Innovation

Power to the Pollinators

New EPRI Initiative to Foster Utility Collaboration on Pollinator Conservation

By Chris Warren

When it comes to conservation of pollinators, Wisconsin-based Dairyland Power Cooperative was ahead of its time.

In 1994, Dairyland was required to cover a coal ash landfill near one of its power plants. Instead of laying road mix over the landfill, Dairyland invested extra time, labor, and money to seed and cultivate the 40-acre plot with dozens of varieties of native prairie grasses. One of the objectives was to provide habitat for pollinators.

“At that time, such efforts were uncommon at landfills,” said Brad Foss, Dairyland’s senior environmental biologist. “We were fortunate to have the support of senior management, who understood the ecological benefits.”

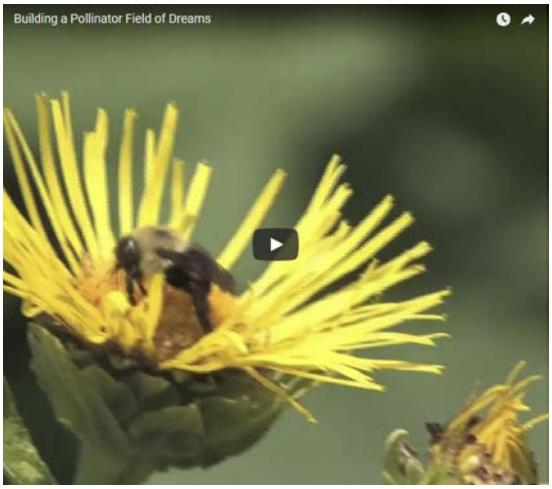
After about five years, populations of bumble bees, monarchs, and other butterflies were thriving on the plot.

Dairyland Power Cooperative recently planted this pollinator plot at its Downsville Solar Project. Photo courtesy of Dairyland Power Cooperative.

More than three decades later, Dairyland was the first electric utility to join EPRI’s new Power-in-Pollinators Initiative, which seeks to foster collaboration among utilities to increase the effectiveness of their pollinator conservation activities.

“We launched the forum for many reasons,” said EPRI Senior Program Manager Jessica Fox. “There’s a growing societal need to protect pollinator populations, potential new state and federal regulatory actions, and an extraordinary opportunity for the power industry to make a difference—by improving land management practices in transmission and distribution corridors and other landholdings.”

Healthy pollinator populations are necessary in supplying about one-third of the food needed by the human population. From strawberries to chocolate to coffee, we depend on bats, birds, bees, butterflies, and other insects, familiar and unfamiliar. Many pollinator populations are at risk as a result of habitat loss, invasive species, pesticides, and climate change.



View the video: https://youtu.be/_cbHp8xwHGg

"The global human health and financial implications of pollinator extinction are huge," said Fox. "We see opportunities to work together on industry-wide goals to support pollinators."

Species such as the Rusty Patch Bumble Bee are among the approximately 45 pollinators listed as endangered under the U.S. Endangered Species Act. Dozens of others may soon be afforded similar safeguards.

Utilities are uniquely positioned to boost the health of pollinators. Many own huge tracts of largely undeveloped land, including transmission line rights-of-way. Some are managing land as conservation areas to attract pollinators.

Many are planning and implementing pollinator protection projects as part of their corporate social responsibility efforts.

"The Power-in-Pollinators Initiative is creating a forum to share ideas and research findings, and to lead innovative, collaborative conservation," said Fox.

EPRI gives participants access to its tool that uses geographic information systems to identify pollinator-rich, company-owned land well-suited for conservation. It's also creating opportunities for collaboration with other utilities. EPRI is actively working with participants to improve the tool.

"The ecological benefits of one company's conservation efforts may be limited if the species migrate into other regions," said Fox. "We see opportunities for companies to work collectively to protect habitat corridors."

EPRI will develop metrics for the effectiveness of pollinator conservation efforts. These in turn can be used to identify projects with significant potential benefits and track progress relative to their goals.

The initiative will convene webcasts and an annual conference. These will advance technical research and establish relationships to cultivate collaborative conservation efforts. Participants will contribute to a pollinator database of leading and broadly relevant research.

They will be looking for lessons learned. For example, Dairyland's two-plus decades of pollinator protection reveals the importance of a plan, coupled with patience (it takes between three and five years to establish a vibrant pollinator habitat).

"The last thing you want to do is plant a bunch of seeds and walk away," said Dairyland's Foss. "You have to have a long-term management plan and stick to it."

Dairyland, which has recently established pollinator plots at 15 solar power plants, joined the EPRI initiative to learn how to become even more effective and find partners for its conservation efforts.

Key EPRI Technical Experts

Jessica Fox

Further Resources:

- Minimizing Impacts of Land Use Change on Ecosystem Services Using Multi-Criteria Heuristic Analysis(Journal of Environmental Management)
- Assessing Ecosystem Services Using the InVEST Model: Case Study of the American Electric Power ReCreation Lands, Ohio
- Ecological and Wildlife Risk Assessment of Chemicals Encountered in Vegetation Management on Electric Utility Rights-of-Way

- Wildlife and Integrated Vegetation Management on Electric Transmission Line Rights-of-Way
- Study Evaluates Effects of Vegetation Management and EMF on Native Bee Populations
- Use of Transmission Line Easements for the Benefit of Native Bees (2011 report)
- Use of Transmission Line Easements for the Benefit of Native Bees (2013 report)
- Honeybees and Power Line EMF Environments