# NATIVE PLANTS

# WHAT ARE NATIVE PLANTS and how do they benefit both wildlife and gardeners?

Native plants are those that were here before the Europeans arrived. They are three to four times more likely to attract native bees, butterflies and moths than introduced plants do. Additional advantages:

- Do not require fertilizers or pesticides
- Once established, do not require additional water since their roots are up to 8 feet deep;
  hence, they are not affected by drought or fire
- Provide permanent shelter and <u>food</u> for other wildlife and insects
  - One brood of chickadees requires 6000 to 9000 caterpillars!
- Promote local native biological diversity
- Are less likely to become invasive than nonnative plants
- In comparison to lawns: lawns require 8 billion gallons of water DAILY in our country; as well 70 million pounds of fertilizer per year, 70% of which winds up in our waterways.

# **Purchasing and Propagating**

- Latin names:
  - o To avoid confusion, use Genus, as in "Asclepias", and species, as in "tuberosa".
  - Common names, such as "Butterfly Weed", can possibly refer to different types of plants, and can be confusing, as in "Sneezeweed" or "Milkweed".
- Trusted nurseries do not use systemic pesticides.
- Seeds, cold stratification and cuttings are propagation methods.
- Many natives have been 'hybridized' to be more ornamental or have no pollen. They are not as beneficial for wildlife.
- Cultivars do not produce "true to seed".
- Choose plants from your eco-region. The Nature Conservancy has a map of our 81 eco-regions.

#### Blooms over three seasons

- Spring
  - Blue false indigo, Wild geranium, Jacob's ladder, Lilac, Coreopsis, Penstemon, Violets (Viola)

#### Summer

- Milkweed (Asclepias), Sneezeweed, Dense Blazing Star Liatris (Liatris spicata), Bee Balm, Phlox, Black-eyed Susan (Rudbeckia), Coneflower (Echinacea), Shrubby St. John's Wort, Joe-pye Weed (Eupatorium), Trumpet Honeysuckle (Lonicerus)
- Fall
  - New York Ironweed (Vernonia), Aster (Symphyotrichum), Phlox, Goldenrod (Solidago) - often confused with Ragweed, which causes allergies

#### Garden Design

- Traditionally, we've spaced plants two feet apart with mulch in between. Consider one
- foot apart and top-dress with composted leaves or the plants themselves.
- Many insects over-winter in/on stems and on leaves; no Fall clean-up.

HOST PLANTS FOR CATERPILLARS: OVERWINTERS AS:

0	Monarch: Milkweed, (Asclepias), see video below	Adult
0	E. Black Swallowtail: Parsley, Fennel, Dill, Queen Anne's Lace, Rue*	Chrysalis
0	E. Tiger Swallowtail, (NJ State butterfly): Wild Cherry Tree, Chokecherry	Chrysalis
0	Spicebush Swallowtail: Spicebush	Chrysalis
0	Red Admiral: Nettles, Hops Migrates Fall, Returns	April
0	Mourning Cloak: Willow, Birch	Adult
0	Spring Azure: Dogwood, Cherry	Chrysalis
0	Painted Lady: Hollyhock Migrates Fall, Returns April	
0	Great Spangled Fritillary: Violet	Caterpillar
0	Cabbage White: Cabbage, Broccoli, Nasturtium	Chrysalis
0	Orange Sulfur: False Indigo, White Clover	Chrysalis

- Better to have drifts of three different species blooming in each season than many singles.
- Taller, "floppier", plants can be held upright by their neighbors.
- Many plants, especially ones with lots of seeds, are adept at finding "disturbed spaces"
- and colonizing there; lobelias and brown-eyed Susans are examples.
  - Warning: Barbary and other invasive nonnatives; responsibility of gardener for nonnatives such as butterfly bush
- It's OK to include some of your favorites, even if they are nonnatives.

# Garden Advice

- Penn State Extension Master Gardeners in Cambria County, 814-472-7986, "Garden Hotline", <a href="mailto:cambriamg@psu.edu">cambriamg@psu.edu</a>
- Master Gardeners work in their community by volunteering for activities and projects 'such as: Designing, planting, and maintaining demonstration gardens, teaching gardening workshops, answering gardeners' questions, etc.

# **Native Plant Nurseries**

- SEADS Garden Center
   (former location of Flower Barn)
   215 Blair Street
   Johnstown, PA 15905
   814-254-4167
   <u>SEADSofLove@yahoo.com</u>
   Monday-Saturday, 9:00 am-5:00 pm
- Toadshade Wildflower Farm
- Monarchs-and-Milkweed.com
- Prairie Moon Nursery
- Penguin Court/Brandywine Conservancy

Laughlintown, PA 15655

Office:724-238-4991

www.brandywine.org/penguin-court

(occasional plant sales)

### Books

- Bringing Nature Home, Doug Tallamy
- Nature's Best Hope, Doug Tallamy
- The Living Landscape, Doug Tallamy with Richard Darke
- The Nature of Oaks, Doug Tallamy
- Attracting Native Pollinators, The Xerces Society
- Braiding Sweetgrass, Kimmerer

#### Websites

- Put your (mostly) native plant garden on the map for Homegrown National Park, <a href="https://homegrownnationalpark.org">https://homegrownnationalpark.org</a>
- Lady Bird Johnson Wildflower native plant database, (https://www.wildflower.org/plants-main)
- Monarchs-and-Milkweed.com, monarch caterpillars and native plants
- Monarchs-and-Milkweed.com

#### Video

- Pollination, Plants and Insects: <a href="https://www.youtube.com/watch?v=FiwkJui2mh0">https://www.youtube.com/watch?v=FiwkJui2mh0</a>
  - o 8 minutes, unique pollination process for milkweed, HILA Science video

# Summation

Native plants offer a gardener a way to:

- Plant habitats for native insects, birds and animals
- Create durable, water-wise landscapes that require less care and maintenance

Please note that the flowers on the native plants for Pennsylvania Garden flyers are just a selection of possibilities. It would be most helpful to carefully observe which native plants are already thriving in the gardens of your local community.

The photos at the bottom of the Native Plants for Pennsylvania Gardens flyers demonstrate preparing an area where lawn is to be replaced with native plants.

# **Native Plants for Pennsylvania Gardens**



Common Meadow Violet (viola)



Gray Goldenrod (Solidago nemoralis), avoid rugosa



New England Aster (Symphyotrichum)



Trumpet Honeysuckle (Lonicera sempervirens)



Coneflower (Echinacea)



New York Ironweed (Vernonia noveboracensis)



Swamp Milkweed (Asclepias incarnata)



Thread Leaf Coreopsis (Coreopsis verticillata)



Wild Geranium (Geranium maculatum)



Dense Blazing Star (Liatris spicata)



Black-eyed Susan (Rudbeckia hirta)



Joe Pye Weed (Eupatorium dubium)



1.) Lawn with brick edging



2.) Covered with cardboard



3.) Covered with composted leaves