

# Creating a resilient pollinator garden

Worcester Native Plant Initiative  
Leonardo Da Silva



# Objectives

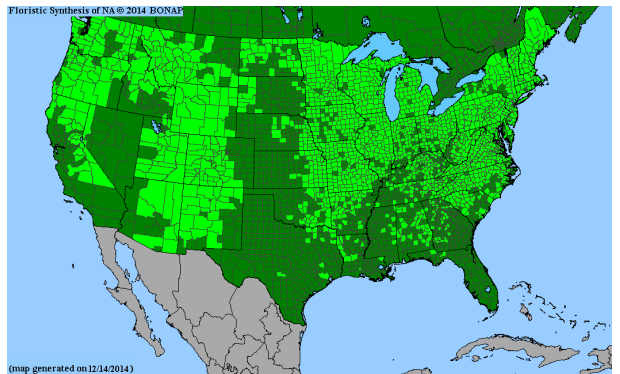


- Learn how to create a pollinator garden that can sustain itself within three years by implementing effective strategies
- Provide some online and local resources to assist you in creating a habitat garden.



# What is a pollinator garden, and what does garden resiliency mean?

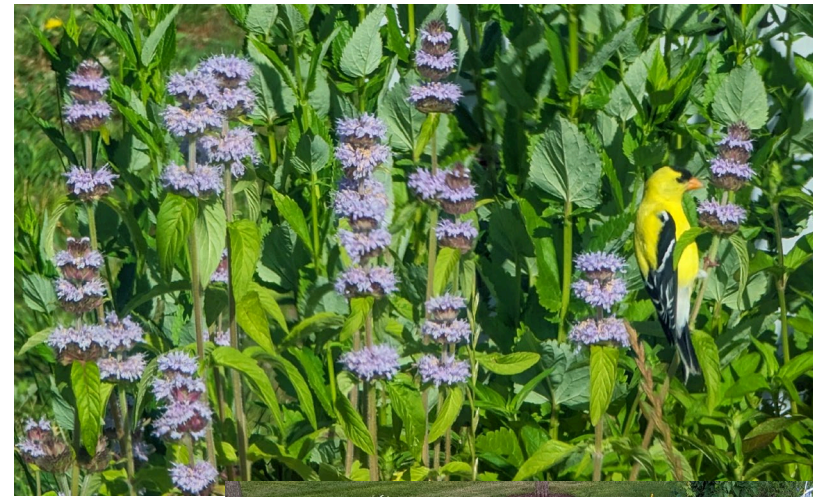
- A pollinator garden attracts and supports pollinating insects such as bees, butterflies, moths, and hummingbirds. These gardens typically feature a variety of native flowering plants that provide nectar, pollen, and habitat for pollinators.
- Pollinator gardens enhance outdoor spaces and help preserve these vital pollinator creatures.
- Creating a garden that can thrive without human input after 3 growth seasons is a sign of garden resilience.
- Resource: Find out if a plant is native to your area by searching for "name of species + bonap" (e.g. *fragaria virginiana bonap*). This online plant atlas will provide a map displaying the plant's native range.





# First-year Planning your garden

- Choose an area for your pollinator garden. It is best to choose a sunny or partially sunny location for the installation, as this will support a wide variety of flowering herbaceous plants.
- Pollinator gardens make an excellent alternative for replacing lawns.
- When choosing plants, consider their mature height. Some native herbaceous plants can grow as tall as 8 feet.





# Preparing the planting bed

- Remove the lawn and any other unwanted species from the site.
- A mattock pick is one of the most effective hand tools for removing lawns.
- If you have a large area, using a power tiller can be helpful.
- The objective is to remove the lawn by uprooting it and then raking away the plant material.





# Amend and mulch the soil

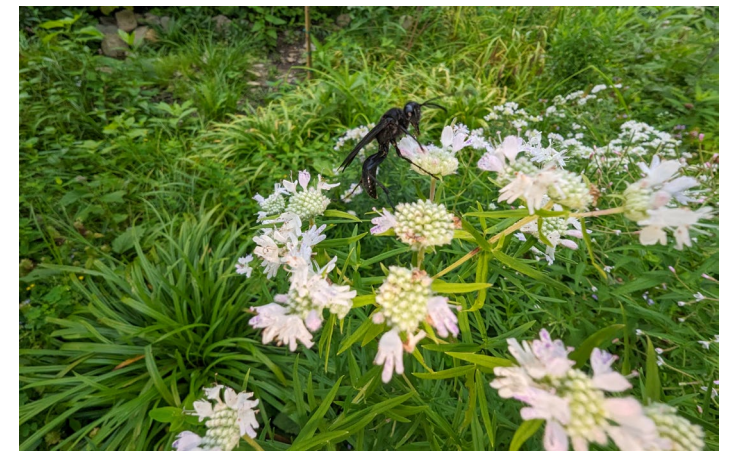
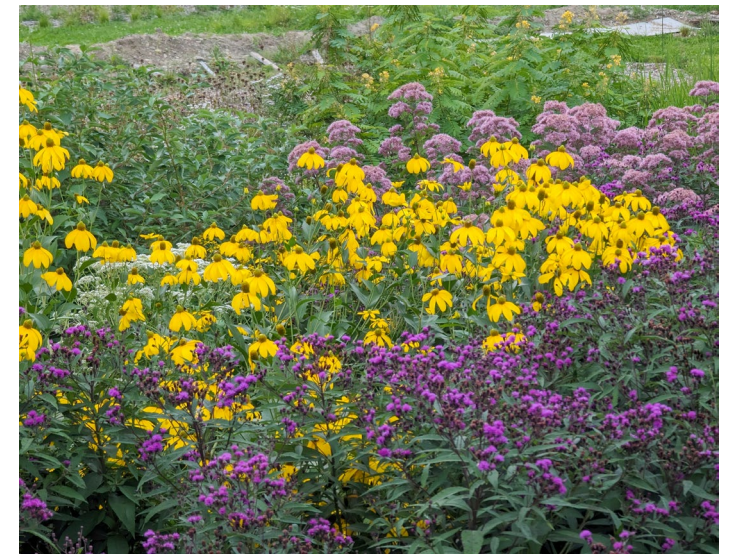
- Soil rich in organic matter is crucial for creating a resilient garden. It allows plants to develop strong root systems during their first season and increases the beneficial bacteria and fungi necessary for healthy soil.
- Resource: The city of Worcester leaf and yard waste compost is available to city residents free of charge. This is an excellent soil amendment.
- Cover the soil with a 3 to 5-inch layer of mulch to prevent soil seed bank from germination.
- Resource: You can contact local tree companies about arborist mulch delivery. Companies can sometimes deliver it to you for free, depending on their local availability.





# Planting your garden

- It is ideal to place plants close together, around 12 to 18 inches apart. This creates soil shade, improves soil moisture retention, and reduces weed growth.
- If multiple plants of the same species are present, plant them together to create a cluster. This will improve foraging efficiency, reduce pollinator energy expenditure, and make the plants more visible to pollinators.
- Resource: Garden in the Woods (Native Plant Trust) in Framingham sells a wide variety of native plants. Lady Fern Farm and the Garden-on Team at UU will also hold native plant sales locally. You can find more information about their sales schedule on Facebook or [ladyfernfarm.com](http://ladyfernfarm.com).
- Resource: Learn how to grow your native plants from seed with the Worcester Native Plant Initiative. The WNPI offers a winter sowing workshop and native seeds in the fall and winter.



Lady Fern Farm



# Watering and fertilization

- Investing in water and fertilization to optimize growth in the first season is crucial for developing strong roots that can endure the winter months.
- Resource: When applied during the growth season, a weak solution of fish and seaweed emulsion can efficiently provide plants with adequate nutrition and improve soil quality by increasing the population of beneficial bacteria and fungi in the soil. Fish and seaweed emulsion can be easily purchased online or at local hydroponic stores.





# Preparing your garden to sleep



- In late fall and winter, fallen leaves can be added to garden beds to provide plant root insulation and a hiding spot for insects.
- It is recommended not to cut down plants. This is because insects utilize dried plant material for winter protection and reproduction. Some insects rely on dried hollow stems to deposit their eggs. Additionally, dried seed heads provide essential food for birds during the winter when food is scarce. It is better to avoid cutting down plants to maintain an ecological balance.





# Second year Improving Resiliency

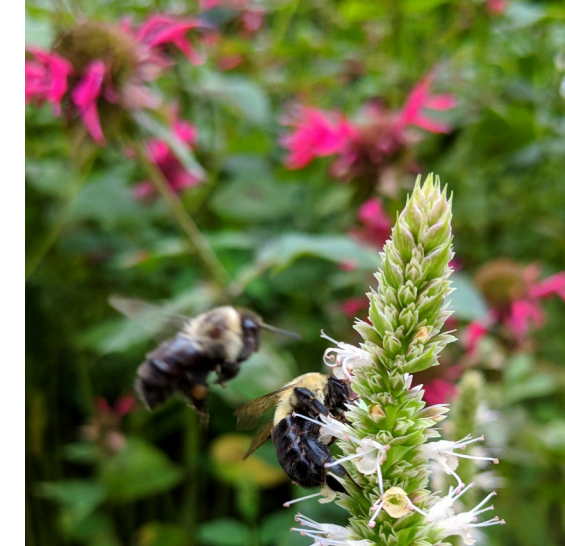
- You may notice a significant increase in plant size during the second year. It is important to fertilize early spring and fall and water the garden bed when the soil dries.
- Remove any unwanted plants from your garden during the growth season. This will prevent competition for water and nutrients.
- Add plants to bare soil spots. This will continue to improve soil water retention and increase beneficial bacteria and fungi by decreasing sun UV soil sterilization.
- Green mulching is a sustainable gardening practice that uses low-growing plants to cover the soil. Partridge pea and Wild strawberry are examples of such plants.





# Third year Watch, Enjoy and Learn

- In the third year, your garden will be mostly self-sustaining. You may continue fertilizing in spring and fall (around Easter and Halloween) and occasionally water when plants show drought stress. The bark mulch and leaves are now decomposing and slowly providing needed nutrients to the plant
- You will see more insects and birds visiting your garden.
- If you need to remove spent plants, wait until temperatures reach the mid-50s and leave about 12 inches of stem.
- Join the WNPI Facebook page and share your results. Encourage others to create pollinator-friendly gardens.





# Local Resources

- The Worcester Native Plant Initiative (WNPI) is a group of volunteers committed to restoring Worcester's native ecosystem. Our efforts aim to educate and raise awareness through workshops and hands-on learning opportunities. We have worked on several projects around Worcester, including a pollinator garden at Coal Mine Brook Park, rehab of the bioswale at Shore Park, and the installation of native plants in containers and street mediums around Webster Square.

On our Facebook page, you can connect with other people interested in native plants in our community and discover education and volunteering opportunities.

Don't miss out on our upcoming events and opportunities! Sign up for our email list today to stay in the loop.



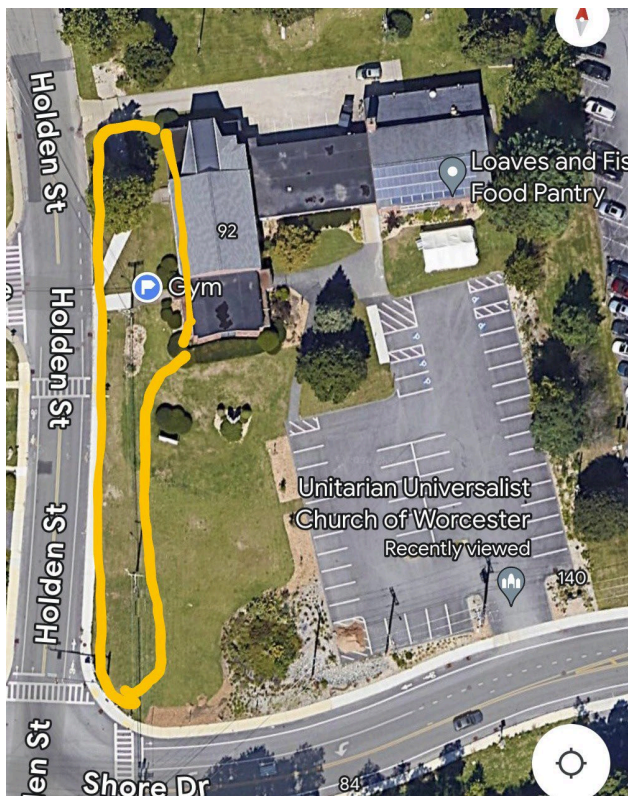
## Worcester Native Plant Initiative >

Private group · 1.2K members

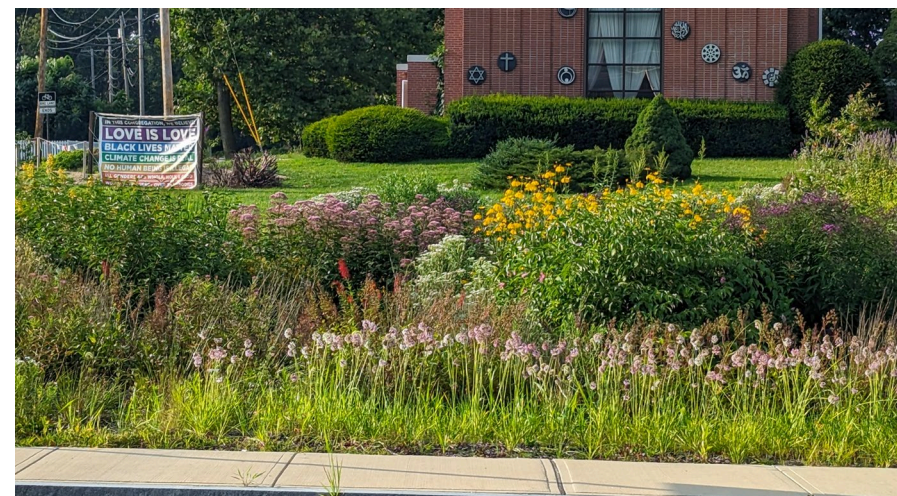




# Local Resources continued



- The Unitarian Universalist Church of Worcester at 140 Shore Dr in Worcester has a large habitat garden that is public and free to visit.
- In the garden, you can explore a variety of native plant species, learning about their textures, heights, and flowering patterns and finding inspiration.







Thank you!