CITY OF BLUE EARTH
AGENDA
CITY COUNCIL WORKSESSION
MONDAY, APRIL 20, 2020 @ 4:30 P.M.

Call to order.

Roll call.

Old Business.
a. Pollinator-Friendly Yards

New Business.

Adjourn.

By Order of the Blue Earth City Council

Post @ City Hall-Friday, April 17, 2020 through Monday, April 20 , 2020
Distribute to Mayor & Council members-Media & file

Backyard Beekeeping Request

- What is the recommendation of the city's Planning Commission regarding beekeeping?

- What data did you use to make that decision?

- I want to state as clearly as I can that I am not a fan of mosquitoes. I don't like them and I think they ruin summer. I would never argue to discontinue spraying for mosquitoes. I want you to understand that. I'm not here to lecture you on pesticide use. Instead, let me share with you a little of what I've learned about bees.

- Will my bees fly over to the neighbors flowers and sting them? No. Bees do not forage where their colony is. What they do is leave their colony and go at least 1 mile away and then work their way backward. If they're desperate and there's no other food they will forage nearby but they prefer not to because they don't want to attract or alert predators like wasps to where their colony is. Also, they don't forage where they defecate. They never defecate side the hive. Ever. Not even during our long, cold winters. In the winter they do "cleansing flights"if the temperature warms up enough for them to survive a short period outside the hive. If I put my hive in my garden, my bees won't pollinate my garden. They're going to go somewhere else. I'll see bees in my garden but probably wouldn't be my bees. They're probably some of the over 2,000 other varieties of bees native to Minnesota.

Mosquito Spray - Pesticide

I contacted the Minnesota Honey Producers and spoke to Joseph Coffey. He's a * Certified Master Beekeeper in Burnsville and owns C&C Apiaries.

According to Mr. Coffey;

Honeybees return to their colonies at dusk so if the applicator sprays during the night using a non-volatile pesticide (and one that will evaporate) there is usually not problem as long as they are not spraying directly at or close to a colony. There are also some regulations against spraying plants that are in bloom because of the contamination of nectar and pollen.

Colony loss in MN is high due to the winter but it depends on the health of the colony and how well it is wrapped for winter. The improper management or the lack of management results in high losses due to our extreme cold.

Next I contacted a woman from Massachusetts who was part of a test who said this about spraying;

I was part of the test for the state of MA for effects of aerial spraying to hives. I did nothing to protect my hives. I saw ZERO impact and no dead bees. Well, there were about 6 dead bees that they collected. If you want to cover your hives you can but no worries if you don't. I know a large scale bee keeper (70+ hives) that covered first go around and didn't second time and saw no impact.

Let's talk about threats to bees

-Weather is the biggest threat - too hot or too cold. Beekeepers learn how to manage for temperature extremes.

- Varroa destructor mites - parasite that feeds on bees. If beekeepers don't manage their colonies to reduce mite levels, there is a 90-95% chance the colony will die within 2 years from effects of the mites and the bee viruses they carry
- Small hive beetles
- Wax moths
- Mice

- Skunks
- Bears! But nor for us.
- Chalkbrood disease
- American Foulbrood
- European Foulbrood
- Nosema - parasitic fungus
- Deformed wing virus
- Black queen cell virus
- Israeli acute paralysis virus
- Sacbrood virus
- Tracheal mites
- Pesticides

My Ask

-My ask is that you allow backyard beekeeping within Blue Earth city limits. Don't issue a blanket denial for this hobby because the city sprays for mosquitos. I would guess that most hobby beekeepers are interested in bees and what they do for us. Leave it up to the individual to decide how and where to spend their time and money. There are many more risks to bees than spraying for mosquitos. I think the reward is greater than the risk.

What type of Project is Right for You ?

Plants, shrubs and trees can all provide pollinator habitat.

The most important pollinator habitat project you can create is one that is long-term. Providing reliable food and nesting resources year after year will best support Minnesota pollinator populations.

Planning how you can best maintain your project will help ensure success. See the chart below to decide what type of project works best for you and your neighborhood.

Guide to Project Types:

	pockets of habitat:* 22	flowering trees and shrubs: 24	pollinator lawn: 26	pollinator meadow: 28
type	native plants (potted)	shrubs and trees (potted)	pollinator lawn (from seed)	native plants (seeds or potted)
difficulty	•••	•	••••••*	•••••••
cost	•••	••••••••	••	•••••
installation	• sod removal • sheet mulching	• dig holes • plant trees/shrubs	• over-seed • remove lawn and re-seed	• solarization • sheet mulching • remove lawn + re-seed
maintenance	• weed, especially in first few years • divide plants as they outgrow their space	• some may need winter protection from rabbits • prune annually	• weed, especially in first few years • over-seed to promote more flowers • raise mower height	• weed, especially in first few years • mow twice yearly
benefits	• easier to maintain • best habitat value for the least amount of effort • a great way to start gardening!	• easiest to maintain • adds habitat value + neat appearance • best for smaller lots + preference for a managed look	• can be difficult to establish • less habitat value than a native planting • less mowing than a tradional lawn	• most work to maintain • best habitat value • best for larger lots

*recommended for new gardeners

*it can be difficult to establish flowering plants in a dense turf lawn

Substitutions *for selected species*

Use plants found within their natural range, this helps protect nearby native plant communities and provides plant species that are sure to be compatible with local insect populations.

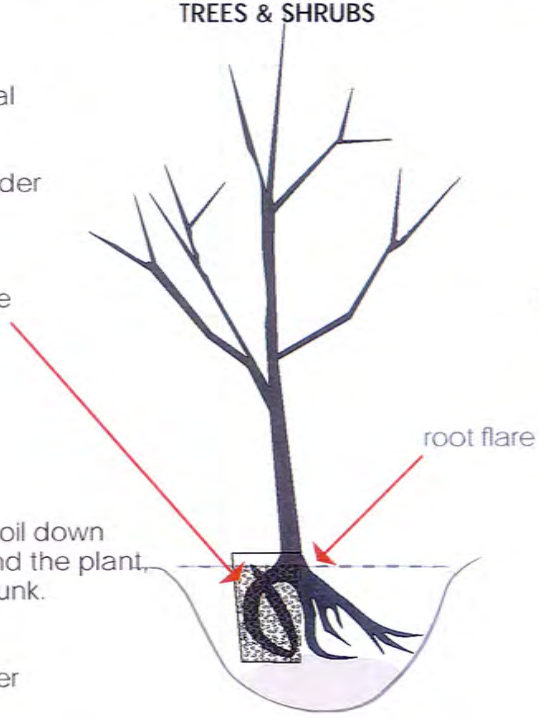
Fox Sedge:	Pussy Toes:	Blue Eyed Grass:	Blue Vervain:	Swamp Milk-weed:	Nodding Onion:	Joe Pye Weed:	Blue Lobelia:	Calico Aster:
Sweet Flag, Blue Flag, Big Bluestem, Indian Grass, Long Beaked Sedge*, Tussock Sedge*, Hop Sedge*, Wood Sedge*, River Oats,	Wild Stawberry*, Trout Lily*, Hepatica*, Bloodroot*, Rue Anemone, Common violet*, Bishop's Cap, Spring Beauty* Creeping Phlox•, low growing Sedums•	Bishop's Cap, Wild Columbine, Wild Ginger*, Bloodroot,* Hepatica*, Large-flowered Bellwort*, Foam Flower*, Alumroot, Calamintha•, Golden Alexanders	Culver's Root, Mist Flower, Michigan Lily, Wild Phlox, Garden Phlox•, Meadow Rue, Marsh Blazingstar, Rattlesnake Master, Ironweed, Red Columbine, Rose Mallow	Poke milkweed *, Turtlehead*, Sensitive Plant, Jacob's Ladder*, Blue Giant Hyssop*, Cardinal Flower*, Foxglove Beards-tongue* Thimbleweed	Larkspur, Shooting Star, Rue Anemone*, Pasque Flower, Prairie Smoke, Wood Lily, Wild Lupine, Bishop's Cap*, Spotted Bee-balm*, Bottle Gentian	Angelica, Great Indian Plantain*, Boneset, Button Bush, Pagoda Dogwood*, Ninebark*, Queen of the Prairie, Sweet Joe Pye weed* Ironweed	Turtlehead, Self Heal, Monarda*, Obedient Plant, Cardinal Flower, Woodland Phlox, Virginia Mountain Mint*, Wood Lily, Rose Mallow, Hairy Wood Mint*	New England Aster*, Smooth Blue Aster, Stiff Goldenrod*, Woodland Phlox, Virginia Mountain Mint*, Bottle Gentian, Button Blazing Star*, Frost Aster, Giant Hyssop*

*• non-native * Part Shade to Shade option.*

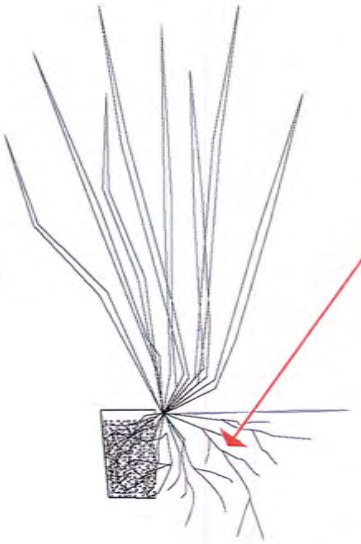
Planting Tips *for new gardeners*

TREES & SHRUBS

- Prepare your new garden bed. Use methods found on BWSR's Creating Residential Pollinator Habitat page
- Dig a hole as deep and 2-3 sizes wider than the pot. Remove the pot.
- Loosen roots and remove any roots that have growing a circle around the base of the plant.
- The soil level should be just below the flare of the tree or shrub and the base of your plant.
- Spread roots, then re-fill hole. Tamp soil down gently around the roots. Mulch around the plant, but don't place mulch against the trunk.
- Water immediately after planting, then once a week for the first summer



PERENNIAL PLANTS



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- Remove the pot.
- Loosen roots and remove any roots growing in a circle around the base of the plant.
- Mulch around the plant, but don't place mulch against the stem.
- Water immediately after planting, then once a week for the first summer.

BWSR bwsr.state.mn.us/creating-residential-pollinator-habitat

Rain Garden *for Pollinators*

Your pollinator planting can do double duty and improve water quality if it is also a rain garden! These plants will also work well in moist garden conditions. The selected species in this garden and bloom times make it a great butterfly garden.

Fox Sedge
Adds texture and beautiful seed heads to a rain garden. It is a tough plant that can easily handle the saturated conditions of a raingarden basin.

FS — 5 plants

Pussy Toes
These low-growing fuzzy plants slowly form carpets of foliage. In the spring their flowers rise up gracefully 6"-8" above their leaves.

PT — 12 plants

Blue Eyed Grass
is a bunch forming early summer bloomer. Not a true grass, its dainty sky blue flowers brighten the early summer garden, and is a great edging plant.

BE — 10 plants

Hoary Vervain
Bright sprires of color to the summer garden that look great against the bright green of Fox Sedge. It is a host to Common Buckeye butterfly larva.

HV — 4 plants

Swamp Milkweed
The bright flowers of Swamp Milkweed are unforgetable, and much loved by pollinators. It tends to spread, plan to divide this plant when it outgrows your garden space.

SM — 4 plants

Prairie Onion
Lavender colored stary blooms in mid-summer rise from bright green clump forming flat-leafed foliage. Will slowly create colonies as the plants become more established.

PO — 5 plants

Joe Pye Weed
Covered with mid to late summer blooms, Joe Pye is a butterfly magnet. It will spread, be prepared to divide this plant by the third year to share with others!

JP — 2 plants

Blue Lobelia
howy spires attract bees and butterflies and blooms well into the fall. Can take part shade conditions, but needs moist soil.

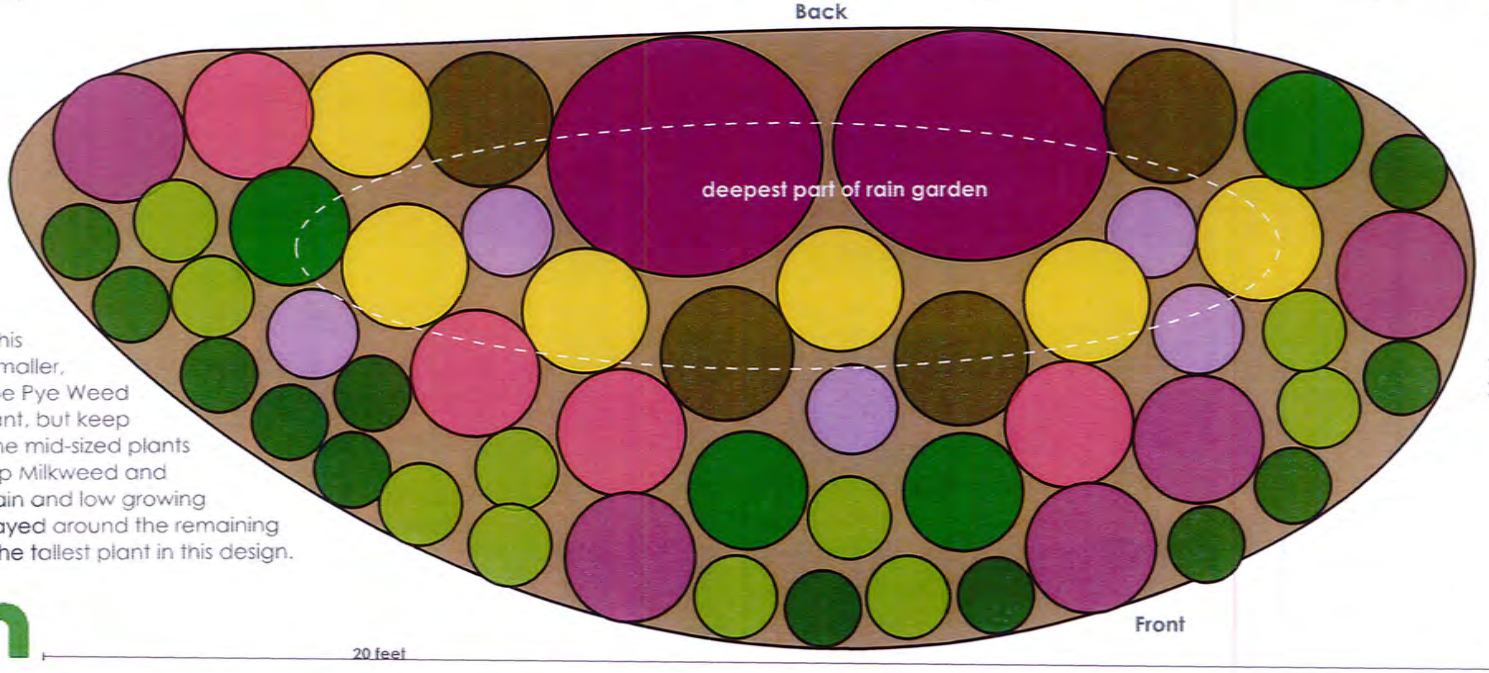
BL — 5 plants

Flat-Topped Aster
Enjoyed by diverse pollinators as well as rabbits and deer. If you have trouble with browsing wildlife, consider substituting with Rattlesnake Master.

FT — 3 plants

Bloom Time

May — *June* — *July* — *August* — *September-Oct.*



Note:
To make this planting smaller, reduce Joe Pye Weed to one plant, but keep some of the mid-sized plants like Swamp Milkweed and Blue Vervain and low growing plants arrayed around the remaining Joe Pye, the tallest plant in this design.

Featured Pollinator:
American Lady
Vanessa virginiensis

Caterpillar hosts include
Pussy Toes
Nectar plants include
Swamp Milkweed, Joe Pye Weed, Blue Lobelia, and Flat-Topped Aster

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