegetation/

Bloom Time	Scientific Name	Common Name	Nativity
TREE/SHRUB			
	<i>Amelanchier alnifolia</i> var. <i>alnifolia</i>	Saskatoon Serviceberry	FC
	<i>Arctostaphylos x coloradoensis</i> 'Panchito'	Panchito Manzanita	CO

Bloom Time			
A	B	C	D

The Bloom Time information is split into 4 columns, each showing the main color of the plant as it blooms throughout the year. Column A is early spring, exact timing depends on temperatures and precipitation of that year, but usually around April and May. Column B is the main plant color in early summer, late May and June. Column C represents the plant color in the heat of summer, July and August. Column D indicates the color in fall, typically September and October.

Nativity
FC

Nativity describes the closest location to Fort Collins where the plant grows natively.

FC= Fort Collins-(these plants grow native in Fort Collins).

CO= Colorado (these plants grow native somewhere in Colorado, but not Fort Collins).

US= United States (these plants grow native somewhere in the United States, but not Colorado).

Not Native= These plants are not native in the United States.

Height X Width
20'x12'

Height is the vertical measurement of a plant at maturity; width is the measurement of the spread (how wide) you can expect a plant to grow. (Measurements are listed in inches or feet)

Exposure
FS/PS

Exposure tells you how much sun the plant likes. If more than one exposure is listed, the plant will do well in multiple types.

FS= Full Sun
PS= Part Sun
S=Shade

Notes
Water during drought

Any additional helpful information about the plant that is not already listed in another category.

Height X Width	Water Needs	Exposure	Habitat Value	Notes	Programs
20'x12'	Low, Moderate	FS/PS	np/bee, bf; hp/bf; birds; wl	Water during drought	NIC
10"x3'	Very Low-Moderate	FS/PS	np/bee, bf; birds; wl	Needs good drainage; red twigs	NIC

Water Needs
Low, Moderate

Very Low- indicates a plant that requires 3 gallons of water per square foot per season in addition to precipitation.

Low- indicates a plant that requires 8 gallons of water per square foot per season in addition to precipitation.

Moderate- indicates a plant that requires 14 gallons of water per square foot per season in addition to precipitation.

High- indicates a plant that requires 18 gallons per square foot per season in addition to precipitation.

Habitat Value
np/bee, bf; hp/bf; birds; wl

Habitat value comes in many forms. Below is a key to describe what habitat values the plant provides. Sometimes a specific animal or insect type is described in the list such as "bee" or "bird".

np = nectar/pollen

bf = butterfly

hb = hummingbird

s = seeds

frt = fruit

hp = host plant

wl = wildlife

Programs
NIC

Programs hosted by the City of Fort Collins include Nature in the City (NIC) and the Xeriscape Incentive Program (XIP). Nature in the City focuses on plants native to Colorado and Fort Collins where XIP focuses on water savings. Plants listed with both XIP and NIC are supported by both programs.

Chapter 2 Pollinator Plant List

EARLY BLOOMERS PLANT LIST

Bloom Time	Scientific Name	Common Name	Nativity	Height X Width	Water Needs	Exposure	Habitat Value	Notes	Programs
	<i>Amelanchier alnifolia</i> var. <i>alnifolia</i>	Saskatoon Ser-viceberry	FC	20'x12'	Low, Moderate	FS/PS	np/bee, bf; hp/bf; birds; wl	Water during drought	NIC
	<i>Prunus americana</i>	American Plum	FC	10'x15'	Very low-Moderate	FS/PS	np/bee, bf; hp; ft/birds; wl	Thorns, tolerates clay soil	NIC, XIP
	<i>Prunus virginiana</i>	Chokecherry	US	30'x15'	Very low-Moderate	FS/PS	np/bee, bf; hp; ft/birds; wl	Tolerates dry rocky soil	NIC, XIP
	Flowering fruit trees including apples, cherries, peaches, and plums								

SHRUBS

	<i>Ribes aureum</i>	Golden Currant	US	4'x4'	Very low, Low	FS/PS/S	np/bee, bf; ft/birds; wl	Bluish berries, fall color	XIP
	<i>Rhus trilobata</i> var. <i>trilobata</i>	Three Leaf Sumac	US	6'x6'	Very low, Low	FS/PS	nests for bees, ss/birds	Lies sandy soil, good fall color	NIC, XIP
	<i>Salix</i> spp.	Willow	US	Varies	Moderate to High	FS/PS/S	np/bee, bf; hp/bf; ft/birds; wl	Grows in wet, damp soils	NIC

FORBS

	<i>Allium cernuum</i>	Nodding Onion	US	1'x6"	Low-Med	FS/PS	np/bee, bf	dry soils, deer tolerant	NIC
	<i>Callitriche involu-crata</i>	Winecups	FC	6"x2'	Low-Med	S	np/bee, bf	Prefers compost loam soil	NIC
	<i>Eriogonum umbel-latum</i>	Sulphur Flower	CO	6"x1'	Low	S	ss/birds	Fall color	NIC, XIP
	<i>Erysimum</i> spp.	Wallflower	US	10"x4"	Low-Med	S/PS	np/bee, bf	Long blooming	XIP
	<i>Geum triflorum</i>	Prairie Smoke	CO	6"x1.5'	Low	FS	np/bee, bf, o	Whispy blooms	NIC, XIP

Chapter 2 Pollinator Plant List

EARLY BLOOMERS PLANT LIST

Bloom Time	Scientific Name	Common Name	Nativity	Height X Width	Water Needs	Exposure	Habitat Value	Notes	Programs
FORBS									
	<i>Linum lewisii</i>	Blue Flax	CO	2'x2'	Low	S/PS	np/bee, bf, o	Readily seeds	NIC
	<i>Penstemon virens</i>	Blue Mist Pen-stemon	CO	2'x1.5'	Low	S	np/bee, bf, o	Long blooming, native bee	NIC, XIP
	<i>Penstemon eatonii</i>	Firecracker Pen-stemon	CO	1'x1'	Very Low	FS/PS	np/bee, bf; n/hb	Handles rocky, sandy soil	NIC, XIP
	<i>Pulsatilla patens</i>	Pasque Flower	FC	6"x1'	Low	S/PS	np/bee	Earliest of blooms	XIP
	Penstemons (many native and cultivar options, check with local nursery)								
					Very low-Low	FS/PS	np/bee, bf; n/hb	Versatile plants	NIC, XIP



Chapter 2 Pollinator Plant List

MID SUMMER BLOOMERS PLANT LIST

Bloom Time	Scientific Name	Common Name	Nativity	Height X Width	Water Needs	Exposure	Habitat Value	Notes	Programs
TREE									
	<i>Robinia neomexicana</i>	New Mexico Locust	US	10'x12'	Very low-Low	PS	np/bee, hb; ft/ birds; wl	Seeds poisonous to humans	NIC
	<i>Tilia americana</i>	American Linden	US	50'x30'	Med	S/PSS	np/bee, bf; ft/ birds; wl	Tolerates clay soil	NIC
	<i>Gleditsia triacanthos</i>	Honey Locust	US	60'x80'	Med	S	np/bee, bf; np; ft/ birds; wl	Tolerates drought, wind	NIC
SHRUBS									
	<i>Amorpha canescens</i>	Leadplant	US	4'x4'	Low	S/PSS	np/bee, bf	Bluish berries, fall color	XIP
	<i>Sambucus racemosa</i>	Red Elderberry	Non-native	8'x8'	Med-High	S/PSS	np/bee, bf; ft/ birds; wl	Tolerates wet soils	NIC, XIP
FORBS									
	Asters (many native and cultivar options, check with local nursery)			1'x6"	Very low-Low	S/PSS	np/bee, bf; n/ hb	Versatile plants	NIC, XIP
	<i>Anaphalis margaritacea</i>	Pearly Everlasting	US	3'x1'	Low	S/PSS	np/bee, bf; hp	Sandy or gravelly soils	NIC
	<i>Asclepias speciosa</i>	Showy Milkweed	US	3'x1'	Low-Med	S	np/bee, bf; np; ft/ birds; wl	Can tolerate moist soils	NIC
	<i>Campanula rotundifolia</i>	Bluebell Bellflower	US	6"-1'x1'	Low-Med	S/PSS	np/bee, bf	Long blooming	XIP
	<i>Gallardia aristata</i>	Blanket Flower	US	1'x1'	Low	S	np/bee, bf	Long blooming	NIC, XIP
	Salvias (many native options, check with local nursery)				Very low-Low	S/PSS	np/bee, bf; n/ hb	Versatile plants	NIC, XIP

Chapter 2 Pollinator Plant List

LATE BLOOMERS PLANT LIST

Bloom Time	Scientific Name	Common Name	Nativity	Height X Width	Water Needs	Exposure	Habitat Value	Notes	Programs
	<i>Ericameria nauseosus</i>	Rabbitbrush	US	4'x4'	Low	S/PS	np/bee, bf	Bluish berries, fall color	XIP
	<i>Rubus deliciosus</i>	Boulder Raspberry	US	8'x8'	Med-High	S/PS	np/bee, bf; frt/ birds, wl	Tolerates wet soils	NIC, XIP
SHRUBS									
	<i>Agastache foeniculum</i>	Blue Giant Hyssop	US	2'x3'	Dry-Med	S	np/bee, bf; n/hb	Tolerant of deer drought, dry soil	NIC, XIP
	<i>Cleome serrulata</i>	Rocky Mt. Bee Plant (annual)	US	3'x1'	Low	S	np/bee, b; n/hb	Long blooming	NIC
	<i>Coreopsis tinctoria</i>	Plains Coreopsis (annual)	US	2'x4'	High	S/PS	np/bee, bf	Prefers moist, sandy soil	NIC
	<i>Helianthus annuus</i>	Common Sunflower	US	1.5-10'x1'	Med	S	np/bee, bf	Dry, disturbed clays, sand	NIC
	<i>Heterotheca villosa</i>	Hairy False Golden Aster	US	2'x1.5'	Low	S	np/bee, bf	Dry sandy soils	NIC, XIP
	<i>Solidago spp.</i>	Goldenrod	US	1.5-5'x 1-3'	Dry-Med	S	np/bee, bf; hp/ fly, moth	Insect magnet	NIC, XIP
FORBS									