



Prickly Ed's Cactus Patch

Native Plants &
So Much More!

Wildly Botanical - Ruggedly Resilient

**Welcome! Tonight's program is
hosted by:**

**Prickly Ed's Cactus Patch
Native Plant Emporium...**

**Your local source for the plants
that vibrant, living landscapes
are made of.**

**Opening for the season
April 24, 2026!**



**Visit us on the web
www.PricklyEds.com for
garden planning tools and
inspiration!**

Download tonight's handout on the **“Workshop Resources”** Page of our Website www.PricklyEds.com/workshop-resources

HOME ABOUT US CONTACT INFO, HOURS, ETC. PLANT SHOPPING DETAILS MORE ^

2026 Workshop Resource Handout

[Download PDF >](#)



YARDS ALIVE
Living Landscape Learning Series
Resource Handout

Visit www.PricklyEds.com to download a digital version of this handout and to explore resources including articles, videos, plant lists, planting guides, upcoming events and background on ways to connect with others. While there, be sure to read our blog & explore past editions of our newsletter.



**Prickly Ed's
Cactus Patch**
Native Plant Emporium

Organizations and Initiatives to Know:

- Pollinator Pathways www.pollinator-pathway.org
- Pollinator Pathways (Barrington) <https://www.blct.org/more-about-us/pollinator-pathways/>
- Homegrown National Park www.homegrownnationalpark.org
- Certified Wildlife Habitats www.certifiedwildlifehabitat.nwf.org
- Perfect Earth Project www.PerfectEarthProject.org
- The Native Plant Trust <https://www.nativeplanttrust.org>
- Rhode Island Wild Plant Society www.RIWPS.org
- Bee Lab at URI <https://web.uri.edu/beelab/>
- Grow Native Massachusetts www.grownativemass.org
- Rhode Island Plant Insect Community Network <https://picn.rinhs.org/>
- The Pollinator Alliance at the Audubon Society of RI <https://asri.org/pollinators/alliance.html>

Research & Learn More About Native Plants

- BIRD FRIENDLY LANDSCAPES
- WHERE THE WILD THINGS ARE
- BUILD A HEALTHY LANDSCAPE
- LANDSCAPING FOR KIDS!
- PLANTING AND CARE FAQs
- NEWS FOR YOU!
- BARNEYVILLE BREWS
- AVOID INVASIVE PLANTS!
- ADVOCATING 4 BIODIVERSITY
- WORKSHOP RESOURCES

Please note that a PDF of the presentation shared this evening will also be posted to this page tomorrow so that you can go back and review the information.

WHAT'S ALL THE BUZZ ABOUT GARDENING FOR POLLINATORS?

TUES. MAR. 31 @ 6:30 PM



PRICKLY ED'S
CACTUS PATCH



Barrington
PUBLIC LIBRARY



“Pollinator Gardening” Doesn’t ONLY help Pollinators - these spaces are packed with ecological benefits.

Landscapes cared for with Pollinators in mind also:

- **Are better for the health of people, pets, and communities!**
- Support biodiversity overall – including boosts to birds and other wildlife
- Are better for soil health
- Have high climate resilience
- Help protect our waterways from harmful chemical runoff

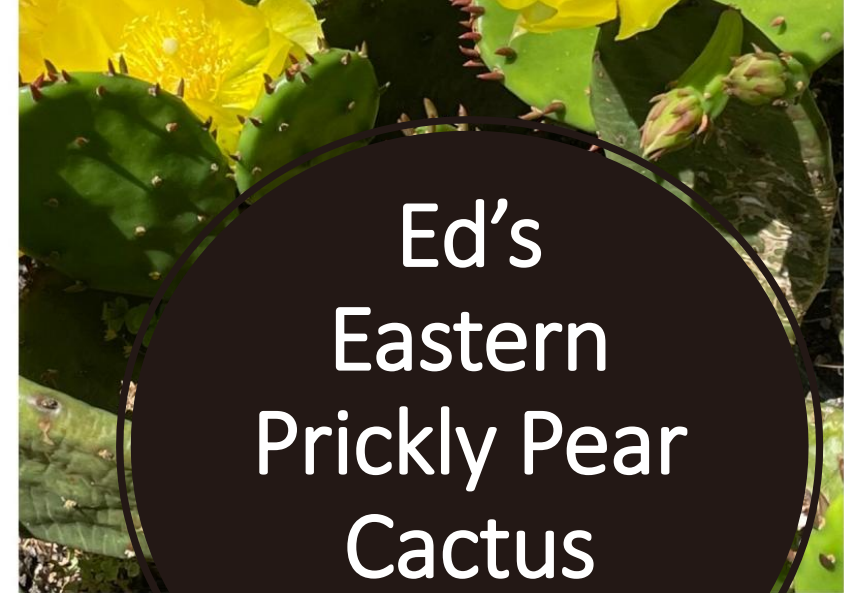
Let’s Dig In!



Welcome
tonight's
local
experts!



Ed's
Eastern
Prickly Pear
Cactus
Patch



Dr. Rachael Bonoan, The
Providence (Bonoan)
Pollinator Lab

<https://providencepollinators.com/>



Casey Johnson, URI Bee Lab & the Rhode Island Plant and Insect Community Network

<https://picn.rinhs.org/>

<https://web.uri.edu/beelab/>



Kevin Ormerod, Ecologist and
Owner of Bluestem Meadows LLC

Visit: bluestemmeadowsri.com





What is ONE thing that you really hope people leave tonight having learned – or thinking differently about?

The Pollinator Buzz

- Estimated **45% decline** in all invertebrates (75% for flying insects) worldwide over the last 40 years
- Nearly **1/3** of all insects are endangered
- North American **butterflies declined by 22%** over the last two decades
- As much as **\$577 billion** of global food production requires pollinators
- More than **85% of all flowering plants** on earth need help with pollination

**Pollinators are an indicator species.
Their presence or absence is linked
to broader ecosystem health.**



New England's Native Pollinators

Native Bees



Wasps



Butterflies



Moths



Beetles



Flies



Hummingbirds



Ants



New England has approximately 1,200 butterflies & moths and 460 native bees
Rhode Island has 285 bee species (historical and modern)



What is one thing you have heard/seen/learned recently that has you especially worried about the plight of pollinators in particular?

What is one thing you have heard /seen/learned that gives you hope?



All About Birds



[Three Years After 3 Billion Birds Lost, America's Birds Are Still in Decline](#) | [Living Bird](#) | [All About Birds](#)

Visit >



POLLINATORS IN PERIL



A systematic status review of North American and Hawaiian native bees

Kelsey Kopec • Center for Biological Diversity • February 2017

How do Honeybees fit into all of this?



Research overwhelmingly shows that urban/suburban “pollinator gardens” CAN have positive impacts.



But for the Most Benefits – All of the Basic Needs of Pollinators Must Be Met!

FOOD FOR ALL LIFE CYCLES



SHELTER



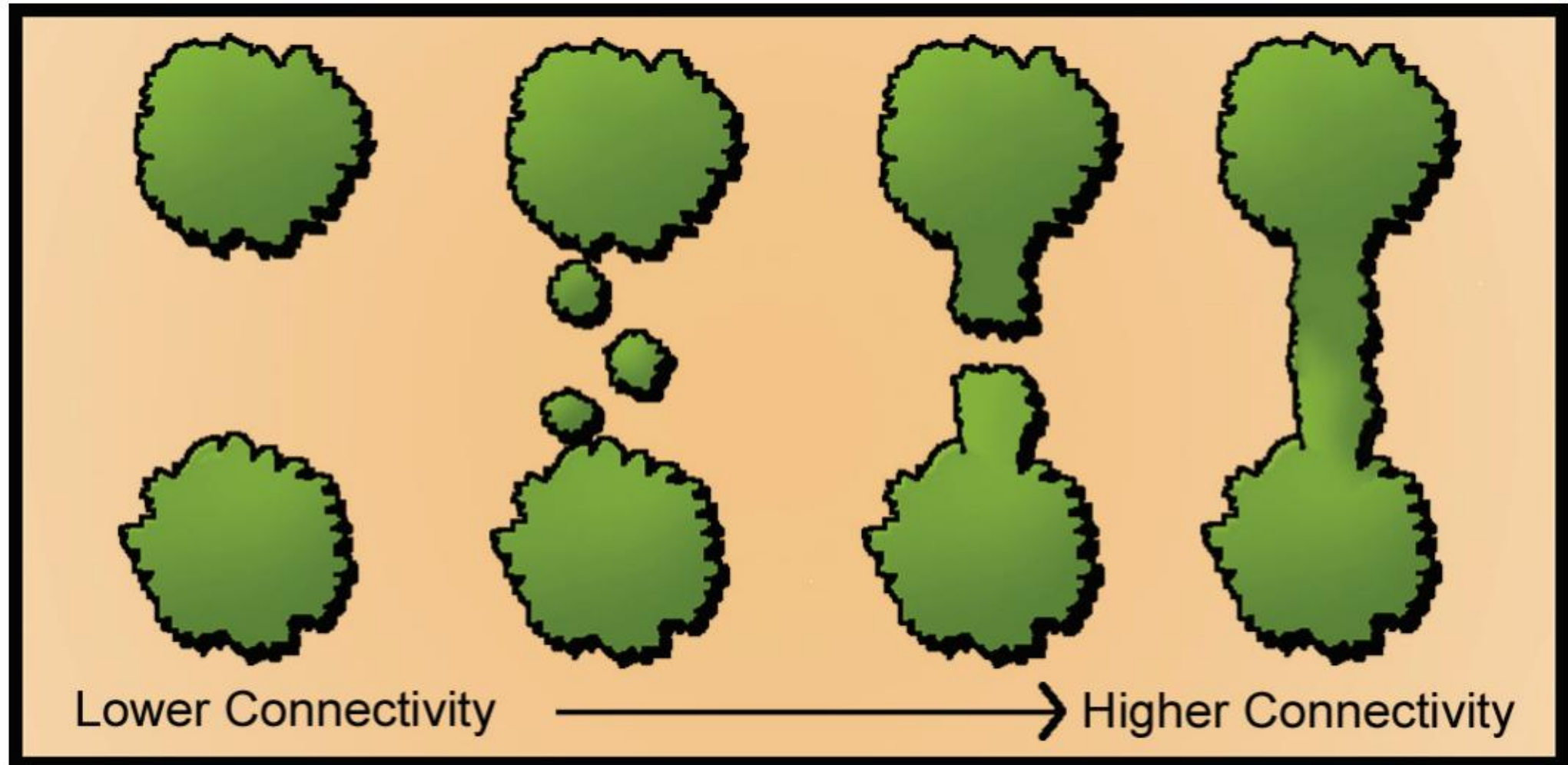
PROTECTION FROM HARM



CONNECTIVITY IN THE LANDSCAPE



CONNECTIVITY

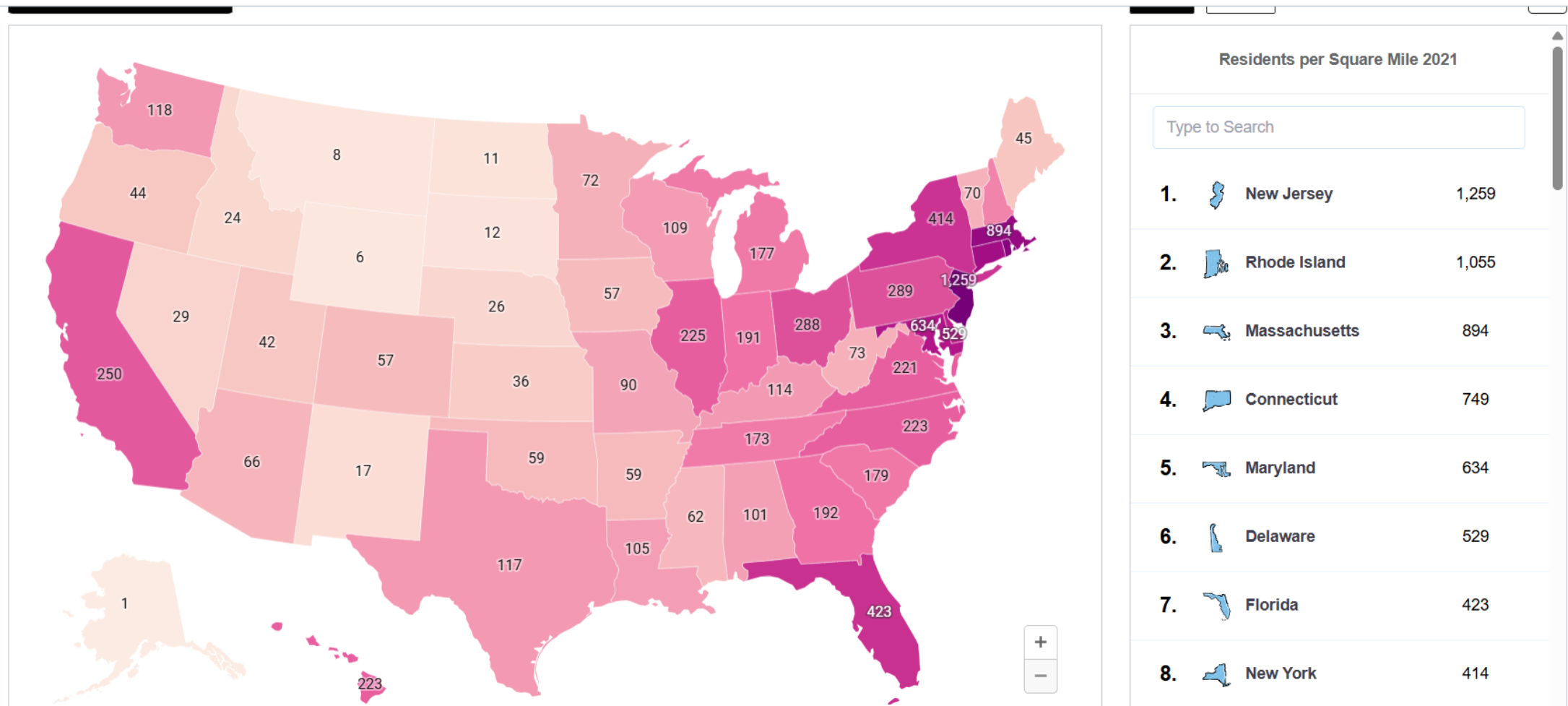


Development fragments habitat!

Rhode Island is the 2nd most DENSELY POPULATED state in the nation and 98.5% of land is PRIVATELY OWNED.

State Densities

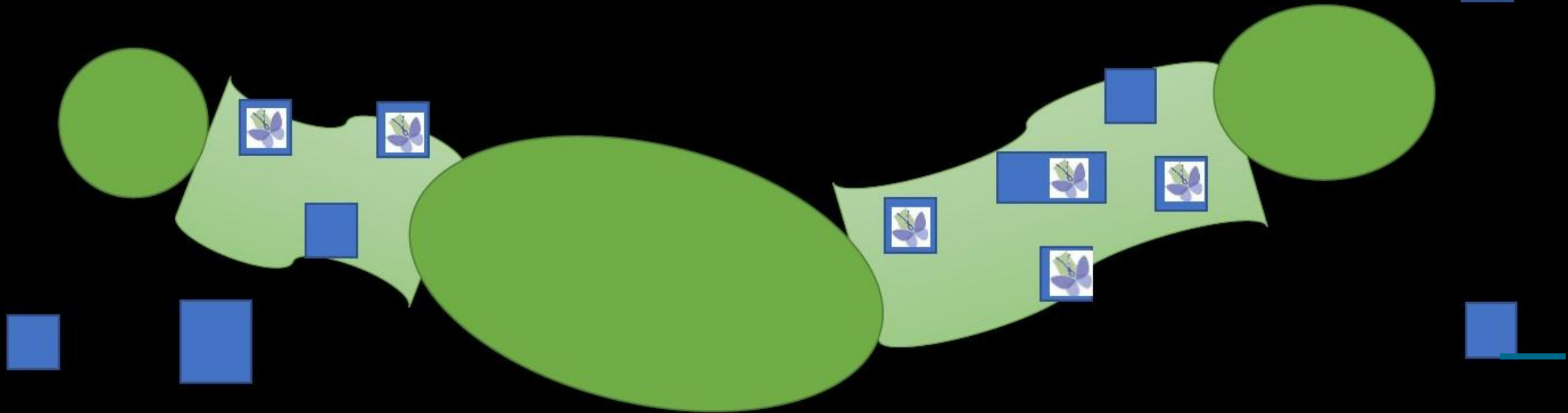
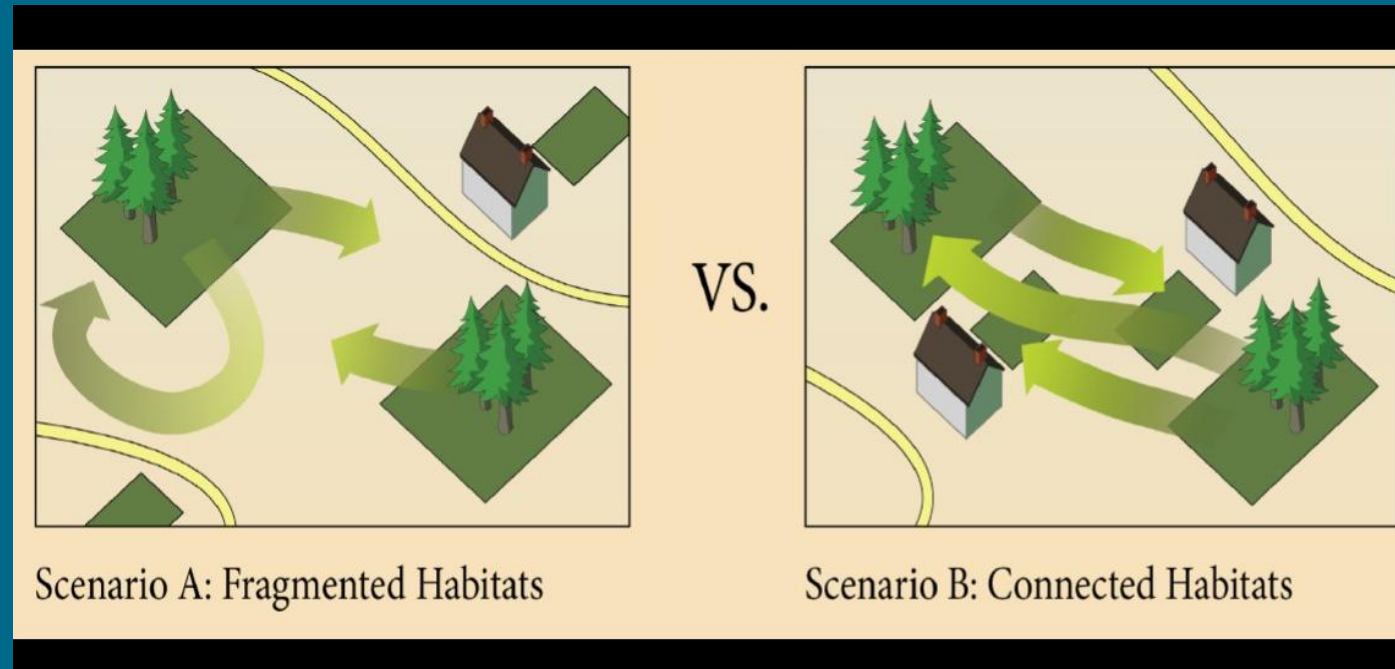
Last updated November 24, 2024



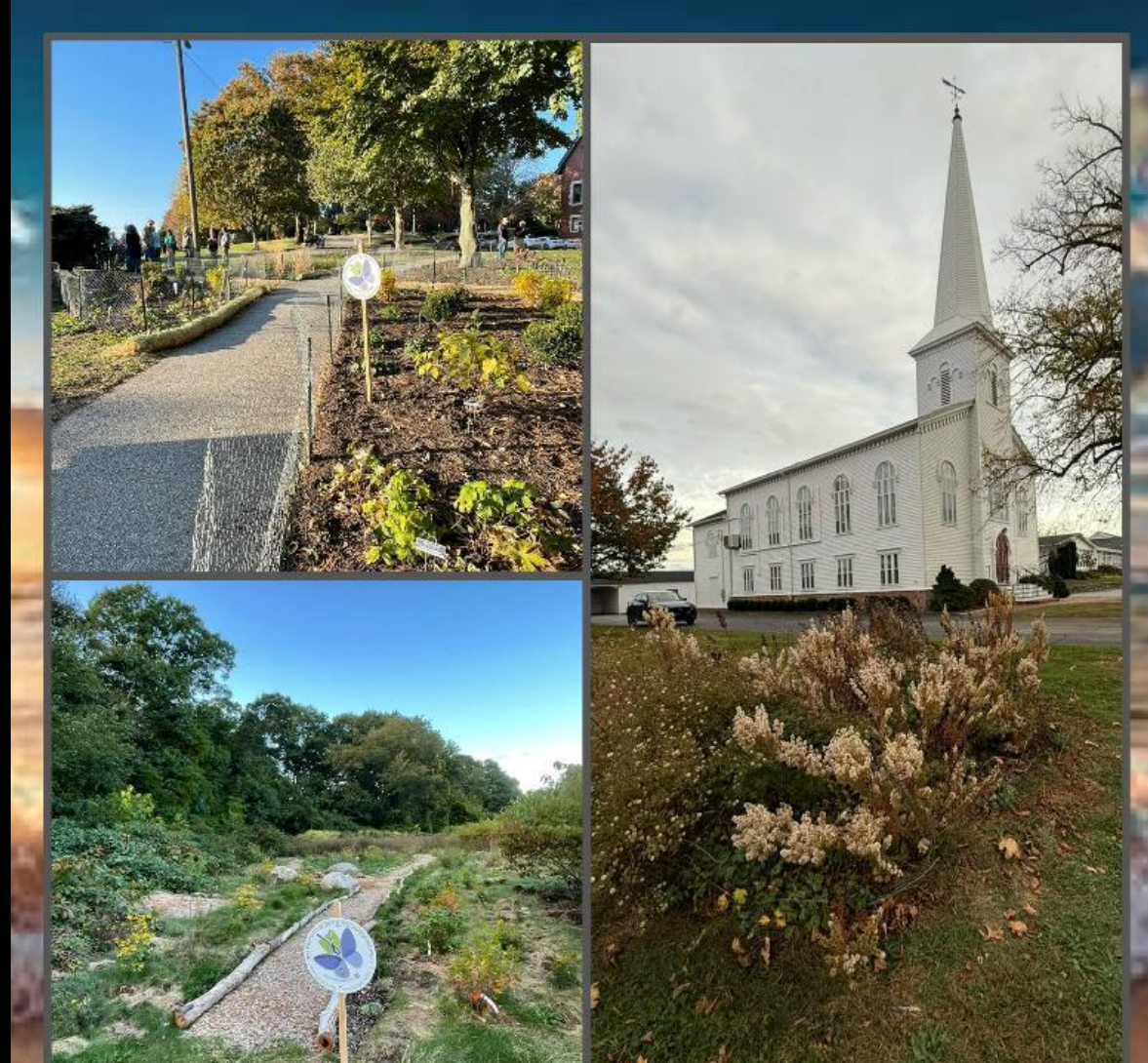
Pollinator Pathways Create Connectivity

These Pathways Are Not Just Gardens For Pollinators – Pollinators Are An Indicator Species – When They Successfully Return, Other Life Can Follow

Learn More www.Pollinator-Pathway.org



Individual efforts are amplified and communities grow healthier when many people help – and many spaces transform.





ICEBREAKER AND REFLECTIONS!

**To Support
Pollinators at
Home, Plant
with Pollinators
in Mind.**



Plant Native Plants!





American Groundnut



American Cranberry



American Holly

SO, WHAT EXACTLY ARE “NATIVE PLANTS”?

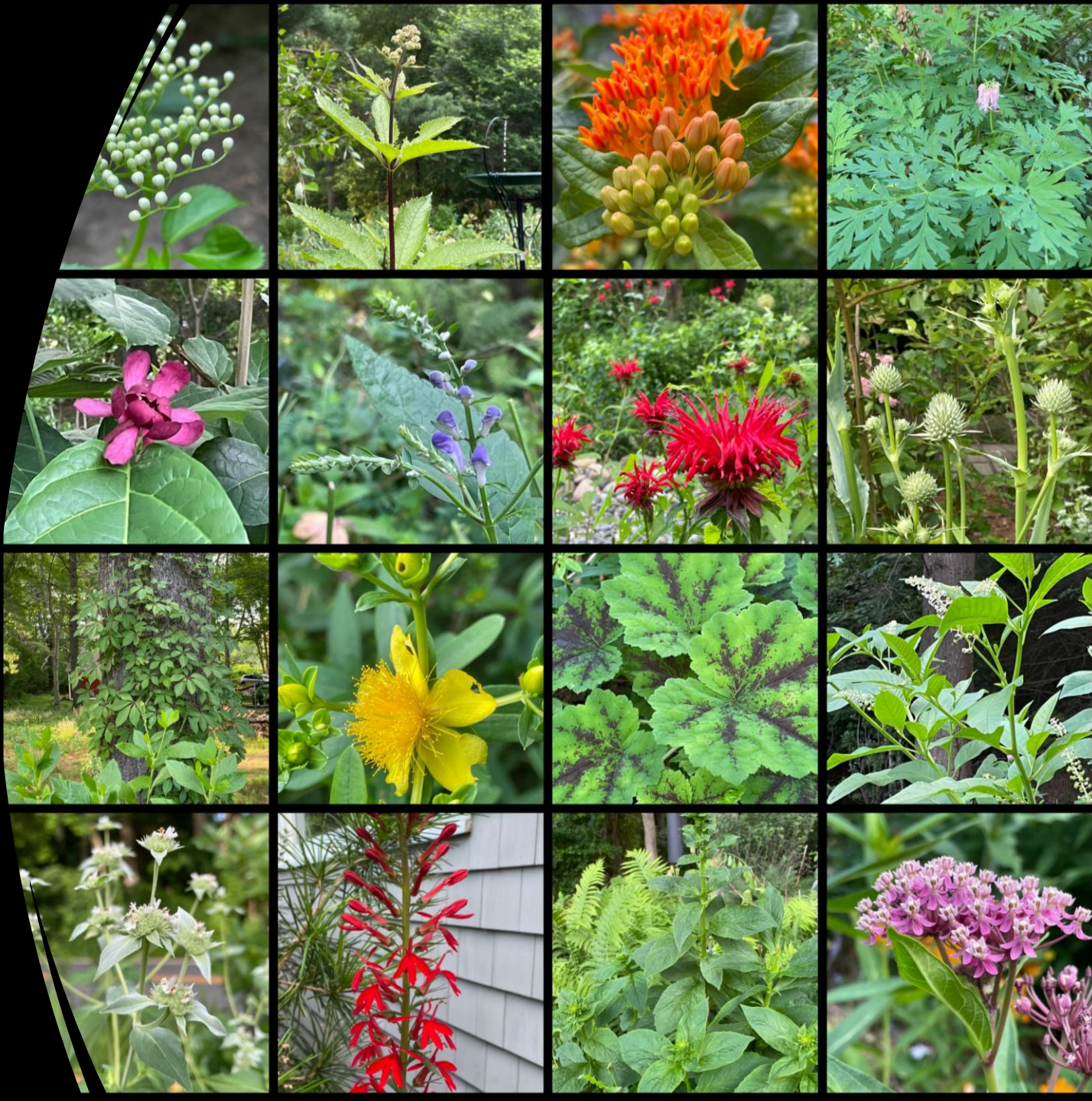
Simply Put – a native plant is one that originally occurred within a region as the result of *natural processes rather than human intervention*. They have **evolved alongside local wildlife, soil, and climate conditions over thousands – or even millions - of years**. In North America, they are generally defined as those existing prior to European settlement.

A close-up photograph of a monarch butterfly perched on a cluster of bright orange flowers. The butterfly's wings are a vibrant orange with dark brown veins and a black border with white spots. The background is a soft-focus green, suggesting foliage.

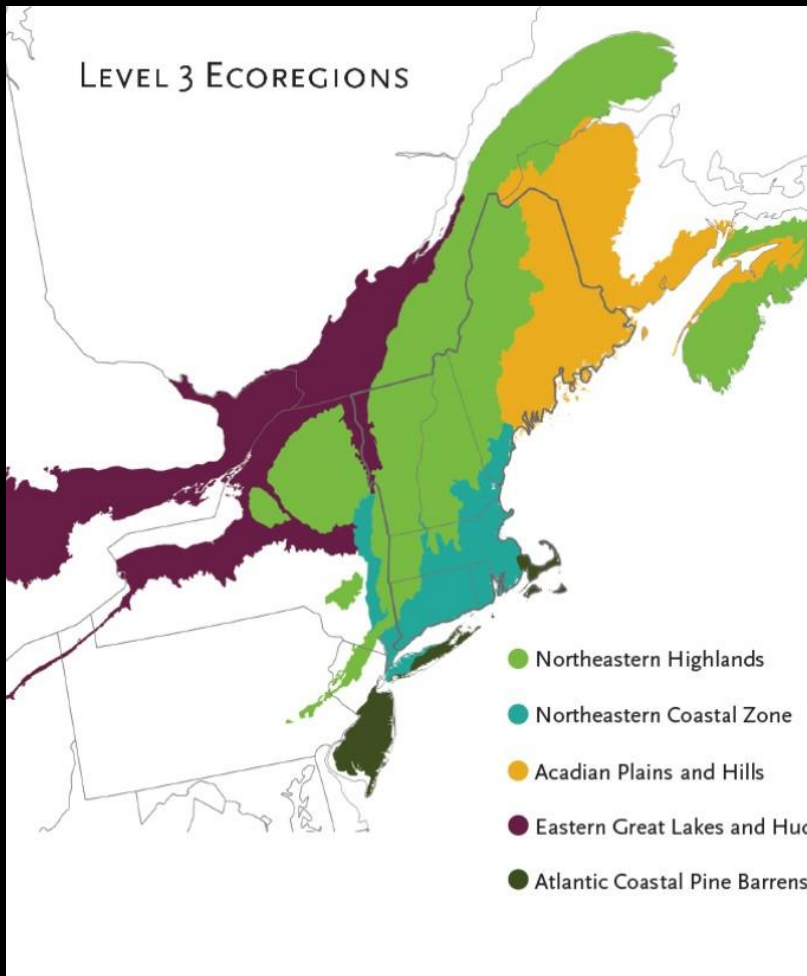
Our native insects need native plants. Approximately 90% of native insects are specialists and require specific native plants to survive.

Native Plants are not what we are used to seeing in our suburban and urban areas!

- Less than 20% of plants sold through the nursery trade are native plants
- Typical residential landscapes are made up of 80% NON-Native Plants
- “Wild areas” contain at least 30% non-native (invasive) plants



Great Places to Research Native Plants – Our website! www.PricklyEds.com



UNIVERSITY OF RHODE ISLAND
<https://web.uri.edu/rinativeplants/>



NATIVE PLANT TRUST

[https://plantfinder.nativeplanttrust.org/
Plant-Search](https://plantfinder.nativeplanttrust.org/Plant-Search)



The Biota of North America Program

www.Bonap.org



National Audubon Society

<https://www.audubon.org/native-plants>



National Wildlife Federation

<https://nativeplantfinder.nwf.org>



It is common to see bees and butterflies on non-native plants. Why does this happen if native plants are so important? If a pollinator visits a plant, then it must be good, right?

Planting for Pollinators

Consider:

- Abundance
- Life Cycle
- Diversity
- Quality
- Arrangement



Abundance
really does
matter!



AGRÁRMINISZTERIUM
Illusztrációk: Zsófia Márton
Szerkesztő: Deák Dalma, Zsófia Márton
Készült a Magyar Rovartani Társaság megalapítását
Támogatta az Agrárminisztérium (PFR/182/2021).

In order to have butterflies (and moths) you need caterpillars. This requires “host” plants. And it requires not killing caterpillars spotted on your garden plants!!

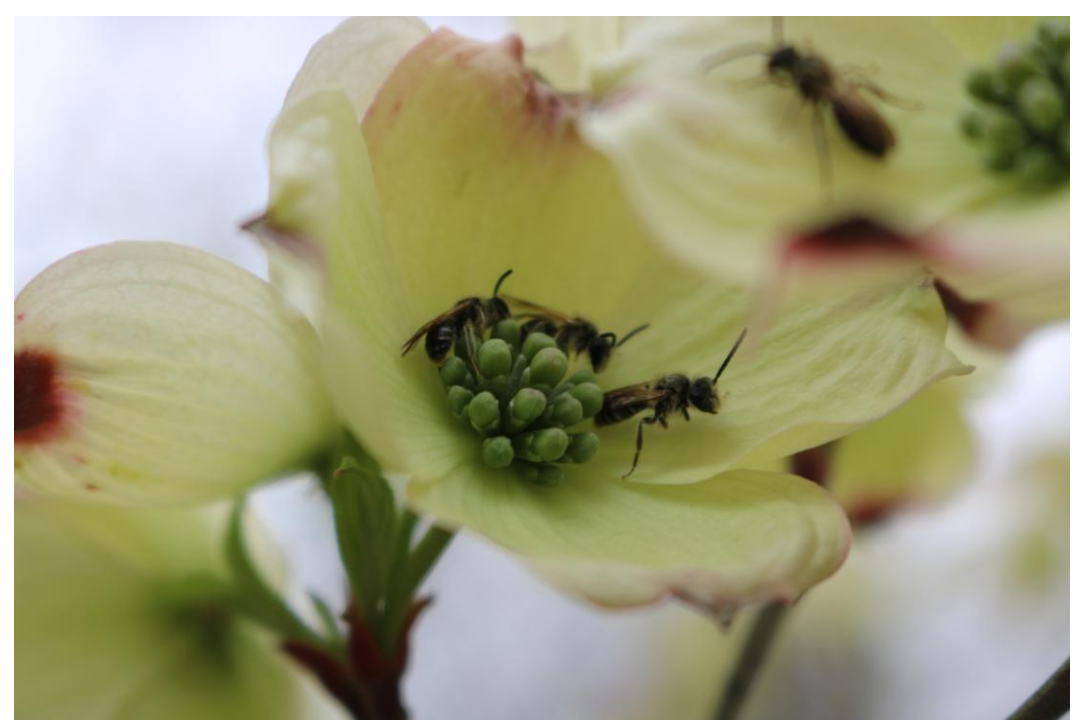
The symbiotic relationship between Monarch Butterflies and Milkweed is one of the best-known examples of this. While Monarchs need a wide array of flowers for nectar, without milkweed they cannot raise new generations of butterflies. The same is true for other “specialist” insects. **About 90% of the time, it is native plants that native butterflies require to complete their life cycle.**





Native trees and native shrubs offer some of the greatest pollinator benefits in our area!

The plants that give us the most "bang for the pollinator buck" are native trees and shrubs. They support the highest number of butterflies and moths whose caterpillars are essential to the food web. And many provide the earliest source of nectar in our region.





NATIVE grass plants are an overlooked necessity
in a complete pollinator ecosystem.

Every step helps!

But research has shown that higher value gardens will be **AT LEAST 100 square feet (ideally MUCH MORE)** and contain abundant levels of high pollinator value plants.



To support diverse types of pollinators, plant a diverse array of plants in lots of different colors and with different flower shapes!



Where ecology meets design

For best benefits work towards these concepts...

- Plant in clusters/clumps of at least 3 of a kind (but ideally use 5-7 of each species – especially with perennials and grasses!)
- Plan the space so that multiple things (ideally at least 3) are in bloom AT ALL TIMES from Spring through Fall
- Layer the landscape – canopy/trees, shrub layer, forbs (perennials and grasses), and groundcover layer



The 3 x 3 x 3 Simple Pollinator Garden Guidance

Seems to have roots in Ontario with the Master Gardeners and various Garden Clubs – quickly spread across social media and garden talks...

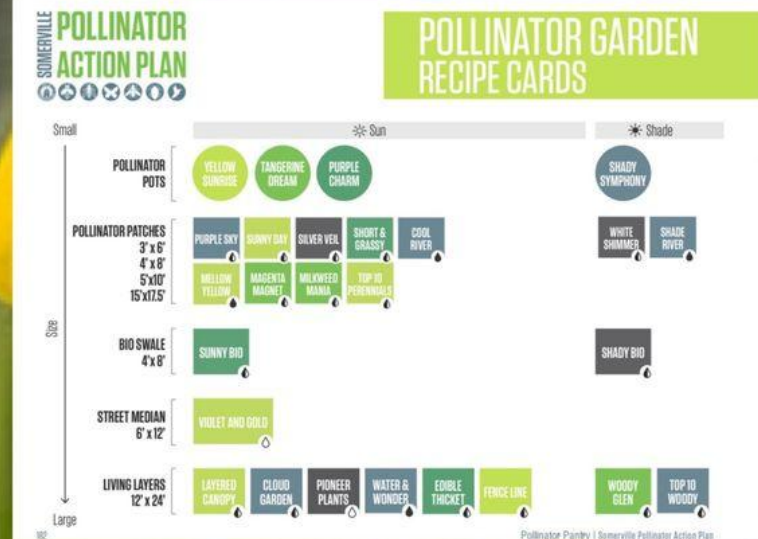
Well intentioned! Raising up great concepts! Lacking in some essential nuances...



There are a growing number of (really good!) **science driven** resources designed for home gardeners that include plant lists and sample plans...

We have gathered them on our website: www.PricklyEds.com so you can easily find and use them!

Once on the website visit: “Pollinator Gardening” “Planning Your Garden”



2

Pollinator Pantry Recipe Cards

Pre-designed and highly aesthetic gardens to support pollinators in Somerville!

SOMERVILLE POLLINATOR ACTION PLAN

Smallest Gardens

- Pollinator Pots
- Pollinator Patches: 3' x 6' | 4' x 8' | 5' x 10' | 7.5' x 15'
- Bio Swale 4' x 8'
- Street Median (For City Use) 6' x 12'
- Living Layers - Trees and Shrubs 12' x 24'
- Lawn Conversions & Seeded Meadows

Largest Gardens

Somerville Pollinator Action Plan | Pollinator Pantry

POLLINATOR GARDEN RECIPE CARDS

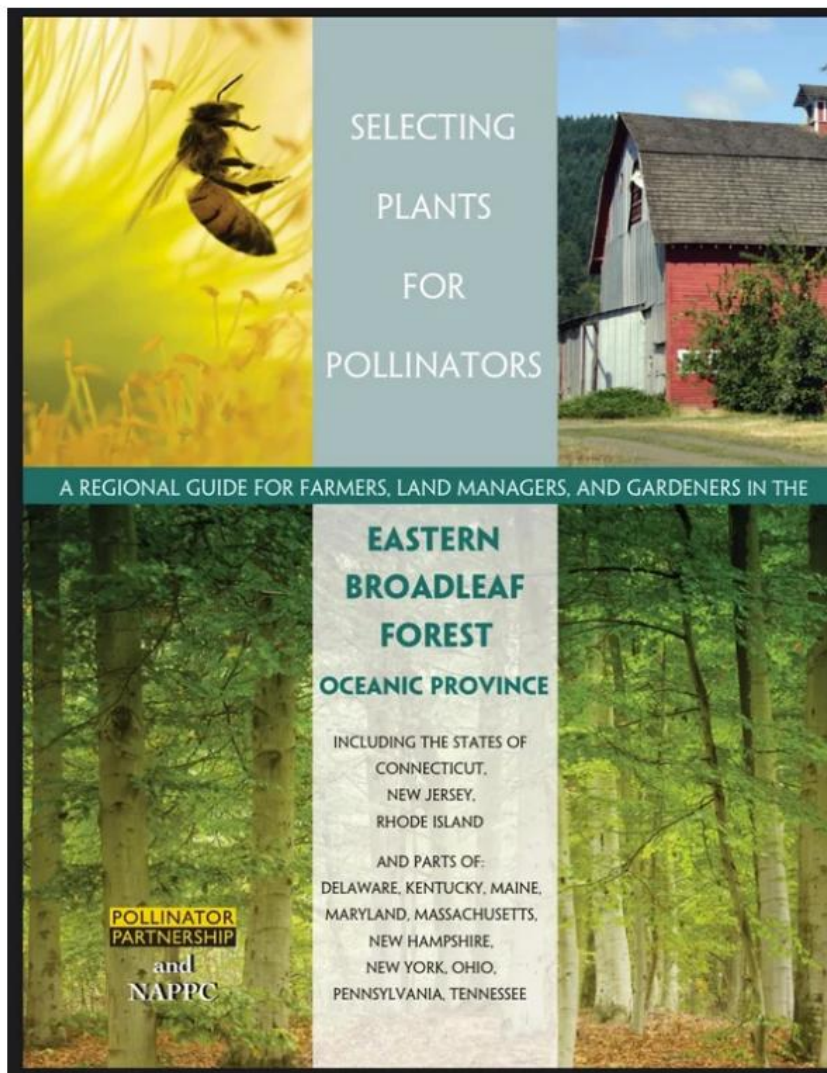
How to use the recipe cards:

- Planting diagrams are organized by size of your installation! Choose the diagram best suited for your site!
- Then choose a recipe card provided to use for species selection with that diagram. Recipe cards are organized by: Color, Soil Type, Moisture, & Other Site Conditions.
- Each symbol = 1 Plant
- Choose 1 plant for each symbol from the same Recipe Card.
- Make sure it's blooming in all seasons!
- You can substitute 'Seasonal Theme' for 'Groundcover' anytime.
- Have fun!

Somerville Pollinator Action Plan | Pollinator Pantry

Pollinator Pantry Recipe Cards from the Somerville Pollinator Action Plan

Pollinator Planting Guide



Selecting Plants your Pollinator Garden

Dig in to this fantastic pollinator planting guide specific to our region. It includes helpful charts of bloom times for beneficial plants and matches host plants to our native butterflies.

[DOWNLOAD THE GUIDE HERE](#)

LIFE IN THE GARDEN BLOG

UPCOMING EVENTS

WHY NATIVE PLANTS?

PLANNING YOUR GARDEN

PLANTS FOR TOUGH SPOTS

POLLINATOR GARDENING

BIRD FRIENDLY LANDSCAPES

WHERE THE WILD THINGS ARE

BUILD A HEALTHY LANDSCAPE

LANDSCAPING FOR KIDS!

Learn more about Keystone Plants and Explore Sample Lists

[LEARN MORE ABOUT KEYSTONE PLANTS FROM PIEDMONT MASTER GARDENERS](#)

[NATIONAL WILDLIFE FEDERATION KEYSTONE PLANTS FOR OUR REGION](#)

[GROW NATIVE MASS KEYSTONE PLANTS FOR LANDSCAPE USE](#)

[PLANTS FOR AT RISK BUMBLEBEES AND BUTTERFLIES FROM THE GEGEAR LAB AT UMASS DARTMOUTH](#)

[UNIVERSITY OF RHODE ISLAND BEE LAB POLLINATOR PLANTING GUIDES](#)

[EXPLORE SOME TOP HOST PLANTS FOR BUTTERFLIES HERE](#)

[EXPLORE TOP BUTTERFLY NECTAR PLANTS WITH THE XERCES SOCIETY- BE SURE TO SCROLL TO THE CHART DESIGNED FOR THE NORTHEAST](#)

[LIFE IN THE GARDEN BLOG](#)

[UPCOMING EVENTS](#)

[WHY NATIVE PLANTS?](#)

[PLANNING YOUR GARDEN](#)

[PLANTS FOR TOUGH SPOTS](#)

[POLLINATOR GARDENING](#)

[BIRD FRIENDLY LANDSCAPES](#)

[WHERE THE WILD THINGS ARE](#)

[BUILD A HEALTHY LANDSCAPE](#)

[LANDSCAPING FOR KIDS!](#)



“Bee” sure to explore the URI Bee Lab Planting Guides!



QUESTION FOR THE EXPERTS...

Many are looking for simple, straightforward ideas on just a few plants that they can add to their yard to be a part of the effort to support pollinators. But the reality is that the science on pollinator – plant relationships is much more complex. Ideas for how people can get started without getting overwhelmed?

It sounds nice – but is it TRUE that even one plant helps?



More from the Experts...

Is there “pollinator gardening” advice you should probably avoid – or use with caution?

What about:

AI?

Social Media Groups?

Neighbors?

“Expert” Gardeners?

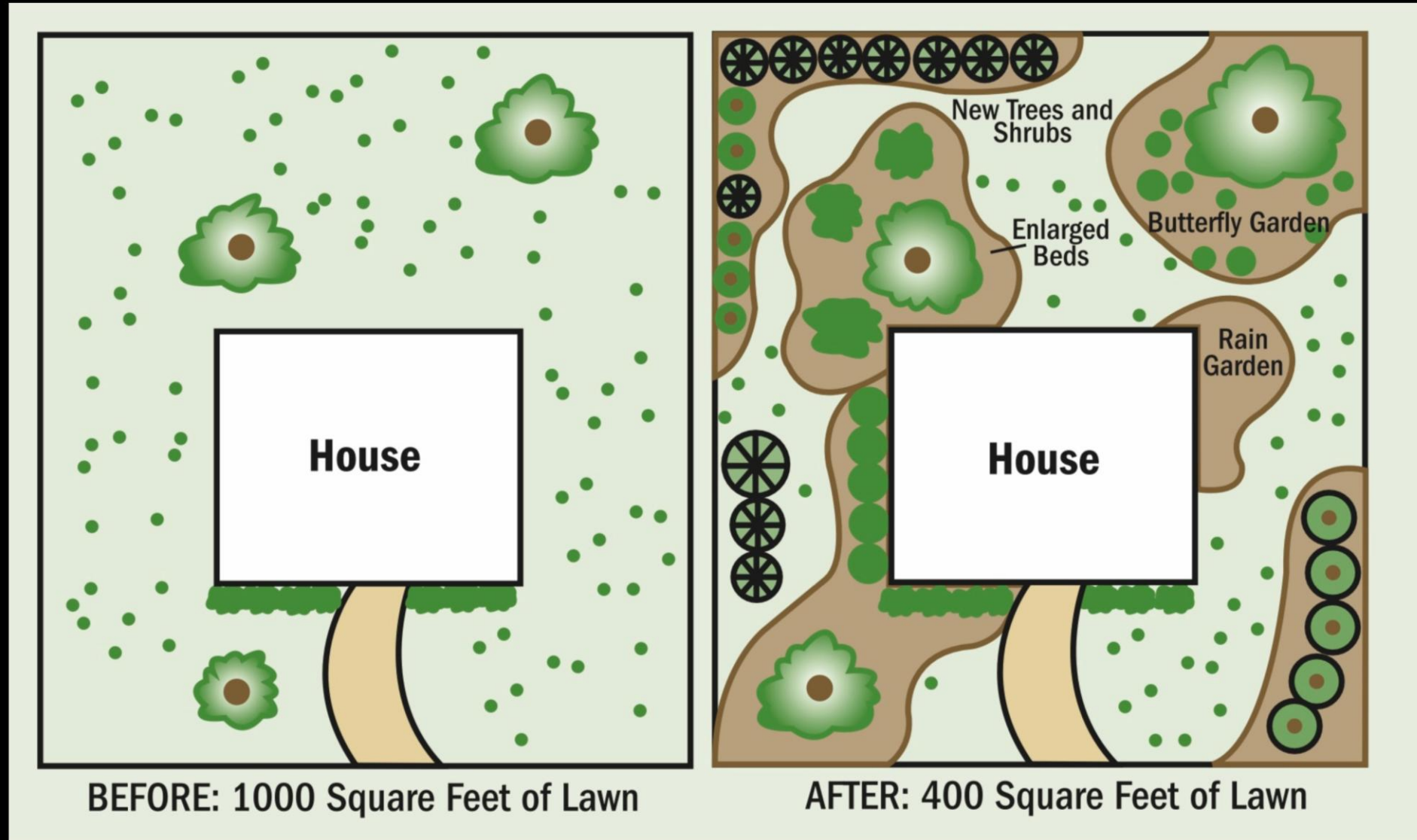


Why is “Lawn Culture” such a problem?

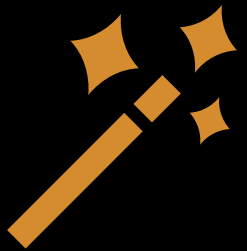
Lawn is the largest irrigated crop in the United States – 40 million acres, larger than the area of all our National Parks combined

- Lawns use nine billion gallons of water a day
- Lawns are a mono-culture providing little to no ecological value
- 80 million pounds of herbicide/pesticide applied to lawns each year
- \$36 billion spent annually to maintain lawns
- Chemical runoff in local waterways is resulting in oxygen chocking algae blooms
- Two-stroke engines, prevalent in lawn equipment emit high emissions (estimated 242 million tons of pollution) and pose numerous other health and environmental risks.

Goal is to Transition From Lawn as a Wall to Wall Carpet to Lawn as an Area Rug (over time)!



An essential clarification. Creating beautiful – and beneficial – pollinator friendly spaces doesn't happen by just letting things go – by doing nothing – by sprinkling some seeds around – or by waving a magic wand.



These spaces are built with Vision – Research – Planning – Lots of Work & Lots of Plants – and they are often built over years or even decades...

No Mow May –
Good idea? Or
well-intentioned
idea that may be
a bad idea?

No Mow May: Why critics say the movement has good intentions, but bad execution

The idea of “No Mow May” was first coined in the United Kingdom and has since gained popularity across the United States.





Planting for Pollinators but then spreading and spraying pesticides creates an ecological trap!



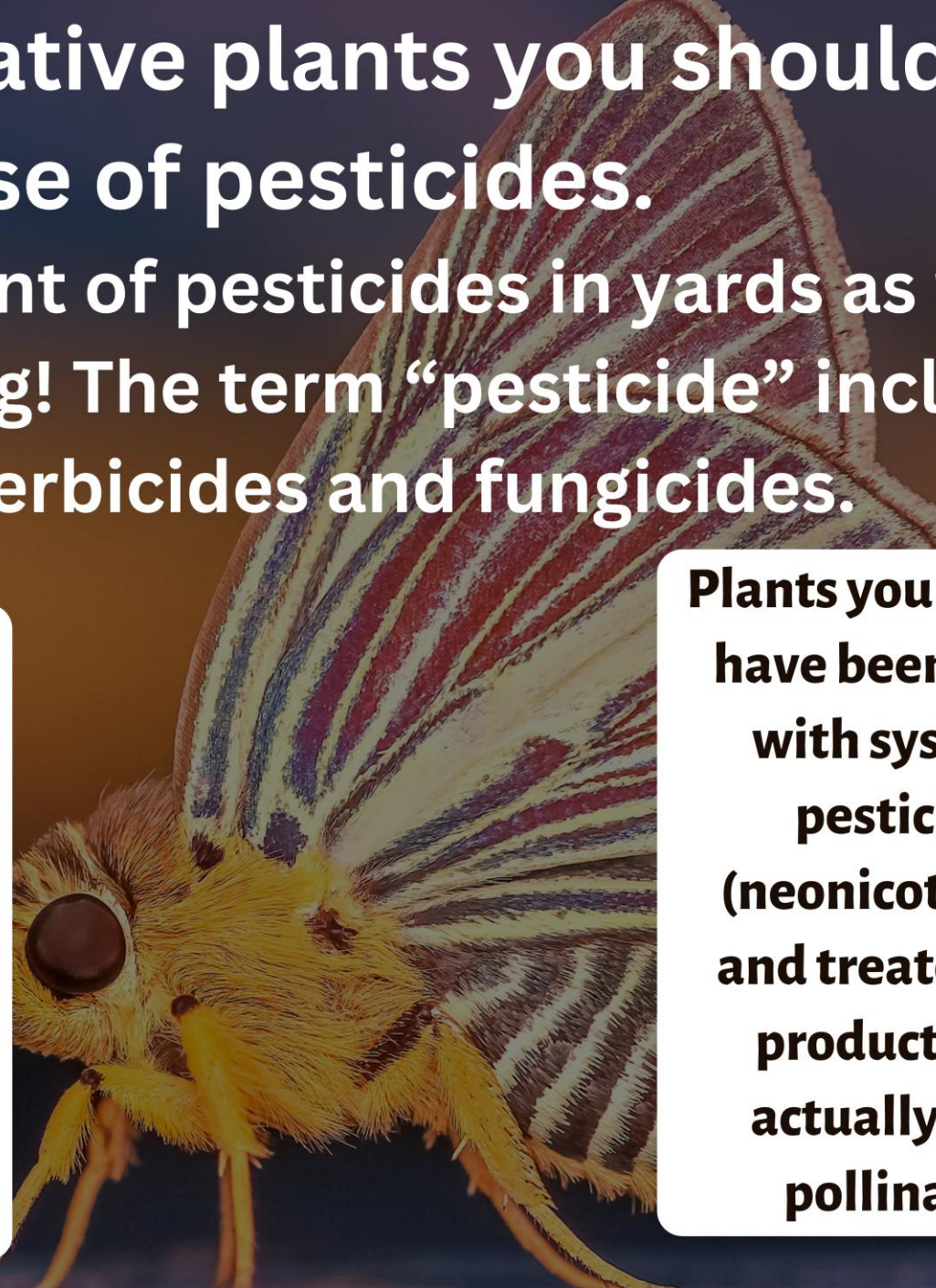
When you garden with native plants you should & can forgo the use of pesticides.

Americans use 10x the amount of pesticides in yards as what is used in commercial farming! The term “pesticide” includes insect pesticides, herbicides and fungicides.

Pesticides used on lawns for purely aesthetic reasons kill at least 7 million birds each year

Broadcast sprays (like mosquito spray) are harmful to all insects - and especially deadly to bees

Plants you buy may have been grown with systemic pesticides (neonicotinoids) and treated with products that actually harm pollinators



Mosquito Fogging

The latest assault on pollinators, songbirds, and neighbors!

A recent Xerces Society Study showed that 100% of yards sprayed for mosquitoes had pesticides at levels toxic to pollinators and 75% of neighboring properties had drift at levels high enough to be toxic to pollinators as well.

Pesticide Sprays for Mosquitos Can Kill Pollinators and Drift Into Neighboring Yards

xerces.org/press



Photo: Praxis Eco Pest Control CC-BY



BUZZ KILL



- **QUESTIONS FOR THE EXPERTS:**
- If a company says a lawn treatment or garden product is “natural” or “safe” then it must be harmless, right?
- I read that 60 million pounds a year of pesticides are used on residential landscapes. How is that possible?
- Do you have any ideas for how we can work together to reduce pesticide use and exposure in communities?

Native pollinators don't live in managed hives. They need natural shelter 12 months of the year.

Create habitat and shelter – keep leaves, save stems, build brush piles, leave logs and snags



Leaves:

- Insulate
- Provide nesting material
- Recycle nutrients into the soil
- Keep soil at right humidity levels for ground nesting bees



A pivotal 2025 study from the University of Maryland (Ferlauto and Burghardt) found that **raking and removing leaves reduces spring moth and butterfly emergence by 45% and species richness by 40%**. The research further emphasized the importance of leaving leaves INTACT – not shredding them. Stick with a rake and broom to move leaves into garden areas.



Native plant stems should ideally remain for multiple seasons – as they break down, they can support consecutive generations of stem nesting insects. When cut back, they should be cut to a height of 12-24 inches.



Bee Hotels – Man Made Versus Nature Made

Does it Matter?



***Did you know – 70%
of native bees nest in
the ground?***





QUESTION FOR THE EXPERTS:

When people think about helping pollinators it is usually flowers that come to mind! But research is increasingly showing the importance of overwintering habitat in sustaining pollinator populations.

What ideas do you have for how we can better help educate the public on the most meaningful steps they can take in their yards to help pollinators in all seasons? - AND - What challenges come to mind when you think about keeping leaves, brush, etc. in yards and gardens?

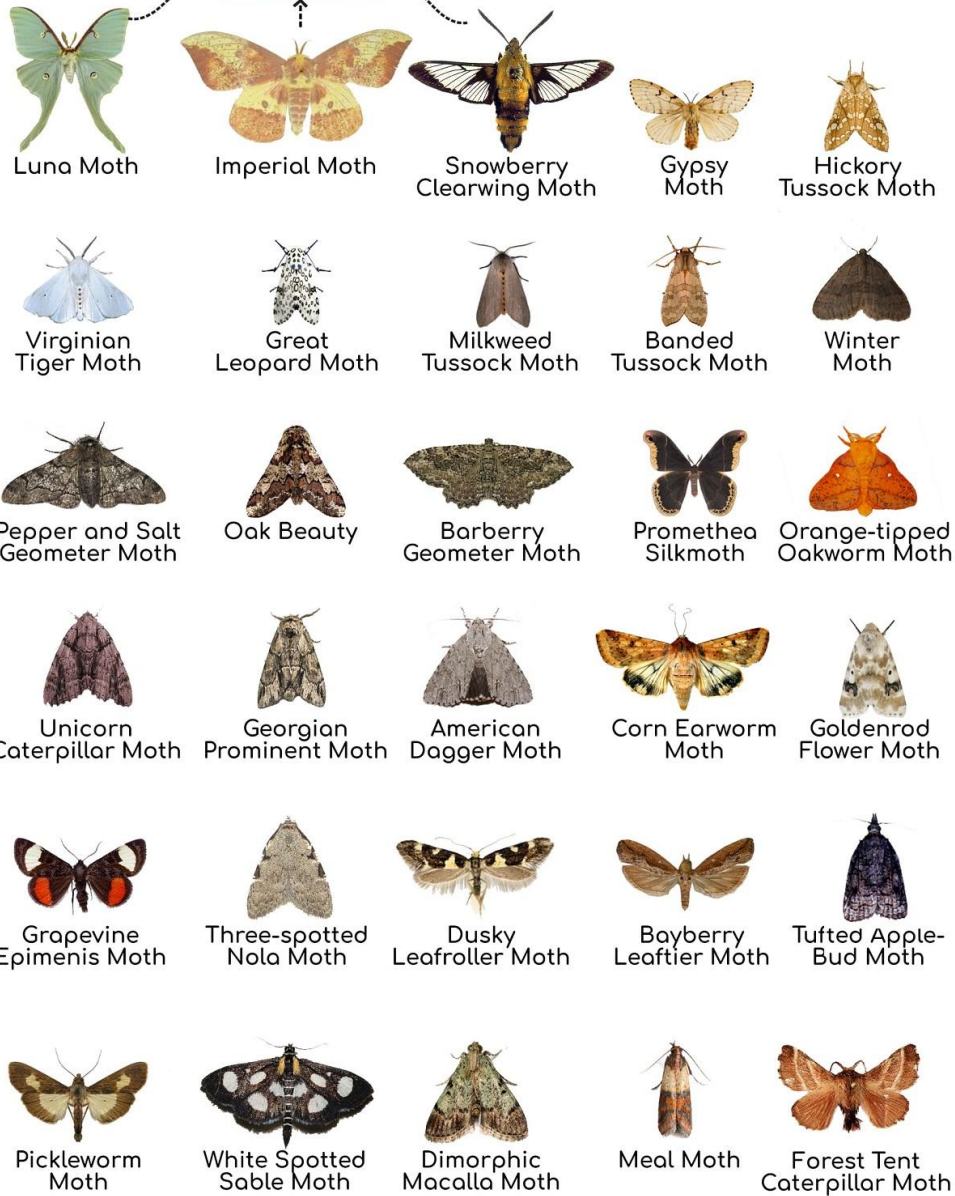
Pollinators
have a night
shift that you
don't hear
much about.



Moths in Rhode Island



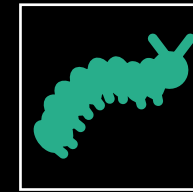
Largest Moths



Did you know? North America has around 12,000 species of moths compared to just 825 species of butterflies? Most Moths are beneficial!



Moths Pollinate Plants – nearly as efficiently as Bees



Moth Caterpillars are essential food for birds



Moths feed amphibians, mammals and reptiles

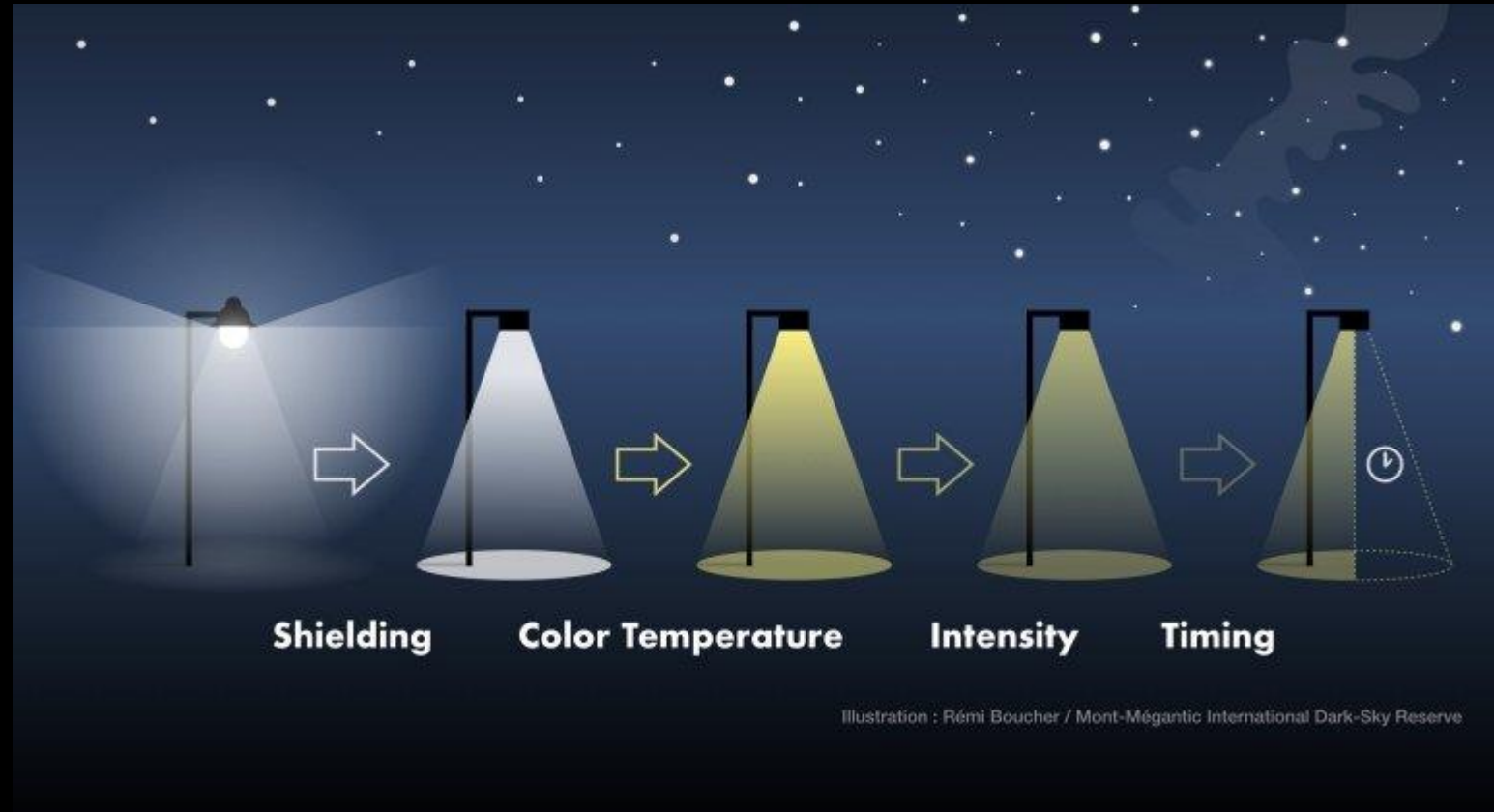
Environments with many native plants will support healthy populations of moths and in turn healthy and diverse ecosystems.

To Support the Night Shift of Pollinators be sure to Follow Nighttime Lighting Guidance From www.DarkSky.org

Too much light at night is harmful to pollinators, messes with predator-prey dynamics, negatively impacts birds and waterways and takes away the ability to enjoy the wonder of the night skies!

Outdoor Lighting Should Be:

- Useful
- Targeted
- Low
- Controlled
- Warm Colored



Question for the Experts ...

People are often surprised that something as simple as turning down the lights – or closing curtains in a house could be a big help to pollinators.

What is another example of something we don't talk enough about when it comes to helping pollinators at home and in communities?





- LIFE IN THE GARDEN BLOG
- UPCOMING EVENTS
- WHY NATIVE PLANTS?
- PLANNING YOUR GARDEN
- PLANTS FOR TOUGH SPOTS
- POLLINATOR GARDENING**
- BIRD FRIENDLY LANDSCAPES
- WHERE THE WILD THINGS ARE
- BUILD A HEALTHY LANDSCAPE
- LANDSCAPING FOR KIDS!

Habitat Assessment Guide for Pollinators in *Yards, Gardens, and Parks*



Above: a diversity of native wildflowers make it possible for this small urban pollinator garden to support a variety of bees, butterflies, and other insects all season long. Below: native wildflowers and fruit trees provide high quality resources for pollinators, wildlife, and people in a small space.

Purpose

Landscaping for pollinators is one of the easiest ways for urban, suburban, and rural residents to directly benefit local wildlife. Schoolyards, community gardens, back yards, corporate campuses, rain gardens, and neighborhood parks all have the potential to meet the most basic needs of pollinators, including protection from pesticides, and resources for foraging, nesting, and overwintering.

The goal of this tool is to evaluate pollinator habitat at a given site, and identify areas for improvement. This process will also help you prioritize the most essential next steps to take for pollinators at the site.



Learn more about how well your yard does – or does not-support pollinators with this science-backed checklist from the Xerces Society. Download it from our website www.PricklyEds.com

How well does your home habitat support pollinators?

Pollinators need more than a few flowers to survive and thrive! Use this helpful guide from the Xerces Society for Invertebrate Conservation to evaluate your yard & garden and identify ways you can enhance your outdoor space to better support pollinators and other beneficial species! 🐝

[DOWNLOAD THE GUIDE AND CHECKLIST HERE](#)

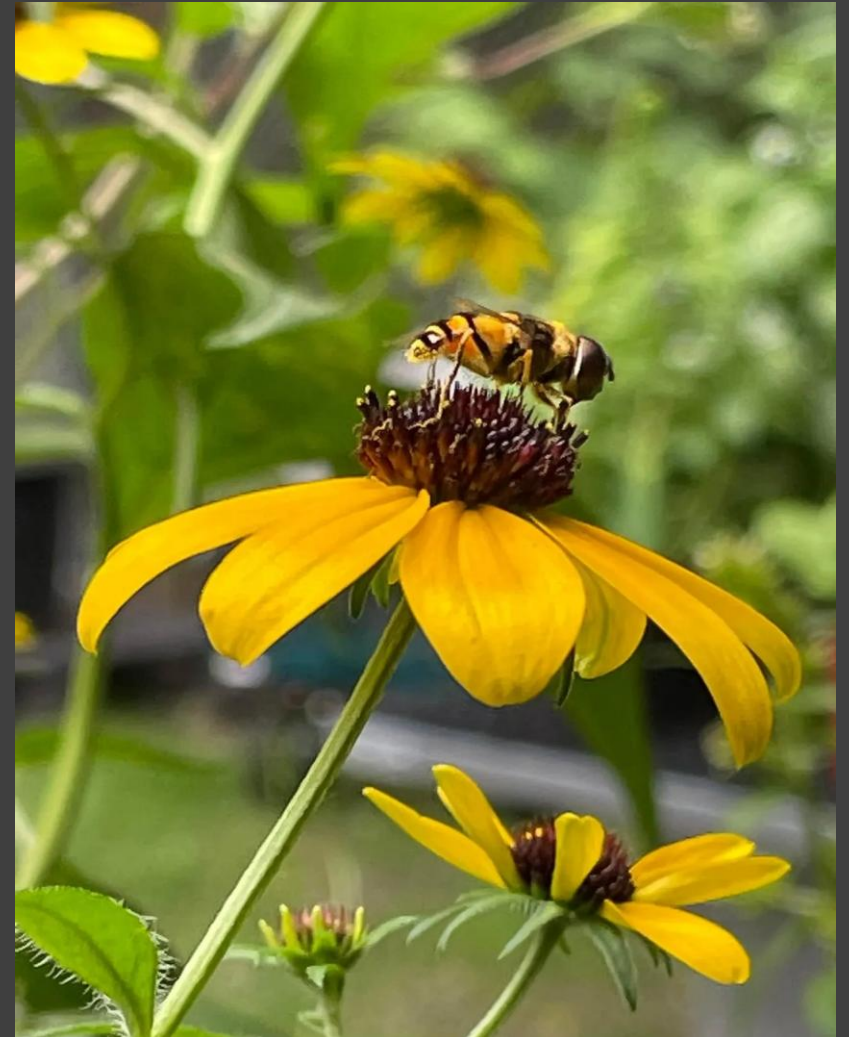




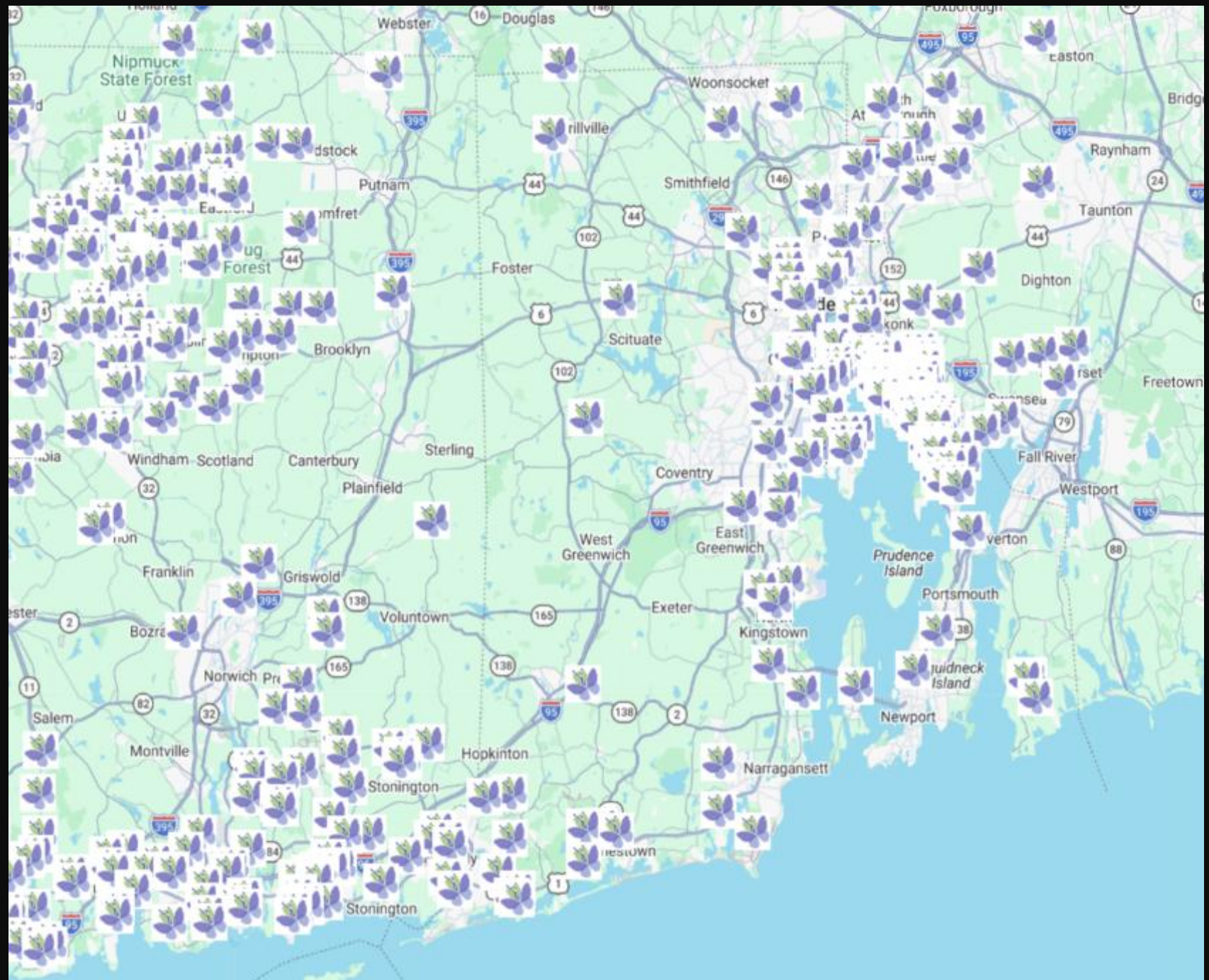
**Connections and Community
are at the heart of this.**

Pollinator Pathways (www.Pollinator-Pathway.org) are helping to connect people and communities. Key Elements of a Successful Pollinator Pathway

1. Create Pollinator Way Stations that include:
 - Native trees, shrubs, perennials and grasses
 - Diverse plants that bloom from spring until fall
 - Big patches of plants for better foraging
 - Areas with dead wood, branches, leaves, and bare dirt for nesting and sheltering
2. Eliminate the use of harmful chemicals & pesticides
3. Shrink areas of turf and lawn across communities
4. Focus on Community Connections

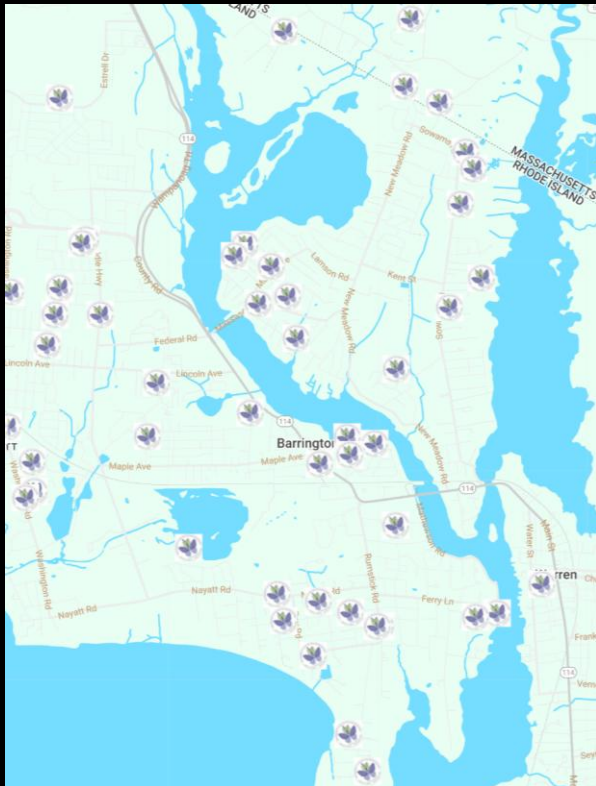


Rhode Island's first Pollinator Pathway launched in Barrington in 2020. Since then, there has been rapid growth across Rhode Island, especially in the East Bay!



Barrington Pollinator Pathway

PollinatorPathways@blct.org



Barrington Resilience Demonstration Garden – Installed in 2024





Pollinator Pathway

Bristol Pollinator Pathway
bristolpathway@gmail.com

Warren Pollinator Pathway
WarrenPollinatorPathway@gmail.com

Pollineighbor meeting - everyone is welcome!

First Thursday each month

Next meeting:

April 2nd at 1401 Hope Street (Audubon Society of Rhode Island), Bristol, RI 02809 6-7pm

AUDUBON
POLLINATOR
ALLIANCE

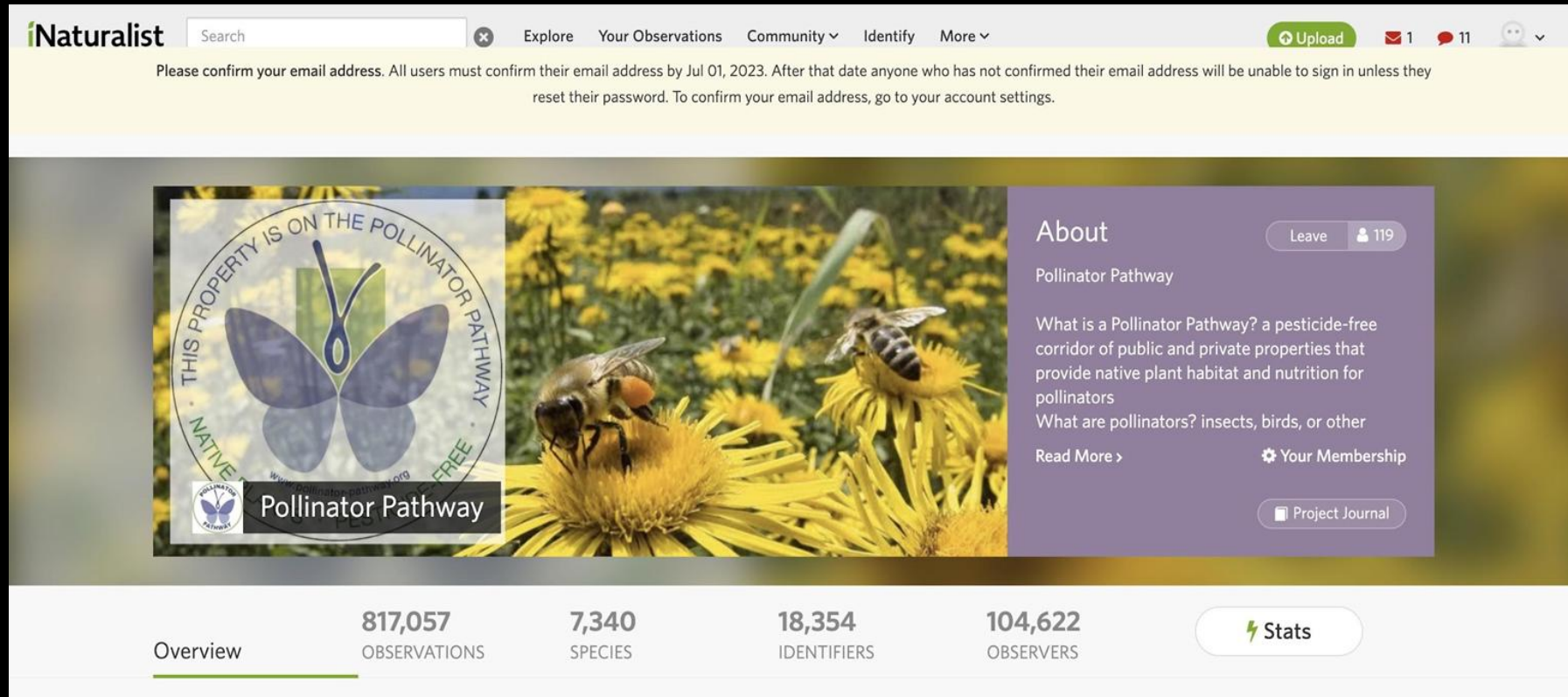
Put your pollinator-friendly garden on the map!

AUDUBON SOCIETY OF RHODE ISLAND

Commit to talking to –
and ideally recruiting – at
least one neighbor this
season! Our efforts are
amplified when more
people participate!



Help identify pollinator species in your neighborhood.



iNaturalist Search [x] Explore Your Observations Community Identify More Upload 1 11

Please confirm your email address. All users must confirm their email address by Jul 01, 2023. After that date anyone who has not confirmed their email address will be unable to sign in unless they reset their password. To confirm your email address, go to your account settings.

Pollinator Pathway

THIS PROPERTY IS ON THE POLLINATOR PATHWAY
NATIVE FREE
Pollinator Pathway

About Leave 119

Pollinator Pathway

What is a Pollinator Pathway? a pesticide-free corridor of public and private properties that provide native plant habitat and nutrition for pollinators

What are pollinators? insects, birds, or other

Read More > Your Membership

Project Journal

Overview **817,057** OBSERVATIONS **7,340** SPECIES **18,354** IDENTIFIERS **104,622** OBSERVERS **Stats**

1. Download the iNaturalist app
2. Join Project "Pollinator Pathways"
3. Photograph pollinators
4. Log your photographs and observations on iNaturalist



Pollinator WEEK

June 22-28, 2026



Questions?



The only difference between a
flower and a weed is judgement...

Wayne Dyer