

## Extension Master Gardener Flower Gardens Provide Critical Habitat for Pollinators

### The Situation

Many bee species continue to experience major challenges. Commercial honey beekeepers lost 502,000 colonies (17%) across the nation in the fourth quarter of 2016 (NASS, USDA). This is a significant concern because North Dakota leads the nation in honey production. Native bees are facing threats to their existence. For the first time, a bumble bee has been listed as endangered in the United States. The range of the rusty patched bumble bee (*Bombus affinis*) used to extend into ND. However, this species has not been detected in ND since the 1990s.



### Extension Response

The Extension Master Gardener (EMG) Program is concerned about the loss of pollinator habitat and began an educational initiative to promote the planting of home pollinator gardens. In 2016, the EMG Program funded, designed and built 19 public pollinator gardens in 16 counties. Locations included the International Peace Gardens, the Chahinkapa Zoo, the state 4-H Camp and the ND School for the Deaf in 2017. These gardens serve as teaching gardens. Extension Master Gardeners and their agents hold workshops and give tours in the gardens to educate people on the importance of pollinators, which native and ornamental flowers to plant for continuous bloom, how to use pesticides safely, and how to promote bee nesting habitat.

A packaged program is available and contains two Extension publications, a PowerPoint for adults, and a lesson plan for youth. The goal is to inspire homeowners to build new pollinator gardens or to retrofit existing gardens to become an oasis for pollinators for the entire growing season. As an incentive, and as a means of tracking impact, homeowners can apply for a free EMG Certified Pollinator Garden sign if they meet certain requirements.

### Impacts

In 2017, nine county EMG Programs held 14 pollinator garden workshops, presentations, and tours. They generated 2 television interviews, 2 radio interviews, and 3 newspaper articles. In total, 213 adults and 822 youth participated in the educational programming.

For 2016-17, the EMG Program has certified 70 gardens totaling 421,487 square feet. Sixty-one of the gardens are in North Dakota and comprise 172,082 square feet. The remaining 9 gardens and meadows are in Minnesota, South Dakota, and Montana and total 249,405 square feet. This includes large plantings in Minnesota and Montana.

### Public Value Statement

The Extension Master Gardener is promoting the planting of pollinator habitat to nourish bees and butterflies.

### Primary Contact

Esther McGinnis  
Extension Horticulturist  
Department of Plant Sciences  
701-231-7971  
[Esther.mcginis@ndsu.edu](mailto:Esther.mcginis@ndsu.edu)

### Collaborators

Janet Knodel, Extension Entomologist  
Amelia Doll, Burleigh County 4-H Agent

### Resources

#### Bee-utiful Landscapes: Building a Pollinator Garden

<https://www.ag.ndsu.edu/publications/lawns-gardens-trees/bee-utiful-landscapes-building-a-pollinator-garden>

#### Butterfly Gardening in North Dakota

<https://www.ag.ndsu.edu/publications/lawns-gardens-trees/butterfly-gardening-in-north-dakota>