

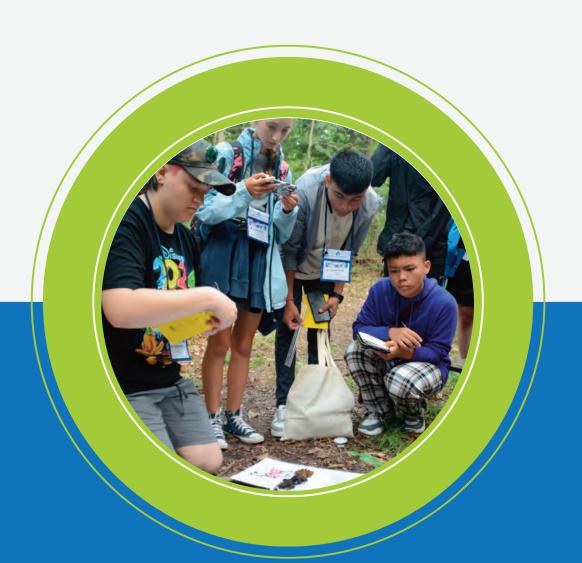


2024

UNITED STATES

# GLOBE

PARTNER YEARBOOK



# **ABOUT THE GLOBE PROGRAM**

# **GLOBE History**

Announced in 1994 and launched in 1995, the Global Learning and Observations to Benefit the Environment (GLOBE) Program is a science and education program that focuses on advancing Earth systems science through data collection and analysis.

More than 268 million measurements have been contributed to the GLOBE science database, creating useful, standardized, research-quality data that support informal and professional scientific exploration.

After nearly 30 years, thousands of youth, educators, and citizen scientists in 127 countries have participated in the GLOBE Program to learn about their local community in the context of the broader world. GLOBE serves learners of all ages who are enthusiastic about Earth science locally and globally through authentic learning using GLOBE technology, tools, and resources.

With the support of NASA and the federal agencies that sponsor GLOBE, namely the National Oceanic and Atmospheric Administration (NOAA), the National Science Foundation (NSF), and the U.S. Department of State, GLOBE engages everyone in purposeful data collection, building STEM skills and tomorrow's STEM workforce.

For more information, visit www.globe.gov.

# The GLOBE Vision

A worldwide community of students, educators, scientists and citizens working together to better understand, sustain and improve Earth's environment at local, regional and global scales.

#### The GLOBE Mission

To increase awareness of individuals throughout the world about the global environment, contribute to increased scientific understanding of the Earth and support improved student achievement in science and mathematics.

#### The GLOBE U.S. Coordination Office

The GLOBE U.S. Coordination Office supports a diverse group of 100 experienced and committed GLOBE Partnerships to create a strong, self-sustainable framework for training and responsive support for every GLOBE learner in the country. The office works with the U.S. Partner Forum to contact and provide support for every Partner in the country on a personal basis and through a regional model.

In 2024, the GLOBE U.S. Coordination Office (or "U.S. GLOBE") was supported through a sub-award from the GLOBE Implementation Office. Headquartered at the Leitzel Center at the University of New Hampshire, U.S. GLOBE is managed by Jennifer Bourgeault, U.S. Country Coordinator; Haley Wicklein, U.S. Assistant Country Coordinator; Alicia Carlson, Outreach and Communications Lead; Jodi Haney, Trainer/Mentor Trainer and Partner Sustainability Lead; and Eleanor Jaffee, Outside Evaluator.



# **GLOBE Partnerships**

U.S. GLOBE Partners facilitate the implementation of the GLOBE Program in their state or service area. Partners support educator professional development, student inquiry, and research on the environment.

Each U.S. GLOBE Partnership must have a formal affiliation with an institution of higher education, a school district, a state department of education or a recognized informal education organization (501(c)(3)) such as STEM learning centers, museums and foundations that can sustain the implementation of GLOBE in their communities.

New and prospective GLOBE Partners must demonstrate the capacity to recruit, train, and mentor educators in their service area. Their efforts must focus on capacity-building, program sustainability, and youth inquiry and research.

- View a list of <u>current U.S. GLOBE Partners</u>
- Learn more about how to <u>Become a GLOBE Partner</u>

# New U.S. GLOBE Partnerships

The GLOBE U.S. Coordination Office welcomed one new GLOBE Partnership in 2024: PA Virtual Charter School in King of Prussia, Pennsylvania. We look forward to working with them to expand GLOBE's reach in the United States!

GLOBE is sponsored by the U.S. National Aeronautics and Space Administration (NASA) and supported by the National Science Foundation (NSF), National Oceanic and Atmospheric Administration (NOAA) and the United States Department of State.



The material contained in this document is based upon work supported by a National Aeronautics and Space Administration (NASA) grant or cooperative agreement. Any opinions, findings, conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of NASA.



The GLOBE U.S. Coordination Office is based at the Leitzel Center at the University of New Hampshire.





# **U.S. GLOBE NEWS HIGHLIGHTS**

The following highlights were posted on the <u>U.S. GLOBE news page</u> in 2024. The full stories are available from the linked titles. The complete list for 2024 can be found in the Appendix on page 64.

<u>U.S. Partners Share Solar Eclipse Activities:</u> The GLOBE U.S. Coordination Office asked GLOBE Partners to share their experiences during the April 8 total solar eclipse. Four Partners responded with their activities leading up to the eclipse, including interviews and presentations, and well as their experiences leading programs on the day of the eclipse.

A "Sunspotter" projection device provides a view of a solar eclipse by projecting an image of the sun onto a flat white sheet of paper.



GLOBE and Dr. John Francis Invite Educators and Students to Take a Planetwalk: Dr. John Francis, a friend of GLOBE, is on a 6,000 mile journey to walk across the continent of Africa, from Cape Town to Cairo. Dr. Francis is a well-known environmental educator who stopped riding in motorized vehicles and stopped speaking for 17 years after witnessing an oil spill in the San Francisco Bay, California, USA. While the GLOBE community can't all join Dr. Francis in Africa, they are finding ways to join him in solidarity in their own communities.

Dr. John Francis walks with a stick along a beach in South Africa, the ocean behind him.



# U.S. GLOBE NEWS HIGHLIGHTS continued

<u>2024 GLOBE Annual Meeting Highlights: U.S. Partners:</u> The 2024 GLOBE Annual Meeting was held July 15-18 at the State University of New York at Fredonia and hosted by long-time U.S. GLOBE Partner Mike Jabot. The meeting was organized and facilitated by the outgoing GLOBE Implementation Office (GIO) at the University Corporation for Atmospheric Research (UCAR). More than 200 attendees from 31 countries gathered on the SUNY Fredonia campus throughout the week and joined in the field trip to Niagara Falls on the third day. Several U.S. GLOBE Partners received travel funding support from the GLOBE U.S. Coordination Office through UCAR/GLOBE Implementation Office Grant and Cooperative Agreement No. NNX17AD75A. They provided reports of their experiences and take-aways.



2024 GLOBE Annual Meeting participants gathered outside on the SUNY Fredonia campus, with more than 150 people in the photo.





# 2024 U.S. GLOBE ACTIVITIES

U.S. GLOBE Office activities in 2024 supported Partners, educators, and students. The major activities included:

- U.S. Student Research Symposia
- North American Regional Meeting
- Mini-grants
- Watercoolers
- North American Phenology Campaign

# STUDENT RESEARCH SYMPOSIA

U.S. GLOBE coordinates annual regional Student Research Symposia (SRS) for educator and student teams, supported with funding from NASA (grant 80NSSC18K0135) and Youth Learning as Citizen Environmental Scientists (YLACES).

In April and May 2024, middle and high school students from around the United States came together at five regional SRS to share the results of research they conducted in their local communities. They used GLOBE protocols and data in their research and prepared posters to share their results with peers and STEM professionals.

In total, 430 people (educators, STEM professionals, students and others) attended the 2024 SRS, including 264 students who presented 95 projects.

Aside from their presentations, students participated in a variety of science activities. Many practiced GLOBE protocols, listened to scientists talk about their research and careers, explored the local environment, and learned about programs of study at the hosting locations.

More information about each regional SRS can be found in later sections or through this 2024 SRS summary.

# 2024 NORTH AMERICAN REGIONAL MEETING

The 2024 North American Regional Meeting (NARM) was held virtually over three days, October 15–17, for three hours each day. Amy Chen, the GLOBE program officer at NASA, and Rebecca Lewis and Becky Boger from the new GLOBE Implementation Office opened the meeting with welcomes, highlights, and updates on GLOBE activities.

Ninety-eight people registered for the free meeting. Over the three days, 90 of those people attended, making it the most well-attended virtual NARM in the GLOBE Program's history. Forty-eight people attended all three days.

The first day consisted of concurrent workshops to build skills. The second day featured GLOBE Partners sharing their work and accomplishments through lightning talks. The third day focused on professional learning around grant writing and communications. Read a summary of the 2024 NARM.

# 2024 U.S. GLOBE ACTIVITIES continued

# **U.S. GLOBE PARTNER MINI-GRANTS**

Beginning in July 2023, the GLOBE U.S. Coordination Office began soliciting proposals from U.S. GLOBE Partners through a mini-grant program. Two mini-grants were awarded in 2024, including:

- Project-Based Learning templates to support student research using GLOBE, NASA, and NOAA data.
- A week-long summer camp for high school students to collect measurements using GLOBE protocols in hydrology, surface temperature, trees, and land cover and work on mini projects.

A summary of all mini-grants can be found on the GLOBE Mini-Grants Awards Padlet.

# **U.S. GLOBE WATERCOOLERS**

The U.S. GLOBE Watercoolers are virtual learning, discussion, and networking opportunities for GLOBE educators and Partners that model the idea that informal gatherings around water coolers at work can lead to valuable exchanges of information and new collaborations. In 2024, U.S. GLOBE community members presented at 13 Watercoolers with 76 unique attendees. Presentations covered a wide range of topics including NASA Worldview, the Dirty Soil citizen science project, a GLOBE atmosphere group for West Virginia educators, and connecting state standards to GLOBE.

Recordings of Watercoolers can be viewed on the <u>U.S. GLOBE Watercoolers YouTube playlist</u>.

# NORTH AMERICAN PHENOLOGY CAMPAIGN

In collaboration with GLOBE Canada, the GLOBE U.S. Coordination Office encourages educators, students, and citizen scientists to make leaf green-down and green-up observations through the North American Phenology Campaign. The campaign is based largely on the successful European GLOBE Phenology Campaign.

In spring 2024, observers measured leaf budburst and green-up and entered 1,746 measurements into the GLOBE database. In fall 2024, observers measured leaf green-down using the GLOBE Color Guide and GLOBE Observer app and entered 1,695 measurements into the GLOBE database.





# U.S. GLOBE PARTNERSHIP ACTIVITIES: BY THE NUMBERS

U.S. GLOBE Partners reach a wide audience through their events and activities. This year, we asked them to report the numbers, including:

- Youth reached
- Youth-centered events
- Educators reached
- Educator-centered events

The graphic shows the cumulative reports of the 29 Partnerships that reported on at least one of the categories. We had some high numbers of engagement this year, due in part to the 2024 total solar eclipse.

There were a few superstar reporters! Most notably:

- Wayne RESA (Mich.) reported reaching 75,000 youth (they provided solar eclipse glasses to many schools in Detroit).
- Los Angeles Public Library (Calif.) reported reaching 3,480 youth and 980 educators.
- South Dakota Discovery Center reported reaching 800 educators.

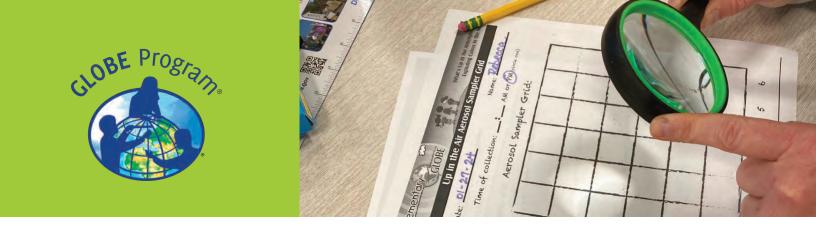
# U.S. GLOBE BY THE NUMBERS (2024)





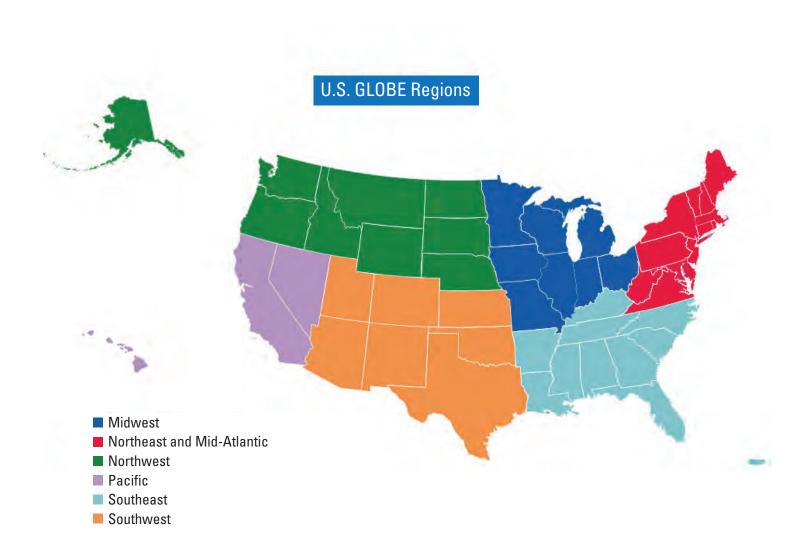






# **U.S. GLOBE REGIONS**

The U.S. is divided into six GLOBE regions. Each region has one representative on the U.S. Partner Forum, who works closely to guide the future of GLOBE in the United States.



A map showing six regions of the United States, indicated by color. Dark blue: Midwest; Red: Northeast and Mid-Atlantic; Green: Northwest; Purple: Pacific; Light blue: Southeast; Orange: Southwest.

# **U.S. GLOBE REGIONS** continued

# **MIDWEST REGION**

Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin

# **NORTHEAST AND MID-ATLANTIC REGION**

Delaware, District of Columbia, Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia

# **NORTHWEST REGION**

Alaska, Idaho, Montana, Nebraska, North Dakota, Oregon, South Dakota, Washington, Wyoming

# **PACIFIC REGION**

California, Nevada, Hawaii

# **SOUTHEAST REGION**

Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico Territory

# **SOUTHWEST REGION**

Arizona, Colorado, Kansas, New Mexico, Oklahoma, Texas, Utah



# **SRS SUMMARY**

The 2024 GLOBE Midwest Student Research Symposium (SRS) was held at the Toledo Zoo and Aquarium in Toledo, Ohio, from May 6-8. More than 70 students from four states attended to present their research to each other and STEM professionals. Read a summary of the 2024 GLOBE Midwest SRS.

Here are some examples of student projects from the Midwest SRS.

- Assessing Ground Freezing Depth Variability During an El Nino Winter: A Frost Tube Approach, Crestwood High School (MI)
- What is the Effect of Light on the Change of Leaf Color?, Clippert Academy, (MI)
- Nitrate Measurements of Lake Jimmerson, Garrett High School (IN)

Midwest Partnerships that supported student and educator teams attending the SRS include Xcite Learning/ BGSU/ Toledo Zoo (who coordinated and hosted), University of Toledo/GLOBE Mission Earth, NASA Langley Research Center, Wayne RESA, and the University of Wisconsin-Madison.

# **GLOBE NEWS HIGHLIGHTS**

In April, GLOBE educator Julie Houck coordinated an in-person North American Regional Meeting (NARM) workshop in Defiance, Ohio. Twenty-two GLOBE Partners and educators attended the meeting to practice GLOBE protocols and learn from each other. Read a summary of the NARM in Defiance, Ohio.

GLOBE educator Joe Carstensen shared his approach to keeping students engaged while collecting data and presenting their findings in a news story. Read more about Joe's approach in <u>A Love Letter to the GLOBE Website: Using GLOBE's Digital Tools for Student Engagement</u>.

GLOBE Mission Earth led a student field day at Earth Heart Farms for 350 Northwest Ohio K-12 students in October. Students collected GLOBE data and investigated the flora and fauna on the property. Read a summary about the student field days at Earth Heart Farms.



# **PARTNERSHIPS**

Read about the activities and accomplishments of the following Midwest Region GLOBE Partnerships in this section.

- Grand Valley State University, Michigan
- Wayne RESA, Michigan
- University of Toledo, Ohio
- Xcite Learning/NWO@BGSU/Toledo Zoo, Ohio
- University of Wisconsin Madison, Wisconsin

Other Midwest Region Partnerships are listed in the Appendix.

# MICHIGAN



# **GRAND VALLEY STATE UNIVERSITY**

# **Grand Valley State University GLOBE Partnership page**

**GLOBE** Partner since 1998

#### **Partnership Coordinator:**

Amanda Syers syersam@gvsu.edu 616-331-3792

#### **Team Members:**

Christina Catanese, catanesc@gvsu.edu Janet Vail, vailj@gvsu.edu

**About the Partnership:** GLOBE at GVSU focuses on three primary audiences: K-12 students, in-service educators, and pre-service educators. At the Annis Water Resources Institute, K-12 students are immersed in place-based education field trips that use GLOBE protocols to help them gather information about their place. For students grades 4-12, this can include a cruise aboard the W.G. Jackson or D.J. Angus, which are GVSU's research and education vessels. During a cruise experience, students are the scientists conducting water quality analyses and gathering data about weather conditions.

**2024 Highlights:** Thousands of students cruise aboard the D.J. Angus and W.G. Jackson each year. This experience can be life-changing, as for some students it is not only their first experience on a boat, but it can be their first time seeing themselves as a scientist. Sampling protocols on cruises are modeled after GLOBE Hydrosphere and Atmosphere protocols.

**Areas of Expertise:** In-service professional development, Programming for students, Elementary GLOBE, Pre-service educators, GLOBE in undergraduate classrooms, Science research, Citizen science, Informal science

**Funding:** Grand Valley State University

**Audiences:** Elementary school students, Middle school students, High school students, Undergraduate students, Pre-service educators, PreK-12 educators, Life-long learners, Graduate students



# MICHIGAN

# **WAYNE RESA**

# Wayne RESA GLOBE Partnership page

**GLOBE Partner since 1998** 

#### **Partnership Coordinator:**

David Bydlowski davidbydlowski@me.com 734-306-9508

#### **Team Member:**

Lisa Ogiemwonyi ogiemwl@resa.net

**About the Partnership:** The AEROKATS and ROVER Education Network (AREN) is a NASA program that helps GLOBE members collect data through low-cost kite-based crafts (AEROKATS) and remotely controlled aquatic and land vehicles (ROVERs). It introduces educators and students to NASA technologies and practices — including in-situ and remotely sensed Earth observations — in authentic, experiential learning environments.

#### 2024 Highlights:

- Provided eclipse glasses to over 50,000 students in the Metropolitan Detroit area.
- Provided direct AEROKATS and TerraROVER trainings to educators across the United States

**Areas of Expertise:** In-service professional development, Programming for students, Pre-service educators, GLOBE in undergraduate classrooms, Engineering, Citizen science, Informal science

Cooperating Organizations: University of Toledo, NASA, local school districts

Funding: NASA Award

**Student Research Support:** Provide support to students through the Wayne RESA partnership. Financial, consulting, communications with the GLOBE office

**Audiences:** Elementary school students, Middle school students, High school students, Undergraduate students, Pre-service educators, PreK-12 educators

# OHIO



# UNIVERSITY OF TOLEDO

# **University of Toledo GLOBE Partnership page**

**GLOBE** Partner since 2002

#### **Partnership Coordinator:**

Kevin Czajkowski kevin.czajkowski@utoledo.edu 419-530-4274

# **Team Members:**

Sara Mierzwiak, sara.mierzwiak@utoledo.edu Yitong Jiang, Yitong.jiang@utoledo.edu Olawale Oluwafemi, Olawale.Oluwafemi@rockets.utoledo.edu Shari Grayczyk, shari.grayczyk@utoledo.edu

#### **About the Partnership**

The University of Toledo (UT) leads the efforts of <u>GLOBE Mission Earth</u> (GME), a collaborative of institutions across the U.S. working to increase involvement in GLOBE. GME incorporates multiple interdisciplinary collaborations and offers GLOBE training and support for educators. Dr. Kevin Czajkowski, Geography Professor at UT and Principal Investigator of GME, also serves as lead scientist on the GLOBE Urban Heat Island Effect (UHIE) Surface Temperature Intensive Observation Period.

#### 2024 Highlights:

- Professional development: At <u>Earth Heart Farms</u>, UT engaged educators and students in land restoration and conservation using GLOBE protocols to monitor ecological changes on an 80-acre former farm.
- Student outreach: UT actively works with the <u>NASA SEES High School Virtual Internship Program UHIE</u>, Air Quality Initiative, and Solar Eclipse groups; <u>Upward Bound High School Training Program</u>; the <u>GLOBE Kids Club</u> virtual program for students in grades 3-5.
- In collaboration with the Tennessee State University GLOBE Partnership, UT held a summer internship program for pre-service educators, focusing on GLOBE protocols.
- Student symposia: UT hosted a local Student Research Symposium at The Toledo Zoo in partnership with Xcite Learning and Project Prairie, with 354 students from 12 schools who showcased 95 research projects. The GLOBE Midwest Regional SRS hosted 70 students from Indiana, Michigan, Ohio, and Wisconsin, showcasing 36 student research projects.

**Areas of Expertise:** In-service professional development, Programming for students, Elementary GLOBE, Pre-service educators, GLOBE in undergraduate classrooms, Engineering, Education research, Science research, Citizen science, Informal science

**Cooperating Organizations:** NASA Langley Research Center (LaRC); AREN Project; Arctic and Earth SIGNs Project; Palmyra Cove Institute for Earth Observations; WestEd/UC Berkeley; Tennessee State University; Boston University.

Funding: NASA Cooperative Agreement Notice (CAN) #: NNX16AC54A

#### **Publications and News**

- See the complete list of publications and presentations on the University of Toledo Publications and Presentations page.
- GLOBE Mission Earth news page

**Student Research Support:** UT offers ongoing support to educators and students in preparing and submitting student research projects. Educators upload student projects to the GME Student Research page. GME provides suggestions for edits and improvements.

**Audiences:** Elementary school students, Middle school students, High school students, Undergraduate students, Graduate students, Pre-service educators, Life-long learners, PreK-12 educators



# OHIO

# XCITE LEARNING/NWO@BGSU/THE TOLEDO ZOO

#### Xcite Learning/BGSU/Toledo Zoo GLOBE Partnership page

**GLOBE** Partner since 2000

#### **Partnership Coordinator:**

Jodi Haney jhaney3@mac.com 419-350-8469

#### **Team Members:**

Mitchell Magdich, mitch.edu@toledozoo.org Amy Boros, aboros@perrysburgschools.net Alex Burris, Alexandra.Burris@Toledozoo.org Jenna Pollock, jpolloc@bgsu.edu

**About the Partnership:** Our collaborative partnership engages in educator professional development, K-12 student programming, pre-service educator training, and collaborative federal grant activities to promote GLOBE in the region.

# 2024 Highlights:

- Four-week STEMM Summer Camp Program for K-4 grade students at Waterville Primary School, Waterville, Ohio. The focus of this program was to lead students through a project-based learning (PBL) experience to answer the question, "How does our prairie help our garden grow?" GLOBE protocols were used to study the atmosphere and soil, and a Purple Air device was installed to investigate air quality. The STEMM Camp included the Earth Beneath Our Feet Soil Tent Program this year. This was the third year of this camp.
- In May 2024, 385 K-12 grade students presented research at our third annual Local GLOBE in the Prairie Student Research Symposium (SRS) held at the Toledo Zoo and Aquarium. Eighty-seven students from four states participated in the Midwest SRS the following day. At the Midwest SRS, students presented their research, collected and reported on data collected at the zoo, had an overnight "Zoo Snooze" filled with engaging activities and behind-the-scenes tours in the zoo's aquarium, and experienced career talks and keynote presentations by subject matter experts.
- Thirteen middle school science educators from Washington and Sylvania Local Schools earned GLOBE Educator certification after a three-day professional development series focusing on GLOBE in the Prairie and project-based learning (PBL). Gold standard PBL units were developed using Al and included the use of GLOBE protocols to guide student investigations.

Areas of Expertise: In-service professional development, Programming for students, Elementary GLOBE, Pre-service educators

**Cooperating Organizations:** Local schools; The University of Toledo/GLOBE Mission Earth

**Funding:** Small grants (YLACES and others); local school professional development funds

#### **News Stories**

- Local students present Project Prairie Initiative results at Toledo Zoo (WTOL)
- Toledo Zoo hosts student research symposium (The Blade)

**Student Research Support:** We work with educators at professional development events to build their confidence in leading student research. Then we meet with individual educators and their students to mentor the projects throughout the academic year.

**Audiences:** Elementary school students, Middle school students, High school students, Undergraduate students, Pre-service educators, PreK-12 educators, Life-long learners

# WISCONSIN



# UNIVERSITY OF WISCONSIN-MADISON

# **University of Wisconsin-Madison GLOBE Partnership page**

**GLOBE** Partner since 1999

#### **Partnership Coordinator:**

Michael Notaro mnotaro@wisc.edu 608-261-1503

**About the Partnership:** Dr. Notaro leads GLOBE educator professional development workshops for K-12 educators in Wisconsin. He runs GLOBE-inspired STEM camps for autistic middle and high school students. He applies GLOBE to encourage a more diversified STEM field

# 2024 Highlights:

- Three GLOBE-inspired STEM camps for autistic youth were run by Dr. Notaro: The Sky's The Limit STEM Camp in Beloit, Wisconsin; Nature's Navigators STEM Camp in the Wisconsin Dells; and Zoo Explorers Sensory-Friendly Mini Camp in Madison.
- Through the Wisconsin Rural Partnerships Institute, Dr. Notaro is integrating GLOBE into K-12 schools across Adams, Juneau, and Jackson Counties in Wisconsin in support of greater resilience for rural communities.
- Dr. Notaro provided GLOBE training and climate 101 training to K-12 educators, environmental organization staff, DNR staff, and environmental center staff in Milwaukee.

**Areas of Expertise:** In-service professional development, Programming for students, Elementary GLOBE, Science research, Citizen science, Informal science

**Cooperating Organizations:** Welty Environmental Center; Upham Woods Outdoor Learning Center; Henry Vilas Zoo; Beloit College; Van Wiepz Consulting; Wisconsin schools

Funding: National Science Foundation GEOPAths program; Wisconsin Idea Collaborative Grant; Read Coakley Foundation

**Publications and Presentations:** See the complete list of publications and presentations on the <u>University of Wisconsin-Madison Publications and Presentations page</u>.

#### **News Stories:**

• Expanding climate science through hands-on learning (University of Wisconsin-Madison)

**Student Research Support:** Dr. Notaro partners with the School District of Beloit, which has sent numerous students to the Midwest GLOBE Student Research Symposium during the past couple of years.

**Audiences:** Elementary school students, Middle school students, High school students, Undergraduate students, Pre-service educators, PreK-12 educators





# **U.S. GLOBE 2024 NEWS ROUND-UP**

These articles were posted on the <u>U.S. GLOBE news page</u> in 2024. The full stories are available from the linked titles.

# **JANUARY TO MARCH**

- Caydence P. Finds SEES Internship "Incredibly Rewarding"
- 14 October 2023 Annular Eclipse Round-up
- January 2024 Updates to U.S. Partner Forum
- New Jersey GLOBE Partnership Takes the First Steps with Dr. John Francis, Planetwalker: "From South Jersey to South Africa"
- Recapping the Pacific In-Person North American Regional Meeting

# **APRIL TO JUNE**

- Wildlife Biologist Ready to Answer Phenology Questions
- Students Present GLOBE Research at INFINITY Science Center
- "Satellites and Remote Sensing" NARM Summary
- U.S. Partners Share Solar Eclipse Activities
- U.S. GLOBE Students Contribute 50 Projects to IVSS
- Camp Counselors Gather for GLOBE Goes to Camp Conference
- Defiance, Ohio, Hosts In-Person NARM
- GLOBE Students Present Research at Jet Propulsion Laboratory
- Northeast/Mid-Atlantic Students Showcase Environmental Research at Berks Nature
- Boston University AguaROVER Design project
- Midwest Students Present Research at Toledo Zoo and Aguarium
- All Saints' Episcopal School Hosts Southwest Students' Research
- Students Share Research at U.S. GLOBE Student Research Symposia
- New Hampshire Students Help Create the Earth Around Us Water Tent
- Going Global in West Virginia with GLOBE



# U.S. GLOBE 2024 NEWS ROUND-UP continued

# **JULY TO SEPTEMBER**

- GLOBE and STEELS Standards in Pennsylvania
- The Re-Establishment of GLOBE in Alabama
- 2024 GLOBE Annual Meeting Highlights: U.S. Partners
- GLOBE's North American Regional Meeting at Badlands National Park
- Summer Camp Focused on Sustainability and Sustainable Development Goals with GLOBE
- N is for Nube: Top 5 Must-Have English-Spanish Resources About Clouds
- N is for Nube: Los 5 mejores recursos en inglés y español sobre las nubes
- North Carolina Educators Study Climate and the Earth as a System Using GLOBE
- GLOBE is Adopted at Two National Estuarine Research Reserves in California
- A Love Letter to the GLOBE Website: Using GLOBE's Digital Tools for Student Engagement
- GLOBE and Dr. John Francis Invite Educators and Students to Take a Planetwalk

### **OCTOBER TO DECEMBER**

- Student Field Days at Earth Heart Farms Fall 2024!
- If You Build It (to Be Fun and Engaging), They Will Come (to NARM)
- GLOBE Expands Its Reach in Massachusetts
- U.S. GLOBE Office Shares GLOBE at North American Association for Environmental Education Conference





# 2024 CURRENT U.S. GLOBE PARTNERSHIPS

#### **Alabama**

AMSTI (pg. 48) Keri Richburg keri.richburg@alsde.edu

#### Alaska

<u>University of Alaska Fairbanks</u> (pg. 36)

Dr. Elena Sparrow ebsparrow@alaska.edu (907) 474-7699

#### **Arizona**

Biosphere 2

Dr. Kevin Bonine kebonine@email.arizona.edu

#### Northern Arizona University

Mansel A. Nelson mansel.nelson@nau.edu

# **Arkansas**

Arkansas Partnership for STEM Education

Keith Harris krharris@ualr.edu

# **University of Arkansas**

Lynne H. Hehr Ihehr@uark.edu

#### **California**

California Academy of Sciences/ Science Action Club

Mauna Dasari mdasari@calacademy.org

# Central San Joaquin Valley Partnership

Leigh-Ann Olsen lolsen@kingsburghigh.com

# Elkhorn Slough National Estuarine Research Reserve

(pg. 42) Peggy Foletta peggyfoletta@gmail.com (559) 970-9467

# Los Angeles Public Library (pg. 43)

Vivienne Bird vbyrd@lapl.org (213) 228-7552

# Los Angeles Unified School District

Henry Ortiz henry.ortiz@lausd.net

# **NASA Jet Propulsion Laboratory**

Peter Falcon pcfalcon@jpl.nasa.gov

# **New Education Options**

Bo Lebo bolebo@duck.com

# WestEd/UC Berkeley (pg. 44)

Svetlana Darche sdarche@wested.org (415) 203-4181

# Colorado

# **CIRES Education Outreach**

Jonathan Griffith Jonathan.Griffith@colorado.edu

# Metropolitan State University of Denver

Janelle Johnson jjohn428@msudenver.edu

# **UCAR Center for Science Education**

Julie Malmberg malmberg@ucar.edu

#### **Connecticut**

# Talcott Mountain Science Center

John Pellino jpellino@tmsc.org

#### Florida

# Florida Agricultural and Mechanical University

Dr. Katherine Milla Katherine.milla@famu.edu

# University of South Florida (pg. 49)

Teresa Greely greely@usf.edu (727) 553-3921

# WeatherSTEM by Ucompass.com, Inc.

Edward Mansouri emansouri@weatherstem.com

#### Georgia

# Center for Sustainable Communities

Garry Harris gharris@htsenterprise.com

# SOSSI - Saving Our Sons & Sisters International LLC

Chuck Barlow Jr info@iamsossi.org

# University of West Georgia (pg. 50)

Randa Harris rharris@westga.edu (678) 839-4056

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