

# The Pool Report – Spring 2021 | Issue 1

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## Welcome to The Pool Report!

The Michigan Vernal Pools Partnership (MVPP) is excited to provide the first issue of the Pool Report-- the new communication piece of the MVPP and the Vernal Pool Patrol. We look forward to keeping members, partners, citizen scientists and other interested parties up to date with the latest news and information through this quarterly eNewsletter. This issue includes important announcements and events as we prepare for the vernal pool season, including a two-part vernal pool training series coming soon on March 26<sup>th</sup>/27<sup>th</sup> and April 2<sup>nd</sup>/3<sup>rd</sup>! Scroll down to 'Upcoming Events' learn more.

## The Michigan Vernal Pools Partnership

### Partner Spotlight – Michigan Tech Research Institute

Locating and mapping vernal pools are essential to their conservation, and a key partner at the cutting edge of this work is the [Michigan Tech Research Institute](#) (MTRI), a research center of the Michigan Technological University. Applying new technology, MTRI's current project is the identification of vernal pool locations in Great Lakes national parks, including Pictured Rocks and Sleeping Bear Dunes National Lakeshores, and Voyageurs, Indiana Dunes, and Isle Royale National Parks.

The project involves uses a number of new remote sensing products and analysis techniques to identify and map potential vernal pools. These potential pools are then verified in the field, including documentation of vernal pool indicator and other animal species.

Identifying vernal pools will inform park management and protection decisions specific to the pools, including the use of prescribed fire, invasive species control, visitor use, hydrology, and other issues. The work also extends to areas outside of park boundaries to better determine the extent and locations of these special wetlands. In turn, that analysis will help identify

protection, restoration and management needs for amphibian populations and other animals dependent on vernal pools in and around the parks.

For more information, contact Laura Bougeau-Chavez, PhD: [Ichavez@mtu.edu](mailto:Ichavez@mtu.edu)

### **2020 MVPP Annual Meeting a Great Success**

Over 170 vernal pool enthusiasts attended the Michigan Vernal Pools Partnership Annual Meeting in December with participants from seven states and one Canadian province. Attendees represented a broad spectrum of vernal pool interests including local, state, federal and tribal government; natural heritage programs; zoos and nature centers; universities and colleges; academic and community scientists; conservation groups; educators; and more. Updates on vernal pool programs, protection efforts, new tools for the Vernal Pool Patrol, and strategies for public outreach were just some of the highlights of the day long, virtual program.

A special thanks goes to our guest speakers:

- Dr. Jared Homola (Impacts of Urbanization on Genetic Diversity and Connectivity of Vernal Pool Amphibians)
- Richard Staffen and Betsy Leppo (Evaluating and Identifying High Quality Vernal Pools for Conservation)
- Dr. Jo Lattimore (Implementing an Effective and Sustainable Citizen Science Program— Michigan Clean Water Corps)
- And to all the MVPP Partners who provided updates about their vernal pool work!

Stay tuned for announcements of the 2021 Annual Meeting next fall!

## **The Vernal Pool Patrol**

### **Sign Up for Spring Pool Patrol Training**

Learn more about vernal pools and how you can help monitor and protect these important wetlands in Michigan through the Vernal Pool Patrol's two-part, virtual training! To participate in the Vernal Pool Patrol, you'll need to complete one session from both parts of the training. Scroll down to '**Upcoming Events**' for training dates, or click the following links to sign up for free:

Part 1: <https://www.eventbrite.com/e/146377140969>

Part 2: <https://www.eventbrite.com/e/146653260851>

### **New Portal for the Vernal Pool Patrol**

The Vernal Pool Patrol team at the Michigan Natural Features inventory have developed the [Vernal Pool Patrol Hub](#)! The site was designed to help manage members using the Vernal Pool Field Survey (Survey 123) and provide easy access to training resources and videos provided during workshops.

Signing up for an MNFI Community (ArcGIS Online) account is easy and free! If you already have an ArcGIS Online account, you can sign in and follow the initiative using your credentials, you don't need to create a new account.

**New or interested community scientists:** During the upcoming training workshops we will be discussing in detail how to sign up and navigate the site.

**Current Vernal Pool Patrol members:** If you've used the Survey123 app in the past, you will now have to create an individual account through the site to access the field survey and view updated training resources.

Please view the [Patrol FAQ page](#) on the hub to learn more before reaching out to Courtney Ross, [rosscour@msu.edu](mailto:rosscour@msu.edu) with questions or to update your access.

## More News

### Species Spotlight: Fairy Shrimp

*Emma Kull*

A vernal pool fills with water in the springtime, bringing new life. Here, a small crustacean hatches; a lesser known relative of the lobster.

This crustacean's common name, fairy shrimp, is the perfect nod to its graceful demeanor in the water and its small, delicate body. These aquatic dancers glide through the water on their backs by slowly rippling their eleven pairs of legs to create propulsion. They vary in size but are typically around three quarters of an inch long.

The fairy shrimp would not be able to survive without the protective habitat created by the emergence of vernal pools each year. Though the ephemeral nature of vernal pools makes them a safe place for fairy shrimp to live without fish predators, surviving in such impermanent conditions is no small task. Fortunately, fairy shrimp are well adapted to do just that.

Fairy shrimp have relatively short life cycles, only about a few weeks, allowing them to age and usually reproduce within the short window provided by the pool. In the case that the vernal pool dries up too quickly for the fairy shrimp to reproduce, these clever crustaceans have a backup strategy. Each spring, only a segment of the fairy shrimp eggs that had been laid the year before will hatch, leaving the rest to remain dormant for potentially several years. That means that the fairy shrimp population can continue to survive, even if the pool doesn't fill with water one year.

Fairy shrimp are considered an indicator species to confirm the presence of a vernal pool, as well as a sign of a healthy ecosystem: a sign that is exciting to behold if you are lucky enough to witness it.

## Upcoming Events

### 2021 Vernal Pool Virtual Trainings

This virtual training (via Zoom) will provide information and resources needed to participate in the Michigan Vernal Pool Patrol! The training consists of two parts. If you are interested in participating in the Vernal Pool Patrol, you must complete one session from Part 1 and one session from Part 2.

## Michigan Vernal Pool Patrol Training 2021 – Part 1

### ***Dates/Times:***

Friday, March 26, 9:30-11:30 am or  
Saturday, March 27, 9:30-11:30

### ***About:***

Overview of vernal pool status and ecology, their importance to ecosystems, conservation efforts in Michigan including the Vernal Pool Patrol, and how you can get involved.

[Sign Up!](#)

## Michigan Vernal Pool Patrol Training 2021 – Part 2

### ***Dates/Times:***

Friday, April 2<sup>nd</sup>, 9:30 am-12:00 pm or  
Saturday, April 3<sup>rd</sup>, 9:30 am – 12:00 pm

### ***About***

In-depth training on the Vernal Pool Patrol program, how to monitor and collect quality data on a vernal pool(s) in your area, how to identify common vernal pool plants and animals, and available tools and resources.

[Sign Up!](#)

## News & Notes

### Catch up on the latest research surrounding vernal pools:

- [Landscape genetics reveals unique and shared effects of urbanization for two sympatric pool-breeding amphibians](#)
- [Breeding Effort and Hydroperiod Indicate Habitat Quality of Small, Isolated Wetlands for Amphibians Under Climate Extremes](#)
- [eBook on vernal pools](#)
- [New field guide to amphibian eggs and larvae \(from Wisconsin\)](#)

### Connect with us:

#### *Vernal Pools Partnership*

- Julie Stoneman - [jstoneman@michigannature.org](mailto:jstoneman@michigannature.org)

*Vernal Pool Patrol*

- Yu Man Lee - [leeyum@msu.edu](mailto:leeyum@msu.edu)
- Courtney Ross - [rosscour@msu.edu](mailto:rosscour@msu.edu)

*The mission of the **Michigan Vernal Pools Partnership**, a public/private partnership, to increase awareness, understanding and protection of vernal pools through conservation, research & mapping, education & outreach and collaboration.*

*The **Vernal Pool Patrol** is a statewide program for community scientists and educators who want to learn more about these fascinating wetlands, participate in science and conservation, and enjoy spending time outside in nature! Members learn how to follow a standard protocol to help identify and map locations of vernal pools within their local communities.*

**Michigan Vernal Pools Partnership**

[mivernalpools.com](http://mivernalpools.com)