MAP: BEE HOUSES & BUTTERFLY GARDEN ~ POLLINATOR MEADOW ~ BEE GARDEN



Sponsored by Friends of Springton Manor Farm, Karen Owens, PA Master Naturalist, and Jared Surette, Eagle Scout

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PURPOSE:

BUTTERFLY GARDEN

The butterfly garden has been rejuvenated at the site of the former butterfly house. The goal of the garden is to provide an assortment of perennials that provide a food source for butterflies and other pollinators. We need pollinators since they are critical to the food chain. Almost all fruit and grain crops grown in the U.S are dependent on pollinators. Currently, pollinators are in decline due to land development and the use of pesticides.

PLANTS:

The backbone of the garden is made up of pollinator favorites such as Joe-Pye Weed, assorted Milkweeds, Coneflowers, Asters, False Sunflowers, Salvias, Catmints, and many others. It is important to have plants that bloom at different times to ensure a continual food source for the pollinators.

INSECTS:

Enjoy the assortment of butterflies (including the well known Monarchs and Swallowtails), plus different types of bees and insects. And did you know birds such as hummingbirds can be pollinators too.

TIMING:

Spring through Fall flowers and pollinators can be seen in this garden.

For More Info



SPECIAL THANKS TO: Friends of SMF Gardening Team: Suzanne Tucker, Illaria Steele, Ginny Wright, Robin Spurlino, Sandy Rocker



SPONSORED BY:
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Troop 140



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POLLINATOR PARADISE

PURPOSE:

The bee houses (Pollinator Paradises) provide above-ground nesting sites for cavity-nesting bees. The female bee will create brood chambers, each filled with a pollen ball, lay her eggs, and seal off the opening. Larvae will feed on the pollen and develop into pupae and then adult bees, which will emerge from the nest during the warm months of the year.

LOCATIONS:

2 Houses: Butterfly Garden, facing East / Native Bee Garden, facing South

INSECTS:

bumblebee*, carpenter bees, honey bees**

(Apidae, 118 PA species)

sweat bees

(Halictidae, 110 PA species)

mining bees***

(Andrenidae, 100 PA species)

(Megachilidae, 81 PA species)

cellophane bees***

(Colletidae, 24 PA species)

Melittidae bees

Notes: *Many bumblebee species nest in the ground, not in the bee house.

**Honey bees do not nest in the bee house. They build hives or live in hives built by beekeepers.

***mining bees, cellophane bees and masked bees nest in the ground, not in the bee house.

TIMING:

Life cycles vary by species. For example, mason bee adults generally emerge from the nest in late spring or early summer. Mating takes place, and then females establish new nesting sites in cavities. They provision the nests with a nutritious mixture of nectar and pollen in early summer and then lay their eggs. The larvae develop over the summer months, then spin a cocoon and overwinter as prepupae. Pupation occurs the following spring. The new generation of adults emerges from the nests in late spring or early summer, ready to fly and forage for nectar.

For More Info



SPECIAL THANKS TO: Jared Surette, for his contributions to the Park



SPONSORED BY:

Kalen Owens

PAMaster Haturdist



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NATIVE BEE GARDEN

PURPOSE:

Native bees play a crucial role in our ecosystem. They fly among flowers consuming nectar and collecting pollen to place in the nest to nourish larval offspring. Pollination occurs in a flower when pollen is transferred from the anthers to the stigma so that seeds and fruits can develop. Many native bee species are declining because of pesticides and habitat loss. This garden helps native bees thrive throughout their life cycle by providing food, nesting sites, and nesting materials. We created our garden to help visitors learn what native bees need and how to create habitat for them at home.

PLANTS:

Native bees forage for nectar and pollen in flowering plants (trees, shrubs, herbaceous perennials, grasses).

INSECTS:

Many kinds of bees, wasps, butterflies, and moths come to our garden. Native bees build nests. Some bee species (70%) are ground nesters. Others (30%) nest in pre-existing cavities above the ground, most in holes in standing dead trees, fallen logs on the ground, or in soft woody branches and herbaceous flower stalks; some species excavate their own cavity in wood, pithy flower stalks, or branches of soft pithy wood such as elderberry or sumac. Eggs laid in the nest develop into larvae, then pupae, and finally adults that emerge from the nest and fly.

Ground nesters: mining bees, some sweat bees, some mason bees, some leafcutter bees, some bumble bees, some digger bees, long-horned bees, squash bees.

Cavity nesters: some sweat bees, some mason bees, some leafcutter bees, small resin bees, some bumble bees, some digger bees, small carpenter bees, large carpenter bees.

TIMING:

Year-round. Eggs, larvae, and pupae develop in the nest, eating food placed there by adult females. Adults emerge from the nest in spring or summer.

For More Info



SPECIAL THANKS TO: Pennsylvania Master Naturalist, Karen Owns



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PLANTS:

NATIVE BEE GARDEN

Herbacious perennials

anise hyssop purple giant hyssop thread leaf bluestar thousand flowered aster tall tickseed

raii iickseea

purple coneflower

gayfeather

great blue lobelia spotted bee balm

sundrops

Appalachian mountain mint gray headed coneflower cut-leafed coneflower white silverrod goldenrod

Shrubs

downy serviceberry sweet pepperbush

Grasses

Pennsylvania sedge little bluestem (Agastache foeniculum)

(Agastache scrophularifolia)

(Amsonia hubrichtii)

(Boltonia asteroides) (Coreopsis tripteris)

(Echinacea purpurea)

(Liatris spicata)

(Lobelia siphilitica)

(Monarda punctata)

(Oenothera fruticosa)

(Pycnanthemum flexuosum)

(Ratibida pinnata)

(Rudbeckia lanciniata)

(Solidago bicolor)

(Amelanchier arborea)

(Clethra alnifolia)

(Carex pennsylvanica)
(Schizachyrium scoparium)

For More Info



SPECIAL THANKS TO: Pennsylvania Master Naturalist, Karen Owns







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POLLINATOR MEADOW

PURPOSE:

Working wildflowers, open space can look like a vacant lot, but the many activities going on keep our environment healthy. This meadow provides ecosystem services such as filtering water, pollination, photosynthesis, nutrient cycling as well as decomposing organic waste that enhances soil health. Located on a slope this meadow also plays a role in controlling erosion.

PLANTS:

Installation of this meadow started a couple years before planting. Removing the non-native invasive plants took two years. Drill seeding a special conservation seed mix for meadows provided a variety of wildflowers and grasses. The seed mix included coneflower (Echinacea); blackeyed susan (Rudbeckia); various milkweeds (Asclepia); New England aster (Aster); goldenrod (Solidago); and wild bergamot (Monarda). Native grasses included little bluestem (Schizachyrium) and sideoats grama (Bouteloua).

INSECTS:

Each season brings an array of insects who call the meadow home. During the peak summer months, a vast number of diverse pollinators visit the meadow. Not just bees and butterflies but wasps, flies, moths, and skippers find their way here. Leaving the stems over winter provide places for insects to overwinter. Leaf litter allows cover for some butterflies and moths.

TIMING:

Spring through Fall.

For More Info



SPECIAL THANKS TO: Spurlino Family Foundation, a fund of CCCF

