

UNIVERSITY OF MINNESOTA | EXTENSION
MAKING A DIFFERENCE IN MINNESOTA: ENVIRONMENT • FOOD & AGRICULTURE • COMMUNITIES • FAMILIES • YOUTH



Planting for Pollinators
GROWING A SUPPORTIVE LANDSCAPE

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Why Pollination Matters

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Pollination Feeds the World

- **1 in 3** bites of food comes from pollination
- Economic value of pollinators
 - **Global \$162 billion**
 - **US \$15.2 billion**



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Pollination Looks Good

- Plants create wild spaces that inspire
 - National & local parks
 - Greenspaces in cities
 - Community gardens
- Without pollinators, these places would not survive



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Pollination Holds the World Together

- Pollination creates seeds
- Seeds lead to healthy ecosystems
 - Stabilizes the soil & prevent erosion
 - Buffers waterways
 - Stores carbon
 - Provides habitat for other wildlife




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Agents of Pollination in MN

- Bees
- Flies
- Beetles
- Butterflies
- Moths
- Wasps




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Bees are MVPs (*Most Valuable Pollinators*)

- **Effective & Efficient**
 - Use both pollen & nectar
 - Have specialized branched hairs to carry pollen
 - Travel far & return to nests
 - Improve pollination success by focusing on one type of flower at a time (“*Constancy*”)



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Supporting Native Pollinators

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Basic Needs

- Food
- Water
- Shelter
- Safety



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Provide Lots of Food

- Better nutrition
- Differing sizes
- Simple shapes
- Staggered bloom time



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Make Food Easy To Find

- Grow in masses
- Choose scented varieties
- Pick the right colors for your pollinator
- Look for specific petal markings (Nectar guides)



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Grow Healthy Plants

- Brighter colors
- More blossoms
- Better (more) food
- Fewer pests
- Longer lifespan



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Avoid Unnecessary Pesticides

- Is the problem fatal or cosmetic?
- Will it be an ongoing problem?
- Are there non-chemical ways to manage it?



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Let Things Get Wild

- Keep some plant litter
- Leave areas un-mulched
- Let wildflowers live in your lawn



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Plants for Pollinators

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Bee Lawns

- Low-growing flowers with traditional grass
- Source of season-long food
- Good for slopes & hard-to-mow places
- Reduces mowing




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Plants for Bee Lawns

- Ground Plum
- Lance-leaf Coreopsis
- Lance-leaf Self-heal
- Calico Aster
- Dutch White Clover
- Creeping Thyme
- Snowdrops
- Crocus






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Shrubs & Trees

- Flower early
- Lots of blossoms
- Source of food for pollinators coming out of hibernation

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Shrubs & Trees

- Apple/crabapple
- Basswood
- Cherries
- Dogwoods
- Lilac
- Maple
- Pussy Willow
- Spirea



Pussywillow



Maple



Crabapple

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Native Grasses

- Creates habitat for stem- & soil-mining pollinators (especially butterfly larvae)
- Provides nest-building material
- Creates wintering spaces



Little Bluestem

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Native Grasses

- Big Bluestem
- Little Bluestem
- Lake Sedge
- Prairie Dropseed
- Sideoats Grama
- Switchgrass



Prairie Dropseed



Indian Grass

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Flowers for Shade

- Bloodroot
- Canadian Columbine
- Goatsbeard
- Great Blue Lobelia
- Poke Milkweed
- Trout Lily
- Virginia Waterleaf



Canadian Columbine

Virginia Waterleaf

Goatsbeard

Yellow Trout Lily


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Spring Perennial Flowers (Apr-Jun)

- Allium (Chives)
- Dutchman Breeches
- Prairie Phlox
- Trillium
- Wild Geranium
- Wild Lupine
- Virginia Waterleaf



Wild Geranium

Allium

Creeping Phlox

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Summer Annual Flowers (Jun-Aug)

- Marigold
- Rudbeckia
- Salvia
- Snapdragon
- Sunflower
- Zinnia



Salvia

Marigold

Sunflower

Zinnia

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Summer Perennial Flowers (Jun-Aug)

Summer Perennials

- Beebalm
- Catmint
- Coneflower
- Coreopsis
- Echinops
- Giant Hyssop
- Purple Prairie Clover



Bee Balm
Echinops
Bee Balm
Coreopsis

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Fall Perennial Flowers (Aug-Oct)

- Asters
- Blazing Stars
- Goldenrod
- Joe-Pye Weed
- Milkweed
- Sedum
- Sneezeweed



Asters
Sneezeweed
Goldenrod
Milkweed

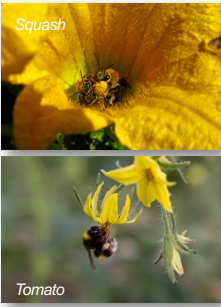
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Fruits & Vegetables

- Herbs (Basil, Thyme, Oregano, Dill, Fennel)
- Berries (Raspberry, Strawberry)
- Broccoli
- Melons & Squash
- Onions
- Peas
- Tomatoes

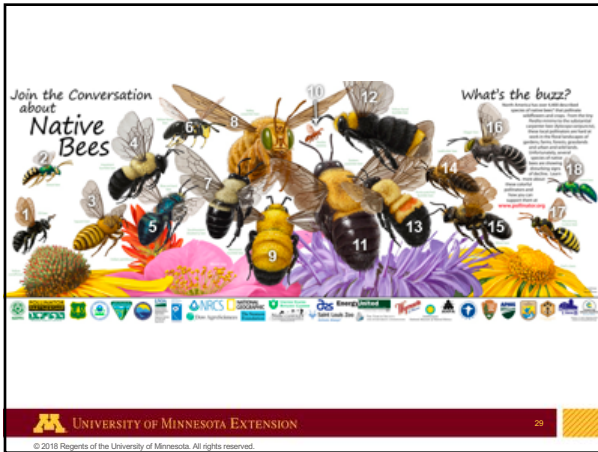


Squash
Tomato

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CLASS RECAP

To support local pollinators

1. Grow plants that provide food or shelter
2. Grow many types of flowers
3. Plant flowers in clusters/masses
4. Keep the plants healthy
5. Avoid pesticides if possible
6. Let the area grow a little wild



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LEARN MORE

You can learn more about **Planting for Pollinators** from the following sources.

- U of M Extension Program – Flowers for Pollinators
z.umn.edu/f4pollinators
<https://flowersforpollinators.wordpress.com>
- U of MN Bee Lab
<http://www.beelab.umn.edu>
- MN Department of Natural Resources
<http://dnr.state.mn.us/pollinators/index.htm>
- Ramsey County Master Gardeners
<http://www.ramseymastergardeners.org/>

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