

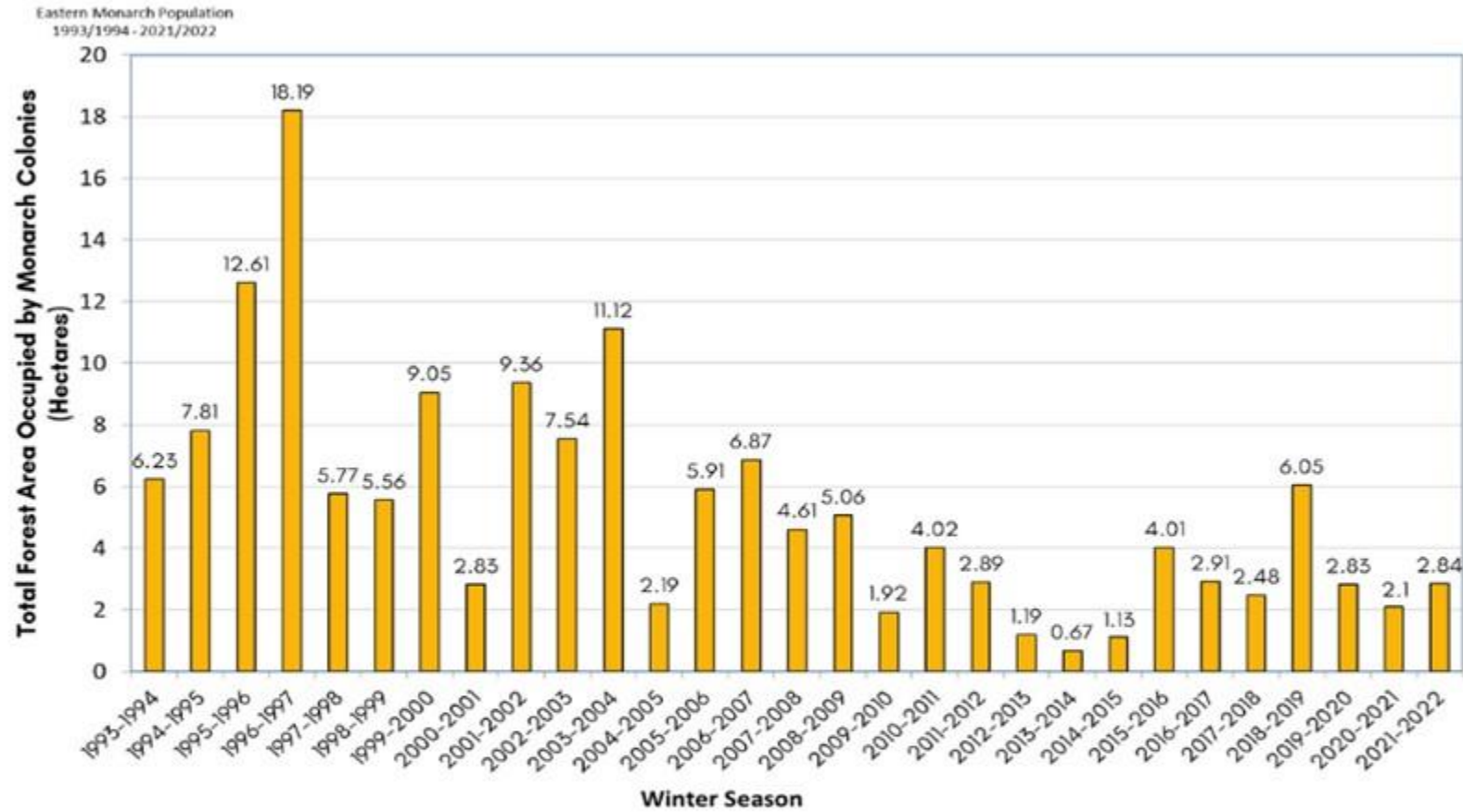








Total Area Occupied by Monarchs at Overwintering Sites in Mexico 1993/1994 - 2021/2022



Scientists estimate that a minimum of 6 hectares of overwintering monarchs is needed to sustain the eastern population (Semmens et al., 2016).

Data from 1994-2003 were collected by personnel of the Monarch Butterfly Biosphere Reserve (MBBR) of the National Commission of Protected Natural Areas (CONANP) in Mexico. Data from 2004-2022 were collected by the WWF-Telcel Alliance, in coordination with the Directorate of the MBBR. 2000-2001 number as reported by Garcia-Serrano et al. in 2004.

Operation Pollination

A 7th Area of Focus environmental framework



ESRAG
ENVIRONMENTAL
SUSTAINABILITY
ROTARY ACTION GROUP

Paul Oman



Great Smoky Mountains National Park

(Tennessee and
North Carolina)



Yosemite National Park

(California)



Member of

Twin Cities EcoClub

District 5950 Environmental Committee (MN)

Member of



North American Central Chapter

**Operation
Pollination
Ambassadors**



**Mina
Venkataraman**
District 3203
Nilgiris West Club, India
ESRAG Chair
South Asia Chapter



Tina Hall
PDG District 6220
NE WI/Upper Peninsula, MI
now with D7780
Newcastle Club, ME



Brian Yopp
MotorCities
National Heritage
Area,
Southeast Michigan



**Marlene
Gargulak**
PDG District 5960
NW WI/SE MN
Rice Lake Club, WI
1st DG to adopt OP

Judy Freund
PDG District 5960
NW WI/SE MN
Hudson Club, WI
**Co-Chair of an ESRAG
Pollinator Committee**



Manon Crowley
Environmental Chair
District 6450, Chicago
"Birthplace of Rotary"
Naperville Club, IL



George Gormley
District 6360
Southwest Michigan
Past President
Harbor Country Club



Eli Arias
Distrito 4140
Rotary Club of Morelia,
Mexico



Elayne Bozick
District 6560
Eastern Ohio
DGND (DG '24-'25)
Youngstown Club, OH



Holly Zane
Wyandot, Bear Clan
Freedom's Frontier
National Heritage
Area, KS/MO



Chris Stein
National Park Service
Twin Cities EcoClub
Minnesota (D5950)

The Story

Pollinators are essential for life on Earth
AND it is critically important to protect them,

BUT their numbers have declined by more than
45% in the past 50 years,

THEREFORE the **Operation Pollination** framework
was developed to *help us protect the planet
for our children and their children.*

Pollinators unite us across the globe...



"The Little Things that Run the World." E.O. Wilson

Agenda

Part One: What is *Operation Pollination*?

Part Two: A brief history of the framework.

Part Three: How to engage in *Operation Pollination*.

Part One

What is *Operation Pollination?*

Operation Pollination...

...is an inclusive framework
to help recruit a **diverse array of**
organizational partners willing to engage
in pollinator habitat restoration and
education activities.

Operation Pollination

Two goals:

- 1) **restore pollinator habitat**
and
- 2) **educate people about the importance of pollinators.**



“The real voyage of discovery consists not in seeking new landscapes but in having new eyes.”

—MARCEL PROUST

...but with those “new eyes” no one wants to see this scene.

Much of the food we eat is thanks to the work of pollinators.



FREE Ecosystem Services

Pollinators are responsible for the reproductive success of more than 85% of the world's plants.

FREE Ecosystem Services

Pollinators are responsible for “pollinating” more than 85% of the world’s plants.

But...since the 1970’s, pollinators have declined by more than 45% worldwide.

Meet the Pollinators...



Bees



Wasps



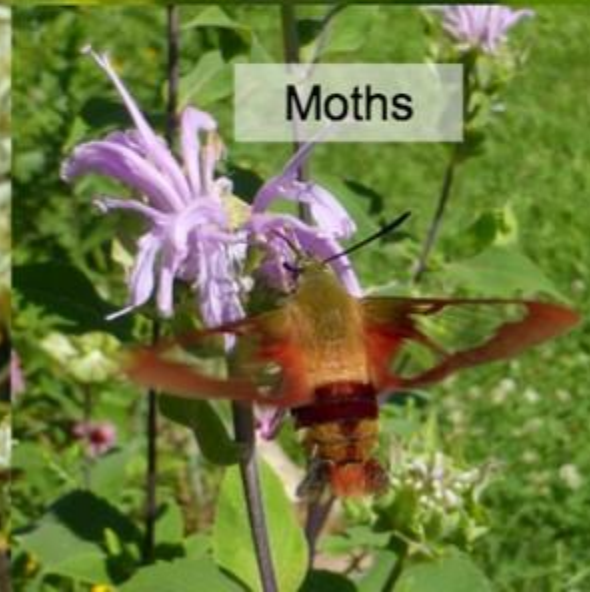
Flies



Beetles



Butterflies



Moths

What type of pollinator is this?





Without pollinators, the humans and all of the terrestrial ecosystems would cease to exist.

To help address the
decline in pollinators...

Operation Pollination

...was conceived and is being
implemented in places across the USA,
and beyond.



is a Leader!

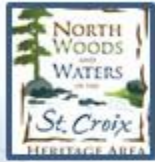
Part Two

Operation Pollination...

A brief history

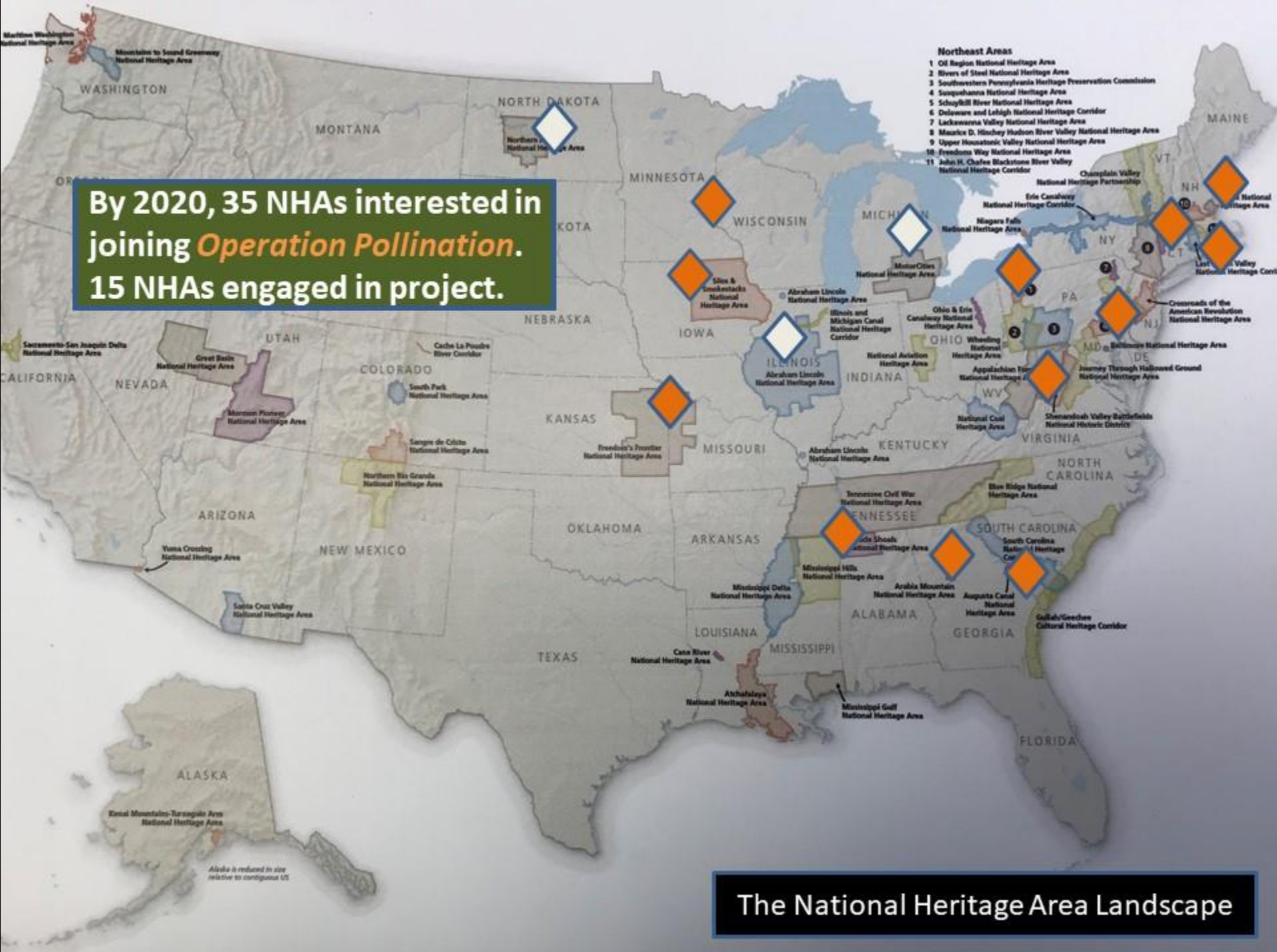
The *St. Croix Valley Pollinator Partnership* (Aug 2015)

Federal land managers invited ALL organizations to join the cause.



By 2020, 35 NHAs interested in joining *Operation Pollination*.
15 NHAs engaged in project.

- Northeast Areas**
- 1 Old Region National Heritage Area
 - 2 Rivers of Steel National Heritage Area
 - 3 Southwestern Pennsylvania Heritage Preservation Commission
 - 4 Susquehanna National Heritage Area
 - 5 Schuylkill River National Heritage Area
 - 6 Delaware and Lehigh National Heritage Corridor
 - 7 Lackawanna Valley National Heritage Area
 - 8 Maurice D. Hinchey Hudson River Valley National Heritage Area
 - 9 Upper Housatonic Valley National Heritage Area
 - 10 Freedom Way National Heritage Area
 - 11 John H. Chafee Blackstone River Valley National Heritage Corridor



The National Heritage Area Landscape

August 2020



ESRAG

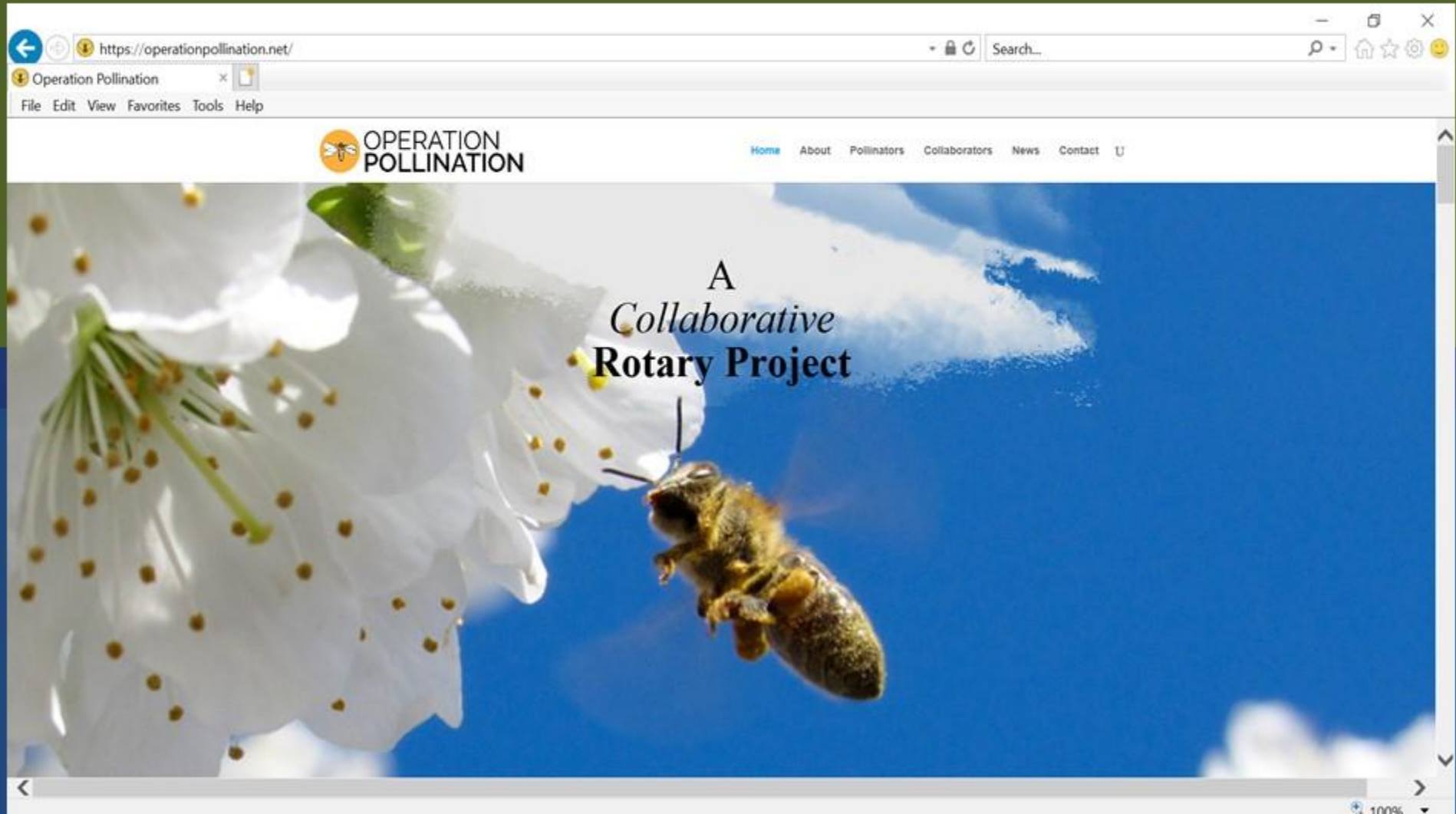
North American Central Chapter

adopted

Operation Pollination

as a *Pollinator Committee* project

<https://operationpollination.net>



Rotary

District 6450



In February 2021, 6450 was the *first district* to sign a Districtwide Pollinator Resolution to join

Operation Pollination.

62 ROTARY CLUBS; 2000+ ROTARIANS

INVITATION

District 6360, Michigan

Rotary
leaders are
now signing
onto
*Operation
Pollination**



Rotary Club of Luton-Somerley,
England



Carnegie
Dunfermline,
Scotland



Rotary Club of Morelia, Mexico



District 6250, WI



District 5960,
MN/WI

*** PLEASE consider signing a Pollinator Resolution and Pollinator Pledge form.**

The *first Club* in South Asia...

...to sign a *Pollinator Resolution*.



Rotary Club Nilgiris West
District 3203
Tamilnadu India

Chicagoland Pollinator Partnership

July 8, 2022



**If you want your Club
to get involved with
protecting the environment,...**

**...*Operation Pollination*
might be right for you?**

Part Three

How to engage in *Operation Pollination*

At its simplest... **Operation Pollination** is signing a piece of paper... It is Three Easy Steps

1) Pollinator Resolution



2) Pollinator Pledge



3) Put pledge partner names on the back of your Pollinator Resolution and obtain media attention.



Pollinator Resolution

The undersigned recognize the critical importance of pollinator habitat both restored and maintained on public and private lands within Rotary District 6440. Through collaboration and outreach resulting from this **Pollinator Resolution**, an interconnected mosaic of pollinator habitat will be developed to help restore and maintain populations of pollinator species throughout this region.

- WHEREAS, pollinators include butterflies, bees, some birds, bats, and other insects that play a crucial role in flowering plant reproduction, and
- WHEREAS, three-fourths of the world's flowering plants and 35% of the world's food crops depend on pollination to be successful, and
- WHEREAS, given the breadth, severity, and persistence of pollinator losses it is critical to expand efforts to reverse these losses and restore populations to healthy levels, and
- WHEREAS, an **Operation Pollination** goal is to increase pollinator habitat throughout the world, and
- WHEREAS, the leadership and impact of Rotarians volunteering to improve communities is a hallmark of Rotary International, and
- WHEREAS, the **Environmental Sustainability Rotary Action Group (ESRAG)** supports the goals of **Operation Pollination**, and
- WHEREAS, working together, we can increase capacity to reach out to organizations and individuals throughout our region with information and education about pollinators and their need for protection,

THEREFORE, we declare that it is the intention of Rotary District 6440 to support the goals of **Operation Pollination**, and to work with our Clubs to collaboratively and strategically protect and enhance pollinator species and their habitat on public and private lands throughout the District.

Governor, Rotary District 6440

Environmental Chair, Rotary District 6440

Operation Pollination Goals

- Increase and improve pollinator habitat** by identifying existing pockets of pollinator habitat and helping develop a nectar corridor for migratory and non-migratory pollinator species.
- Develop strategic partnerships** for improving or creating habitat for pollinators and providing educational opportunities.
- Encourage action** through voluntary, collaborative, and locally led conservation actions such as planting pollinator gardens, building bee blocks and avoiding or limiting pesticide use.
- Provide education** to those interested in increasing their knowledge of pollinators and improving pollinator habitat.
- Promote citizen science** opportunities to track key pollinator species populations and share research and resources about restoring pollinator habitat.

Date

1 JUN 2021

STEP ONE

PLEASE consider signing an
**Operation Pollination
Pollinator Resolution.**

Once a District signs,
all Clubs in the District
are invited to sign a
Pollinator Pledge form.

Templates can be found at
<https://operationpollination.net>


STEP TWO

- If interested, your Club now signs a **Pollinator Pledge** and recruits other organizations to do the same. Simply sign a *Pledge* form.
- **These organizations can be large or small, government or non-government, for profit or not-for-profit.**
- Every contribution is valuable and depends on a partner's capability and capacity. No effort is too large or too small.

EXAMPLE

Pollinator Pledge

St. Croix Northwest Sands Collaborative
Chequamegon-Nicolet National Forest (USFS)
St. Croix National Scenic Riverway (NPS)
St. Croix Wetland Management District (USFWS)



Organization: Rotary Club of Ann Arbor North, MI	Number of members
Main contact name	Which best describes you? <input type="checkbox"/> Non-profit organization <input type="checkbox"/> Service club <input type="checkbox"/> Neighborhood association <input type="checkbox"/> Govt/public entity <input type="checkbox"/> Business <input type="checkbox"/> Other: _____
Street address	
City State Zip Code	
Email address	
Website	Phone


Our organization commits to the following activities in support of the Pollinator Resolution:
(e.g. Your organization can define what you will do in support of pollinators. Examples include but are not limited to converting x square feet to native pollinator-friendly habitat or planting x number of pollinator-friendly plants. The more measurable the action the better, as the Collaborative will work with you to track what has been accomplished at the end of each year.)

Recruit local businesses to engage in habitat restoration.

My signature represents my organization's consideration of and commitment to the Pollinator Resolution.

X _____
Signature Date

Please direct questions and return completed forms to Chris Trosen
at Chris_Trosen@fws.gov or 715-246-7784 x116.



St. Croix Valley Pollinator Partnership Pledge Signers

Andersen Corporation
 ArtReach St. Croix
 Arts Expeditions
 Boy Scouts Eagle River District
 Northern Star Council
 Browns Creek Watershed District
 Cable Natural History Museum
 Carpenter Nature Center
 Cedarcliff Property
 Owners Inc.
 Chequamegon-Nicolet
 National Forest
 Church, Pine, Round and
 Big Lakes P&R District
 Civil Air Patrol Wild
 Rivers Squadron
 Conservation Corps Minnesota & Iowa
 Farm Table (Hungry Turtle)
 Friends of Crex Meadows
 Friends of Douglas County Wildlife Area
 Friends of Freedom Park
 Friends of Namekagon Barrens
 Friends of Scandia Parks and Trails
 Friends of the St. Croix WMD
 Friends of Washington County
 Friends of the St Croix Boom Site
 Gaylord Nelson Audubon Society
 Historicorps
 IrriGreen Farms



Lewis McKay LLLP
 Marine Cub Scouts
 Master Gardeners in Washington County
 Monarch Lab at University of Minnesota
 Namekagon Lake Association
 Namekagon River Partnership
 New Prague Rotary Club
 New Richmond Pathways Committee
 North Woods and Waters
 of the St. Croix Heritage Area
 Northern Great Lakes Visitor Center
 Northwoods Cooperative Weed
 Management Area
 Osceola Braves Baseball
 Pheasants Forever
 Pollinator Friendly
 Alliance of Stillwater
 Quail Forever
 River Market Cooperative,
 Stillwater
 Rotary District 5960
 School District of New Richmond
 Sherman & Ruth Weiss Community Library
 Sigurd Olson Environmental Institute
 of Northland College
 St. Croix National Scenic Riverway
 St. Croix Valley Foundation
 St. Croix Wetland Management District



St. Croix County Sportsmens
 Alliance
 St. Croix River Association
 St. Croix Valley Bird Club
 St. Croix Watershed
 Research Station
 Standing Cedars Community
 Land Conservancy
 Star Prairie Fish and Game
 Star Prairie Land Preservation Trust
 Stillwater Sunrise Rotary
 Students for Sustainability,
 University of Minnesota, Twin Cities
 The Phipps Center for the Arts
 The Prairie Enthusiasts
 (St. Croix Valley Chapter)
 Thomson Reuters
 Trust for Public Lands
 Viking Middle School (Woodville)
 Watershed Wisdom
 WBL Rotary
 West Wisconsin Land Trust
 Wild Ones St Croix Oak Savanna Chapter
 Willow River Rod and Gun Club
 Xcel Energy
 Yoga by Julie
 YouthCARE/Camp Sunrise



Operation Pollination is...

3 Easy Steps

1) Pollinator Resolution



2) Pollinator Pledge



3) Put pledge partner names on the back of your Pollinator Resolution and obtain media attention.



Operation Pollination is a framework, not a prescription.







Want to take the next step?

How to Succeed with a Pollinator Project

Christine (Tina) Hall -
dgtina2017@yahoo.com





Pullman National Monument, Chicago, IL

Please plant pollinator friendly,
native plants in your yard.
Every plant makes a difference!

Northern Plains NHA, Bismarck, ND



The power of one....

Rotarians can help private citizens play
a major role in the recovery of
pollinator species around the world.

Pollinators unite us across the globe...



"The Little Things that Run the World."

- E.O. Wilson

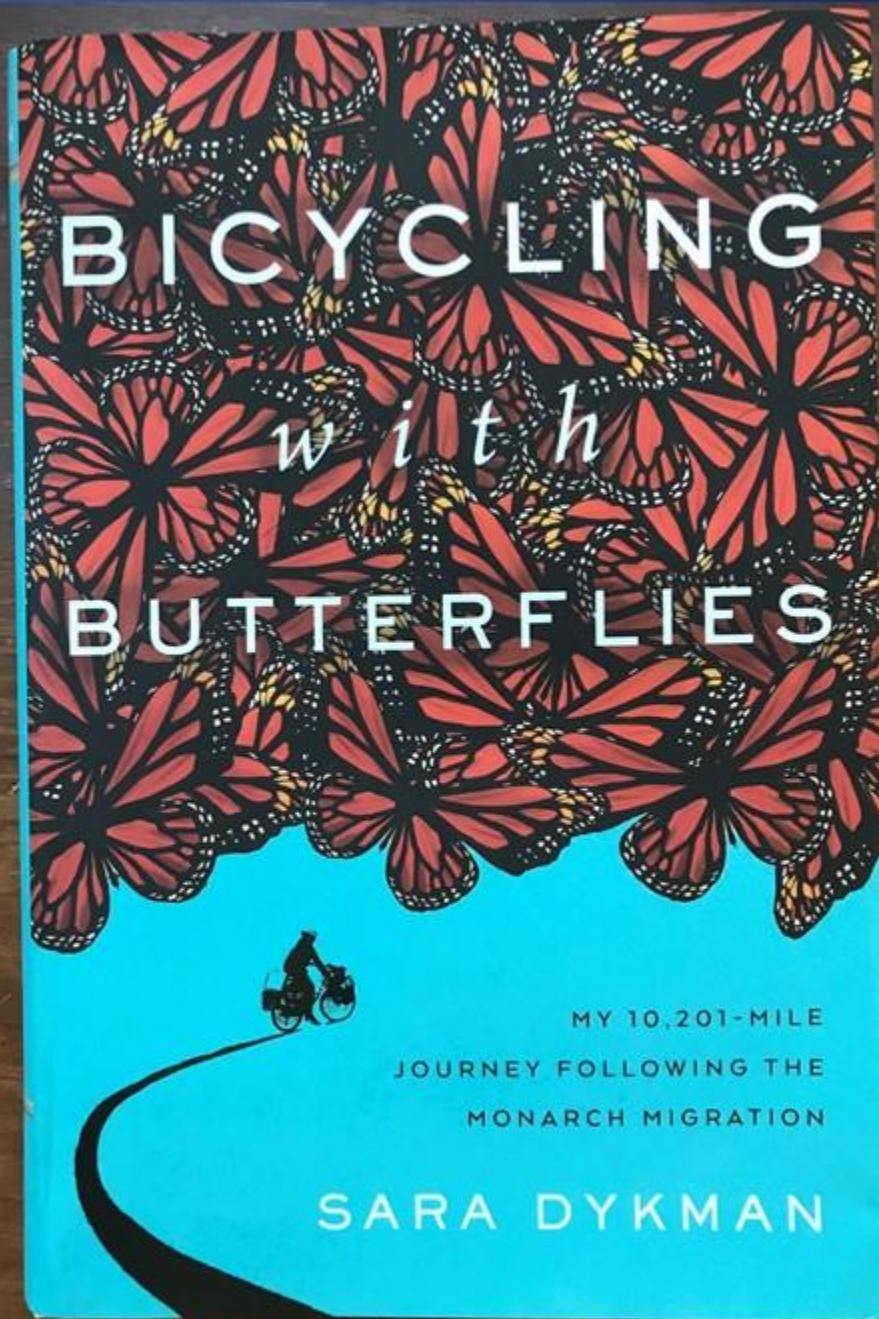
The end goal:

Pollinators = Food Security = National Security



"I haven't seen a monarch every day, but every day I see the people that can help them."

"No one can talk to everyone. But everyone can talk to someone."





**ONLY YOU
CAN HELP PROTECT
POLLINATORS**

THANK YOU

***Rotary Club of
Ann Arbor North, MI***

**for your
consideration
in supporting this
cause.**

The Story

Pollinators are essential for life on Earth
AND it is critically important to protect them,

BUT their numbers have declined by more than
45% in the past 50 years,

THEREFORE the **Operation Pollination** framework
was developed to *help us protect the planet
for our children and their children.*

Might you be able to help?

"We shall not cease from exploration, and the end of all our exploring will be to arrive where we started and know the place for the first time."

--T.S. ELIOT

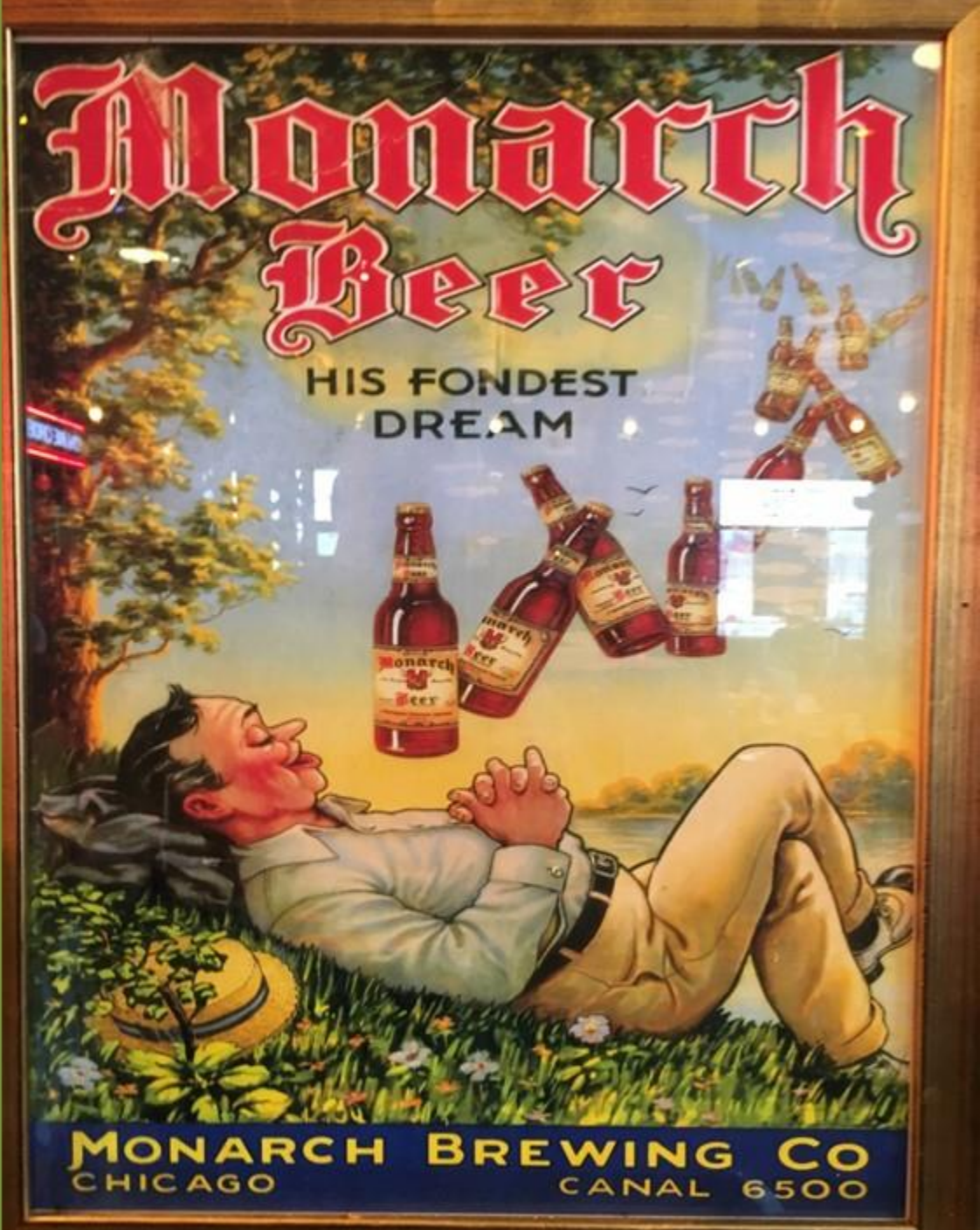


THANK YOU

Chris_Stein@nps.gov

(402) 881-1387

*[https://operation
pollination.net](https://operationpollination.net)*



QUESTIONS?

