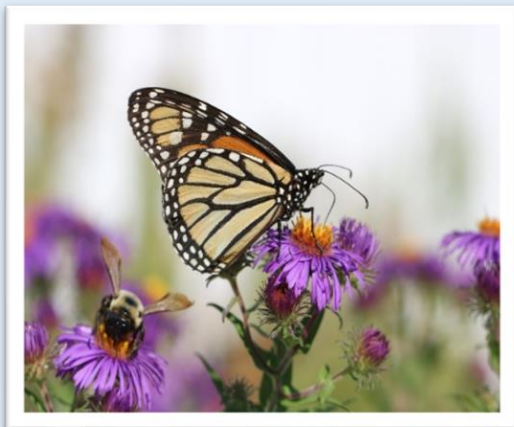


COLLABORATIVE CONSERVATION: LEVERAGING CITIZEN SCIENTISTS IN RIGHT-OF-WAY POLLINATOR MONITORING



Pollinators play an integral role in agricultural and natural areas by pollinating crops and native plants

PROJECT HIGHLIGHTS

- Low-cost pollinator monitoring that leverages citizen scientists
- Urban focused projects with shared monitoring objectives and standardized methods
- Pollinator training materials tailored to your service territory
- Standardized sampling methods
- Contributes to voluntary conservation monitoring efforts such as the monarch CCAA
- Data tracking and analysis for each utility and collaboratively across utilities
- Facilitates community engagement and outreach related to conservation

Background, Objectives, and New Learnings

Many power companies are proactively creating pollinator habitats on utility lands or participating in voluntary conservation efforts such as the monarch candidate conservation agreement with assurances (CCAA). Rights-of-way, in particular urban rights-of-way, are an unrecognized asset that can help companies achieve stewardship and conservation goals by providing pollinator habitat. However, the value of right-of-way habitat in supporting conservation is often not quantified.

To date, little research is available to support the pollinator benefits of rights-of-way whether in urban or rural landscapes. Rights-of-way are increasingly being planted with native seed mixes designed to support native pollinators. However, the resulting benefits to pollinators are rarely quantified. While the monarch butterfly is the focus of voluntary conservation efforts with utilities proactively monitoring rights-of-way for milkweeds and foraging resources, field surveys that quantitatively document key floral resources are time and labor intensive. Furthermore, data collected on pollinators is limited and when pollinator data is collected methods often vary across utilities as each company performs their own surveys.

The goal of this supplemental project is to leverage citizen scientists in the monitoring of right-of-way specifically for pollinators. By enlisting the assistance of citizen scientists in data collection, potentially more right-of-way habitat can be monitored, alleviating pressure on utility staff. Training materials will be developed for citizen scientists targeting the Master Gardner program in the US and Canada. An in-person training will teach citizen scientists how to identify basic pollinator groups, key host plants, and provide a standardized methodology for data collection.

Benefits

Public Benefits

This project improves understanding of how rights-of-way, especially urban rights-of-way, support pollinator conservation while maintaining safe and reliable electric service. Results support biodiversity, reduce environmental impacts, and strengthen public awareness and trust through citizen science engagement.

Funder Benefits

Utilities gain cost-effective, standardized monitoring data that improves decision-making, operational efficiency, and institutional knowledge. The project supports regulatory compliance, voluntary conservation commitments, and clear documentation of environmental stewardship. Training can be tailored to support data collection for participation in voluntary conservation agreements such as the monarch CCAA.

Project Approach and Summary

Training Materials

For utilities participating in this project, utility tailored pollinator identification training materials will be developed. Working with each utility, EPRI will identify groups of pollinators the utility would like to target for monitoring with some groups common across all utilities. EPRI will develop training materials for citizen scientists including a lecture, field guide, and methods guide. Lecture materials will cover pollinator identification, key pollinator host or forage plants (e.g., regional milkweeds), field sampling methods, and protocols for data entry.

On-Site Field Training

EPRI will work with each utility to identify a right-of-way site(s) (1-3) for monitoring. EPRI will then identify and coordinate with a Master Gardner chapter near the selected monitoring location. EPRI will provide on-site training teaching citizen scientists how to identify target pollinator groups, implement standardized sampling methods and the process for data entry.

Data Compilation and Analysis

EPRI will compile data collected by each citizen scientist by site and utility. Anticipated data generated by the monitoring could include: 1) total pollinator counts, 2) counts by pollinator group, 3) counts of target taxa (e.g. monarchs, bumble bees), 4) count of target plant(s) (e.g., milkweeds), 5) group richness, and 6) other beneficial insects (e.g., lady bugs, hover flies). Data will be compiled for each utility as well as across utilities. The benefit of having standardized data collected across multiple rights-of-way in different regions of the country demonstrates the collective value right-of-way habitat is providing to pollinators. Each utility can use collected data in internal and external reports as well as document the

collaborative conservation efforts utilities are collectively providing for pollinators across the country.

Deliverables

All participants will receive the following:

- Training Materials
- On-site Training
- Technical Report
- Results Webinar

Price of Project

This is a 2-year study. The total cost is \$45,000 per member company (\$22,500 / year). This project is eligible for Self-Directed Funding (SDF).

Project Status and Schedule

In Year 1, training materials will be created for all project participants. Site selection will be finalized and Master Gardner program identified. In Year 2, on-site training will be conducted, data collection will occur during the summer, data for each site and across all participating utilities will be summarized and analyzed.

Who Should Join

This project is open to all EPRI members, electric utilities, and other companies with urban assets.

Contact Information

For more information, contact the EPRI Customer Assistance Center at 800.313.3774 (askepri@epri.com).

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