PIKELAND IN SHIP

Lawn Conversion

Watering and mowing lawns have made grass one of America's most expensive, labor intensive and environmentally devastating crops.

Lawns:

- Require extensive use of fertilizers, insecticides, and herbicides which often enter our ground water and streams. Unused nitrogen fertilizer is converted to nitric acid which is 300 times more potent than CO2 as a climate change gas.
- Mowing, weed whacking edging etc. burns gasoline and oil.
- · Can use large amounts of water to maintain.
- Lack biodiversity and therefore do not promote food or shelter for pollinators or local wildlife
- Increase stormwater runoff because of shallow roots and compacted soil.

Lawn Alternatives:

No Man May & Don't Man tough own Stopes

- Low-mow or no-mow variety of grasses that grow slowly and require little water...fescues and clovers.
- Meadows native grasses, annual and perennial flowers usually started from seeds.
- · Trees and Shrubs
- · Vegetable Gardens
- Native Species Pollinator Flower Garden

Why Native Species:

- Easier to Grow native species have evolved over thousands of years to become adapted to this particular area. Better suited for our soil and climate and need less watering, fertilizer and pesticides.
- Deep Roots helps to control erosion and filter stormwater
- Increases Biodiversity protects the ecosystem when under climate, disease or parasitic challenges. ie. Emerald Ash Borer
- Are Not Invasive Invasives lack natural predators and outcompete native species. PA Dept. of Ag. recognizes 140 invasive species.
- Provide food and shelter for a wide range of insects and other wildlife.

OVER-

Why Pollinators:

- Birds, bats, butterflies, moths, beetles and most importantly bees are
 pollinators. They visit flowers to drink nectar and eat pollen, and as
 they move from flower to flower, they carry the male pollen with them.
 This fertilization process is the first step in the process that produces
 seeds, fruits, vegetables and nuts. It is estimated that 35% of the
 world's food crops and 80% of the world's plants rely on pollinators.
- Pollinator nymphs and caterpillars feed on the leaves and stems of the plant. Because of the coevolution of plants and insects it is important to plant native plants that can be used as food by native pollinators. The White Oak serves as a food source for 537 species of butterfly and moth caterpillars.
- The nymphs and caterpillars are the primary consumers of the food chain. It takes between 4000 to 6000 caterpillars to fledge one family of chickadees. A 2019 Cornell ornithology study found there are approximately 3 billion fewer song birds in North America than there was 50 years ago.

Site Preparation

- Whether starting a meadow, native species pollinator garden, vegetable garden or new lawn you must get rid of the existing vegetation.
 Possible ways include:
- Smothering the plants with black plastic or cardboard. Takes several months.
- Applying a thick layer of mulch.
- Manually with shovel.
- · Herbicide Glyphosate (Roundup). Possibly several sprayings.

After the vegetation is killed and removed the soil should be turned to loosen it up and amended with nutrient rich compost.

