Saukville, Wis.—Questions surrounding one of the least understood and most at-risk types of wetland are being answered through the combined efforts of citizen scientists and natural resource professionals participating in the Wisconsin Ephemeral Pond Project (WEPP).

Ephemeral ponds--small wetlands that dry periodically and support many plants and animals not found anywhere else--are the focus of citizens and staff from nature centers, universities, counties and organizations from around the state, including the Friends of the Cedarburg Bog in Saukville.

WEPP took shape in the spring of 2008 when the University of Wisconsin-Extension and the Wisconsin Department of Natural Resources (WDNR) teamed up with other organizations to find better ways of mapping ephemeral ponds and to discover how many exist in Wisconsin. With the help of a grant from the Wisconsin Coastal Management Program, the project got its start in the Wisconsin counties along the shore of southern Lake Michigan.

“We want to increase our understanding of ephemeral ponds’ ecological importance and also support their conservation,” says Gail Epping Overholt, University of Wisconsin-Extension basin educator for the Milwaukee River Basin area. Overholt and fellow Extension educator Kris Stepenuck served as program developers, training instructors, partner and volunteer recruiters as well as leading the education and outreach aspects of the project.

Information gathered from WEPP will aid in identifying and managing ephemeral pond wetland areas. “The first step in protecting and conserving ephemeral ponds is knowing where they are,” says Joanne Kline, environmental analysis and review specialist with WDNR. “Citizen monitors play a crucial role allowing us to expand the number of ponds we can field check.”

So far, knowledge about ephemeral pond systems in Wisconsin is limited. As a result, the areas often go unappreciated for their role as extremely diverse and ecologically vital places. Because little is known about them, ephemeral ponds are sometimes drained, filled in or used as sites for new construction. Some are dug deeper and converted to permanent fish ponds—destroying habitat for amphibians.

Joining more than 72 fellow citizens from Kenosha to Sheboygan counties, volunteers participated in a two-day training program in ephemeral pond ecology and inventory methods. Some volunteers examined physical features like water depth and pond size as the season progressed. Others recorded observations of key ephemeral pond indicator species like fairy shrimp and wood frogs. This information helps in
understanding different types of ephemeral ponds and their significance in the landscape.

Volunteers who dedicated their efforts and time during the spring and summer of 2008 monitoring ephemeral ponds report they honed their scientific skills and became familiar with some pond inhabitants, such as fairy shrimp, skunk cabbage and an occasional Blanding’s turtle.

By the end of the first year, citizens, non-profit partners and staff from local and state agencies had field-checked a total of 422 sites that were mapped as potential ephemeral ponds. Sixty-seven percent of these were verified as ephemeral ponds; 19 percent were identified as other types of wetland and 14 percent of the sites were not wetlands of any type.

“The results show that the mapping is working and identifying the errors will improve the way ephemeral ponds are mapped,” says Overholt.

Another goal of WEPP is to build a self-sustaining network of local partners to recruit, train and support citizen scientists to participate in this program. To learn more about how individuals and organizations can contribute to ephemeral pond conservation, visit http://watermonitoring.uwex.edu/level3/WIephermeral.htm

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