

Handbook for Rotarians



A Collaborative Rotary Project

A Rotary-branded community-collaborative environmental project focused on preserving, creating, and expanding native pollinator habitats on private and public lands.



OUR PURPOSE

The endangered monarch butterfly is our iconic representative.

Because it is migratory, it is representative of many other stressed and threatened species that share their fly-way - migratory or not.

Because milkweed is the ONLY plant species that Monarch caterpillar CAN digest, restoration of the migratory corridor must include milkweed and nectar-producing native plants for fuel.

RESERVE & PROTECT

Our purpose is to preserve and protect the biodiversity of our planet – in our communities and our own backyards.

EDUCATE

Teach the causes of habitat loss and species extinction and help children and adults to better understand and appreciate plant-insect-animal interdependence and how healthy ecosystems with robust biodiversity support all life on earth.

ADVOCATE

We advocate for a shift away from non-native invasive plant species - that provide little to no benefit to our ecosystems - to native keystone plants.

ENGAGE

We work to engage all Rotary Clubs, Districts, and community partners who share our concerns, from Central Mexico, where Monarchs overwinter, to Canada - the farthest reach of their migration.

WHY POLLINATORS?

Bees, butterflies, moths, ants, beetles, wasps, flies, birds, and bats pollinate up to 95% of all flowering plants on earth

Honeybees
provide up to
\$5.4 billion in
agricultural
productivity in the
U.S.

\$217 billion
to the global
economy

180,000 plant species and more than 1200 crops rely on pollinators 4,000 species of native bees are the primary insect pollinator of many agricultural plants

"Bees don't know they are small, so they do great things."

- **90%** of the population of Monarch butterflies declined in the last 20 years.
- 28% of bumble bee species are in serious decline.
- 99% of bees native to the U.S. and Canada are in decline
 - 51 species of butterflies, 111 species of moths, and three species of bumblebees are at major risk Colony Collapse Disorder decimated honey bee hives in North America.

HOW TO HELP

Grow pollinator-friendly flowers | Provide nest sites | Avoid pesticides | Spread the word

INDIVIDUAL

- **Grow pollinator plants** on rooftops and roadside. Even if you don't have a backyard, you can grow pollinator plants in a pot on your apartment balcony or adopt a stretch of roadside that is currently a pollinator wasteland.
- Plant native milkweed. Milkweeds are tricky to start from seed, but nurseries sell
 milkweed plant plugs. The same nurseries may welcome the seeds you've collected.
- Landscape with native plants. Ensure that native plants that best support the local ecosystem are planted in your backyard or places where you can influence plant selection.
- Make your backyard pollinator-friendly. Choose native plants, eliminate competing invasive species, avoid pesticides, and minimize overnight lighting.
- In the winter, leave the leaves. One of the most important things you can do to help overwintering pollinators is to do nothing at all. By leaving the ground cover of leaves, sticks, and plant material, you also leave the material that many pollinators use to make nests.
- Postpone pulling up dead stems or removing old bark. Many pollinators will use
 dead stems or old bark as protection from the elements while they are overwintering.
- Leave your hummingbird feeder up until the hummingbirds have migrated.
- Support local bees and beekeepers. Buy local honey. Build a bee condo.
- Spread the word and encourage family members and neighbors to get involved.



- Create NEW pollinator gardens appropriate to the environment in private and public spaces, incorporating best practices such as native, non-invasive plants and milkweed for monarchs.
- Collect Pollinator plant seeds for scattering and starting seedlings. Offer a
 community service project of gathering seeds from restored prairies and existing
 pollinator gardens. Those seeds can be planted where needed and used to start
 next year's plugs for transplanting.
- Organize a fundraiser or mixer to support pollinator projects and organizations.
 Planting and maintaining pollinator gardens require funding. Organize a community fundraiser, possibly by selling pollinator plants to start your own garden started or enlarged. Have a mixer and invite prospective members. Serve pollinator cocktails or recipes!
- Support 'No Mow May' Early spring, before many of the plants have flowered, is a
 critical time for wild pollinators. plants in your lawn are an important early food
 source. Allowing the plants in your lawn to bloom before the first mowing nourishes
 pollinators in the spring. Working with Homeowners' associations and local
 authorities create a 'No mow May' campaign.
- Enhance outreach materials. Part of implementing your project may include writing
 a blog post, designing a brochure, or adding content to your club's website to
 support your community coalition. Many of the listed pollinator webpages offer
 content on which you can build.
- **Educate** by inviting relevant speakers, working with schools, sharing on social media, in a newsletter, with the media, and with your neighbors and friends.

SEE RESULTS



LOCAL & GLOBAL COMMUNITIES

Once you take action, the results are not only beneficial to our pollinator friends. All of us will reap the reward of a safer world.

You will also benefit from the beauty that is created by gardens and pollinators. To the left are photos from a pollinator's garden at Ohio State University - Trumbull County Extension in Cortland, Ohio, created by the Cortland Rotary Club in collaboration with the Master Gardeners.

All six of Rotary's areas of focus are closely linked to the environment.

Promoting Peace
Fighting Disease
Providing Clean Water and Sanitation
Saving Mothers & Children
Supporting Education
Growing Local Economies

SHARE RESULTS

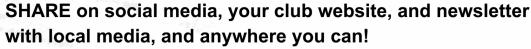
MEASURING THE IMPACT

In the 2024-2025 Rotary Year, the District Environmental Committee will measure our collective impact by recording the number of gardens, plants, and activities to attract pollinators. Resources will be posted on the district website to support clubs in their efforts and track their progress as much as possible.



TRACK your projects. How many people participated by planting milkweed or other other flowers that attract pollinators. How many volunteered to plant a garden or to help with another OP project. How many gardens were created, and what were the locations? A worksheet is provided in your packet to help you track. You may scan the QR code to submit your worksheets and photos, use this link, or email

ccope@unitedwaytrumbull.com OR TEXT 330-207-2065.











GET STARTED

IT'S EASY!

PLEDGE TO TAKE ACTION AS A CLUB - Sign A Resolution

ORGANIZE YOUR ENVIRONMENTAL COMMITTEE

In the 2024-2025 year, Operation Pollination will be the primary focus for the District Environmental Committee.

CHOOSE YOUR PROJECT (S)

MAKE A PLAN

(Use the worksheet in your packet)

GET OTHERS ON BOARD



TRACK, SUBMIT, SHARE, & CELEBRATE!



REMEMBER TO UPKEEP AND RETAIN GARDENS



3 PRO TIPS FOR PLANTING MILKWEED

No matter the type or variety, perennial Milkweed should generally be planted in full sun (6+ hours of direct sunlight) and in well-drained soil that's been amended with organic planting mix. Maintain 1" of water per week for the first year to ensure establishment and fertilize every spring. Milkweed seeds required Cold Moist Stratification. See the printout in your packet or online folder or visit gowitbuildit.com.

Additionally, here are 3 professional tips to keep in mind when planting milkweed:

- Plant multiple milkweed plants, even multiple species, close together. Perennials look and perform their purpose better when planted en masse.
- Make sure other types of plants growing nearby do not block access. Make it easy for monarchs to find the milkweed, as they do rely on visual cues like the plant's shape and leaf form to recognize the target host plant (divergent leaves confuse insects).
- Design your pollinator garden so that milkweed plants are at the perimeter, offset by hardwood mulch. Studies show milkweed plants are bound to be found when not hidden amongst other plants and especially when planted with north-south access.



RESOURCES

ONLINE

Environmental Sustainability Rotary Action Group

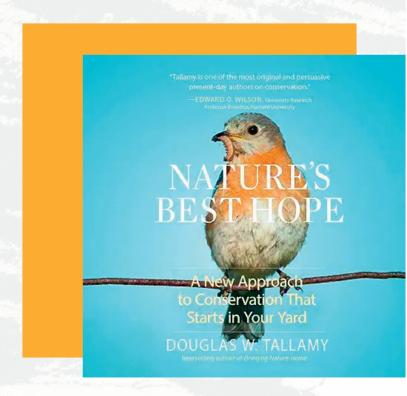
Find Your Planting Guide by Region pollinator.org/guides#zip

Operation Pollination

Pollinator Partnership

Rotarians for Bees

Save Our Monarchs



IN YOUR PACKET

LEARN HOW

7 Things You Can Do for Pollinators

Bee Identification Guide

Build a Bee Condo



Midwest Recipe Card for Pollinator's Garden

Milkweed Seed - What it is & Cold Treatment & Planting

Plant Selection for Garden

Planting for Pollinators

Protecting Monarchs Brochure

Selecting Plants for Pollinators









Pollinator Cocktail Recipes Pollinator Crossword Puzzle



Also check out the ERSAG guide for World Environment Day - Great Projects for Clubs (not just for World Environment Day)



ROTARIANS MAKING A DIFFERENCE!

SUPPORTING THE ENVIRONMENT - ROTARY'S 7TH AREA OF FOCUS



