

# The Benefit of Native Plants



Martin Ryan





SPRINGFIELD TOWNSHIP  
ENVIRONMENTAL ADVISORY  
COMMISSION

# The Benefits of Native Plants

## An Environmental Education Public Workshop

- **Introductions**
- **Why Native Plants?**
- **What Can We Do?**
- **No Dig Garden Beds**
- **Native Plant Sale May 13, 2023**
- **Some Resources**
- **Discussion**

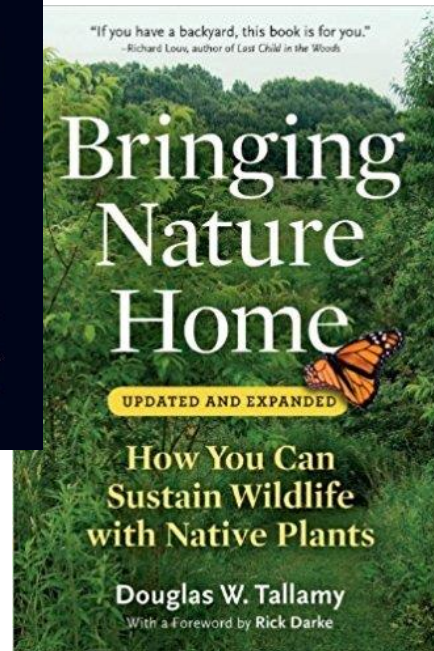
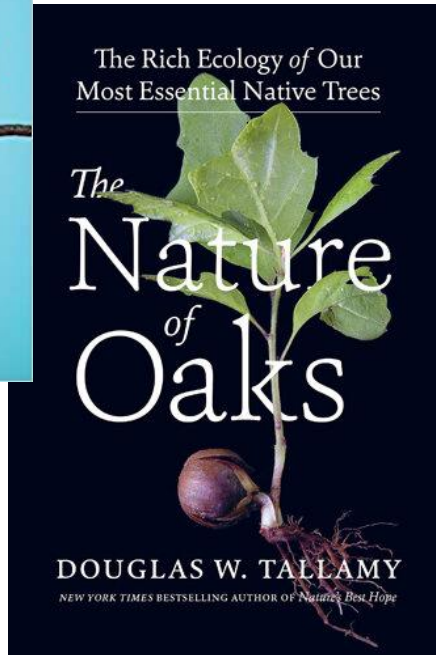
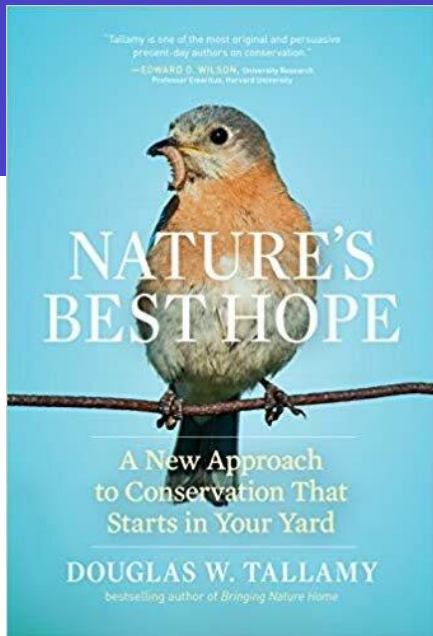
# Agenda

# My Introduction

- Martin Ryan, Erdenheim
  - Martin.a.ryan@icloud.com
- Moved to Springfield Township in 1994
- Joined the Environmental Advisory Commission (EAC) in 2022
- Have enjoyed growing plants since childhood
- I believe that local, distributed solutions can positively affect national policy
  - Residential Solar
  - Composting
  - Planting for Wildlife
  - Vegetable Gardening
  - Voting, especially in Primaries

# Why Native Plants?

## Doug Tallamy



- Doug Tallamy is a professor in the Department of Entomology and Wildlife Ecology at the University of Delaware, where he has authored eighty research articles and has taught Insect Taxonomy, Behavioral Ecology, Humans and Nature, and other courses for thirty-two years.
- Researches how plants that evolved elsewhere impact food webs and biodiversity.
- Tallamy speaks nationwide about his concerns that the approach to gardening must change. He contends the widespread planting of ornamental plants, native to other parts of the world, is creating ecosystem-wide problems.
- Author of the best-selling books "Nature's Best Hope and The Nature of Oaks" and "Bringing Nature Home: How You Can Sustain Wildlife with Native Plants."
- <https://www.youtube.com/watch?v=xPP3fe74mpM>



# What Can We Do?

## WHAT EACH OF US CAN DO

### 1. SHRINK THE LAWN AND LEAVE THE LEAVES!

Think, muse, strategize about how you might reduce the area that is now lawn. Maybe start by planting a very small area (perhaps a mini meadow), leaving enough green grass for your paths and recreational use. It doesn't matter how small or how large your plantings are; what's most important is that you get started, and you get on the MAP! Leave the leaves wherever you can! Park your leaf blower and give yourself a break from the rake! The leaves that stay on your property are going to return the nutrients that were taken up by the trees' roots in the spring back to the soil so the tree gets to use them again the following year. Leaves are also the perfect mulch. Start by raking up areas of the lawn you know you will keep as lawn. Use those leaves to smother the grass in beds around each of your trees, effectively reducing part of the area that is now grass. Come spring you can plant in your new beds.

### 2. REMOVE INVASIVE SPECIES

Invasive plants are ecological tumors that spread unchecked into our local ecosystems, seriously degrading the ability of these ecosystems to function. If every property owner removed the most egregious invasives, the goal of ridding the U.S. of these troublemakers, or at least reducing their seed dispersal to manageable levels, would be largely realized. Start removing the ornamentals you now have that are known to be invasive species. Learn more about invasive species here: [invasivespeciesinfo.gov](http://invasivespeciesinfo.gov)

### 3. GENEROUSLY PLANT THE PLANTS THAT DO THE MOST GOOD

A first step in reducing your lawn can be adding keystone plants in an area that is now lawn. You might choose to plant an oak tree and build a bed with leaf litter around it. BOOM! New powerhouse tree and less lawn! If you have a bigger property, a field, a farm or a large landholding, consider planting more native trees and creating a meadow or two or three!!

To realize the ecological potential of our landscapes, most of us have



to increase the abundance and diversity of our plantings. If you have one tree in your yard, consider adding two more. The idea is to plant groves of trees at the same density at which they occur naturally in a forest. Research indicates that a few types of native plants ("keystone genera") form the backbone of local ecosystems, particularly in terms of producing the food that fuels insects. Landscapes that do not contain one or more species from keystone genera will have failed food webs, even if the diversity of other plants is very high. To find keystone plants that host the most caterpillars and native bees, scan the code or visit: <https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/keystone-plants-by-ecoregion>



SCAN ME



### 4. REDUCE YOUR NIGHTTIME LIGHT POLLUTION

Research is showing that our porch and security lights are major causes of insect decline. Consider turning off your lights at night. Or use motion sensor security lights that light up only when an intruder enters your yard. If nothing else, replace the white bulb in your lights with yellow or amber tinted LED bulbs. These color wavelengths are the least attractive to nocturnal insects.

### 5. NETWORK WITH NEIGHBORS & GET ON THE HOMEGROWN NATIONAL PARK MAP

Be a role model for your neighbors. As you transform your property by planting natives in tasteful ways, it is likely your neighbors will follow suit. For a Homegrown National Park Yard Sign, scan the code or visit: <https://homegrownnationalpark.org/yard-sign>



SCAN ME

### 6. BUILD A CONSERVATION HARDSCAPE

- Each year millions of toads, frogs, and other small creatures become trapped in our window wells where they slowly starve to death. Installing inexpensive window well covers can reduce these needless deaths to zero.
- Set your mower height no lower than 3 inches. This will give you healthier, greener grass that requires less watering but also mows

safely over a box turtle or toad! Try not to mow in the evening when many nocturnal species leave their hiding places.

- Install a bubbler. Small water features with gentle gurgling sounds are irresistible to migrating and resident birds.



### 7. CREATE CATERPILLAR PUPATION SITES UNDER YOUR TREES

More than 90% of the caterpillars that develop on trees drop to the ground and pupate within the organic matter on the ground or within chambers they form underground. It is best to replace lawn under trees with well-planted beds with groundcovers appropriate for your area. It's easy, you can leave leaf litter under your trees, rocks, and old tree stumps, as well as plant wild ginger, foam flowers, wood poppies, ferns, mayapples, etc.



### 8. DO NOT SPRAY OR FERTILIZE

Insecticides and herbicides are antithetical to the goals of HOMEGROWN NATIONAL PARK®. Less evident is that fertilizers are also unnecessary. Creating soils rich in organic matter is entirely sufficient for healthy plants. If herbicides must be used, apply them judiciously and in small quantities. See What Is the Best Way to Get Rid of Invasive Plants? - YouTube



SCAN ME



# Shrink the Lawn

## No Dig Garden Bed



**1. String trim very close to the dirt. We are trying to kill the grass!**



**2. Cover the grass with cardboard. Make sure to remove all labels and plastic tape on the cardboard. Overlap to ensure no light gets through the cardboard.**



**3. Cover with 4" - 6" of Compost. I use the free township compost.**



# Homegrown National Park

**Homegrown National Park® is a term coined by Doug and is the key to our call-to-action:**

- *“Our National Parks, no matter how grand in scale are too small and separated from one another to preserve species to the levels needed. Thus, the concept for Homegrown National Park, a bottom-up call-to-action to restore habitat where we live and work, and to a lesser extent where we farm and graze, extending national parks to our yards and communities.”*

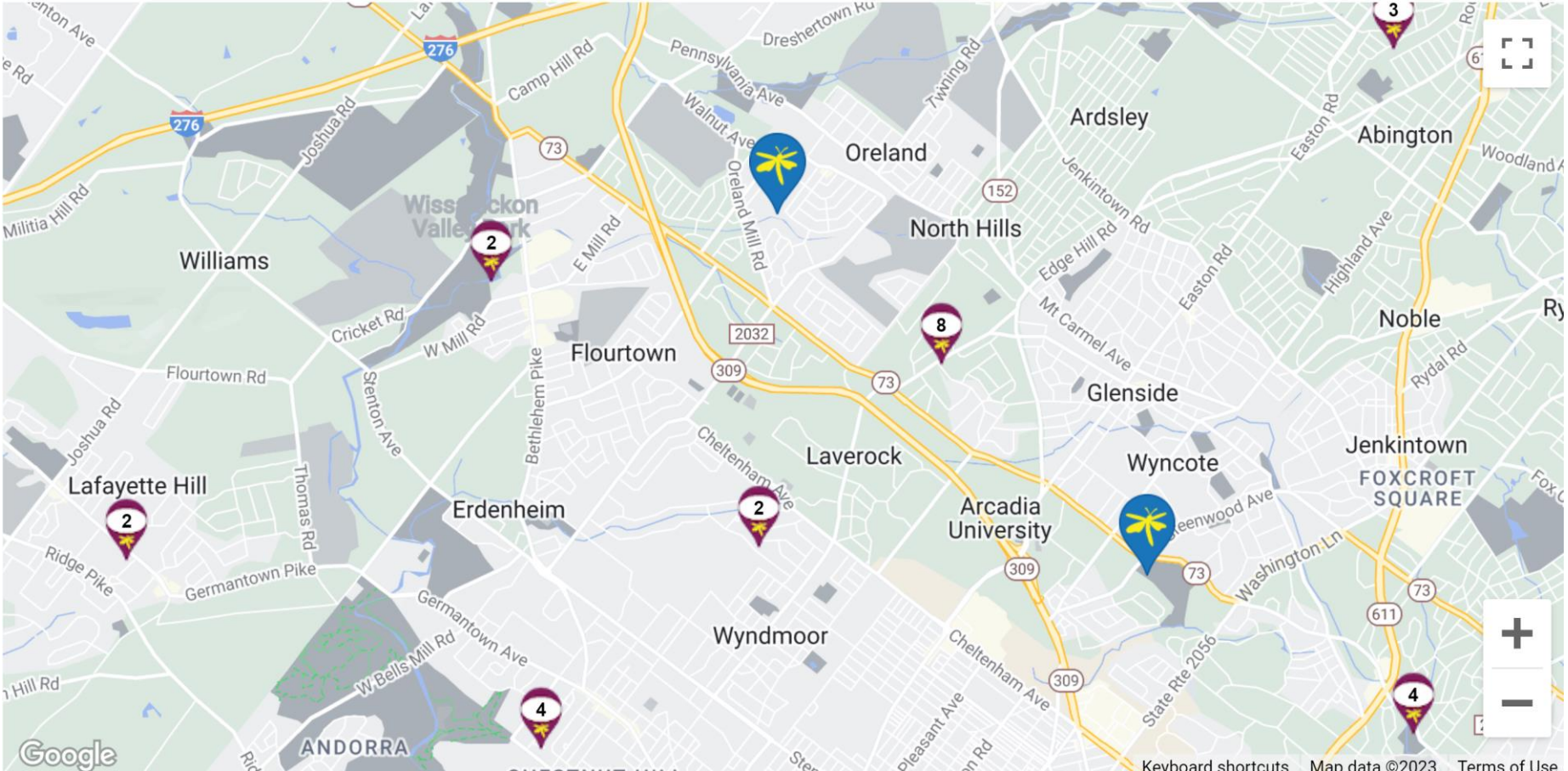
**THE MAP is an interactive community-based visual that will show each person’s contribution to planting native by State, County and Zip Code.**

- There will be a gauge showing progress towards our goal of 20 million acres of native planting in the U.S.
- Importantly, the map is a way for individuals to see their part in the greater whole – creating new ecological networks and restoring biodiversity.

**START DIGGING!**

<https://map.homegrownnationalpark.org/>

# How can we encourage more residents and businesses to get on the map?





# EAC Native Plant Sale

*When:* Saturday May 13, 10 AM - 1 PM

*Where:* Free Library of Springfield Township

Native Plants sourced from Primex, Glenside PA





# Resources

There are many additional sources

## Homegrown National Park

- <https://map.homegrownnationalpark.org/Dashboard/Country>

## Native Tree and Plant Finder

- <https://www.nwf.org/NativePlantFinder/Plants>

We hope you will buy Native Plants locally, but in case you can't find what you are looking for.....

- [https://gardenforwildlife.com/collections/all-products?utm\\_source=nwf-npf&utm\\_medium=referral&utm\\_campaign=npf-evergreen](https://gardenforwildlife.com/collections/all-products?utm_source=nwf-npf&utm_medium=referral&utm_campaign=npf-evergreen)

## Penn State Extension

- <https://extension.psu.edu/>



# How did we do?

- Would you like a copy of the presentation? Email me at [Martin.a.ryan@icloud.com](mailto:Martin.a.ryan@icloud.com)
- Do you feel more knowledgeable about why Native Plants are important to our local habitat and food web?
- Do you feel more knowledgeable about creating a Pollinator garden in your lawn?
- Do you feel that the Homegrown National Park is a good way to encourage ourselves and our neighbors to create Native Plant gardens?
- We hope you will join us at the Native Plant Sale on May 13<sup>th</sup> at the library from 10 AM till Noon.

**Thank you for your time!**