

Increase Pollinators including the Honey Bee Population

Insect pollinators are responsible for 1 of every 3 bites of food that we eat.

Pollinators are increasingly challenged by lack of good nutrition, places to nest and pesticides in today's agricultural, suburban and urban landscapes.

<http://ento.psu.edu/pollinators/resources-and-outreach/bees-bugs-blooms-2013-a-pollinator-trial>

Some of the features of Pollinator Gardens include:

- Native floral resources that bloom throughout the growing season so that there is always nectar and pollen available to pollinators
- Nesting habitat for pollinators
- Water resources
- These gardens also serve as a refuge from pesticide and other chemical exposure and provide a habitat with native plants.

Ellis, K. 2013. Identifying and Promoting Pollinator-Rewarding Herbaceous Perennial Plant Species. Final Report to Pennsylvania Department of Agriculture. 16pp.

Currently at PRN, we have a total on 13 working beehives. In 2016, we added 4 additional hives.

The standard hives we use at PRN have two deep supers; the supers are where the bees live. The average peak population in the month of June is 60,000* adult bees.

*<http://articles.extension.org/pages/21747/seasonality-of-brood-and-adult-populations-basic-bee-biology-for-beekeepers>

PRN's Measurable Results: 4 x 60,000 = 240,000 additional bees

At PRN we classify "Pollinators" as butterflies, moths, native bees, honey bees, flies, beetles, hummingbirds or bats that seek out flowering plants as a food source. This food source can be nectar and/or pollen.

Penn State Extension did a 3 year trial on entitled Bees, Bugs, Bloom Pollinator Trial, the Top Ten Plants for Total Pollinator Visits we identified. We grow and have in our incorporated in our landscaped display gardens 6 of the top pollinators:

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| #1 | Pycnanthemum muticum |
| #3 | Eryngium yuccifolium |
| #5 | Eupatorium hyssopifolium |
| #6 | Liatris microcephala |
| #8 | Asclepias incarnata |
| #10 | Aster laevis Bluebird (Symphyotrichum) |

<http://ento.psu.edu/publications/tables-1-and-2-top-plants-all-years>



Pycnanthemum muticum in our display beds

We have also added 2 Mason Bee Houses that are occupied by Mason Bees, Solitary bees and other pollinators.

