



# Lawns to Legumes Program



# Concerns

Research is showing significant declines in insects across the world – raising alarms



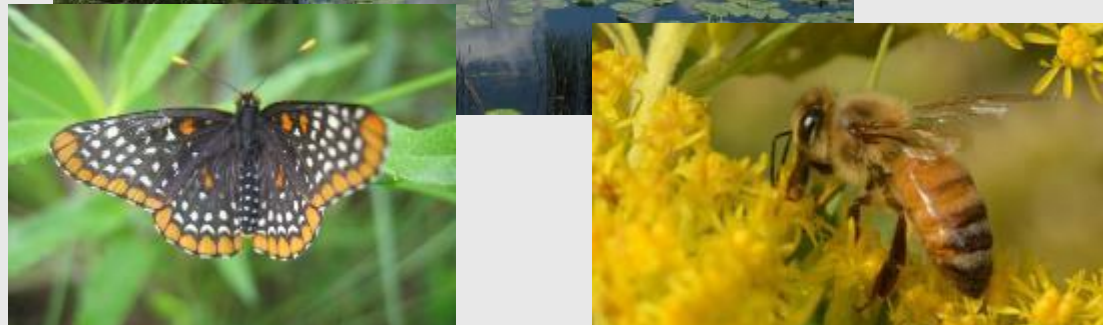


# Concerns

Recent research shows significant declines in insects across the world – raising alarms



More than 40% of insect species are declining



# Concerns

Bird species are also in significant decline with 3 billion less birds in North America since 1970

Rosenberg et al.  
2019



## Response to Declining Pollinator Populations

Populations of the Rusty Patched Bumblebee have declined more than 80% in 20 years!





# BWSR Efforts

## Pollinator and Biodiversity Toolbox



The information below is intended to guide pollinator habitat projects through planning, installation and management. There is a focus on key steps for incorporating pollinator habitat and biodiversity into BWSR funded programs that can include efforts on conservation lands, natural areas and urban landscapes.



Identifying Programs and Funding



Creating Habitat in Conservation Lands and Natural Areas



Creating Residential Pollinator Habitat



Assessing & Prioritizing Project Sites



Selecting Plants & Seed Mixes



Preparing for Planting



Planting



Maintenance



Community Outreach

## Pollinator Plan

January 5, 2019



Minnesota Board of Water and Soil Resources  
570 Lafayette Road North  
St. Paul, MN 55155  
651-296-3767  
[www.bwsr.state.mn.us](http://www.bwsr.state.mn.us)

# BWSR Efforts

Habitat Enhancement



Lawns to Legumes



Conservation Easements  
(around 300,000 ac.)



Habitat Friendly Solar



Riparian Plantings





# Minnesotans WANT to help pollinators

(Pilot Program Started June 2019)

## Funding Source:

Legislative Citizen Commission on Minnesota Resources,  
Environment and Natural Resources Trust Fund



## Program Focus:

Establish pollinator habitat projects on residential landscapes across Minnesota to support the Rusty patched bumblebee and other pollinators.







# Minnesota Board of Water and Soil Resources (BWSR)

## Larger Vision of Lawns to Legumes:

To protect pollinator populations and other wildlife through **building a movement** that achieves large-scale installation of habitat and resilient landscapes

There is a role for all Minnesota residents



Completed projects receive this sign



# m1 BOARD OF WATER AND SOIL RESOURCES

**Mission:** To improve and protect MN's water and soil resources by working in partnership with local organizations and private landowners.

**Thanks** to all partners and many others for contributions!





# Lawns to Legumes Phase 2

## Three Components

- **Public Education and Outreach Campaign**

- Technical Resources for funded and DIY projects
- Over 130 articles published on program (Updated Communications Plan)
- Collaboration with the Minneapolis College of Art and Design

- **Individual Landowner Support**

\$300 Grants, Coaches, Workshops (Around 14,000 applications submitted)

- **Demonstration Neighborhoods**

- \$20k-\$40K Grants for local organizations to build pollinator corridors across residential areas
- Can now include community and educational spaces



Artist: Aaron Bennett, Student,  
Mpls College of Art and Design,  
#Lawns2Legumes

# Lawns to Legumes Program

## Habitat Guide and Planting Template

Resources for funded and DIY projects

### Planting for Pollinators

Principles and Design for Residential Pollinator Habitat

**YOUR YARD CAN BEE THE CHANGE!**

Small (100 sq ft)  
Early-blooming (100 sq ft)  
Core (100 sq ft)  
Backyard (100 sq ft)

### Shade Garden for Pollinators

These are great native plant options for a shady yard. The plants featured here also selected for their beautiful foliage as well as containers bloom from spring to fall.

<p><b>Virginia Creeper</b> This climbing vine is a great choice for a shady yard. It has heart-shaped leaves and small, white flowers. It is a good choice for a shady yard because it can grow in partial shade and it is a good choice for a shady yard because it is a good choice for a shady yard.</p>	<p><b>Spotted Yellow Toadflax</b> This perennial plant is a good choice for a shady yard. It has yellow flowers and green foliage. It is a good choice for a shady yard because it can grow in partial shade and it is a good choice for a shady yard because it is a good choice for a shady yard.</p>	<p><b>Asplenium</b> This fern is a good choice for a shady yard. It has green foliage and small, white flowers. It is a good choice for a shady yard because it can grow in partial shade and it is a good choice for a shady yard because it is a good choice for a shady yard.</p>	<p><b>Black-eyed Susan</b> This perennial plant is a good choice for a shady yard. It has yellow flowers and green foliage. It is a good choice for a shady yard because it can grow in partial shade and it is a good choice for a shady yard because it is a good choice for a shady yard.</p>	<p><b>White Trillium</b> This perennial plant is a good choice for a shady yard. It has white flowers and green foliage. It is a good choice for a shady yard because it can grow in partial shade and it is a good choice for a shady yard because it is a good choice for a shady yard.</p>	<p><b>Blue Hydrangea</b> This perennial plant is a good choice for a shady yard. It has blue flowers and green foliage. It is a good choice for a shady yard because it can grow in partial shade and it is a good choice for a shady yard because it is a good choice for a shady yard.</p>	<p><b>Common Bluebell</b> This perennial plant is a good choice for a shady yard. It has blue flowers and green foliage. It is a good choice for a shady yard because it can grow in partial shade and it is a good choice for a shady yard because it is a good choice for a shady yard.</p>	<p><b>Calico Pansy</b> This perennial plant is a good choice for a shady yard. It has colorful flowers and green foliage. It is a good choice for a shady yard because it can grow in partial shade and it is a good choice for a shady yard because it is a good choice for a shady yard.</p>
---	---	--	--	---	--	---	--

Scale: 1 inch = 1 foot

Notes: This diagram is a guide only. It is not intended to be used as a blueprint. It is intended to be used as a guide only. It is not intended to be used as a blueprint. It is intended to be used as a guide only. It is not intended to be used as a blueprint.

Notes: This diagram is a guide only. It is not intended to be used as a blueprint. It is intended to be used as a guide only. It is not intended to be used as a blueprint. It is intended to be used as a guide only. It is not intended to be used as a blueprint.



Section showing a boulevard planting





# The Lawns to Legumes Program

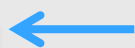
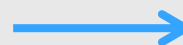
## Four Practice Types



### 1) Native Pocket Plantings

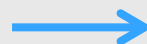
- A. Raingardens
- B. Boulevard Plantings
- C. Lakeshore Buffer

### 2) Beneficial Trees and/or Shrubs



### 3) Pollinator Lawns

### 4) Pollinator Meadows



**So far:**

- 1.2 million square feet of pollinator habitat -
- 279 pollinator pocket plantings
- 70 bee lawn projects

# Lawns to Legumes Highlights

## Highlights:

- Around 100 volunteer coaches
- MN Environmental Initiative Award for “Large-scale Sustainability Impacts”
- 36 workshops (over 2,000 people attended)
- Featured in Oprah Magazine and Mother Earth News
- Over 175,000 visits to program webpages (access to pollinator resources)
- Applications for assistance from all parts of Minnesota
- Equity focus of the program





# Lawns to Legumes Future - Building Momentum



RPBB: Nicole Gerjets, MNDNR

- Increase awareness about the wide range of at-risk species and the role of individual residents (recognize accomplishments)
- Launch Phase 2 Individual Support and Demonstration Projects and support DIY projects
- Support other states and countries interested in replicating this MN model



## Thank You!