What are Floating islands?

Floating Islands are essentially high functioning floating habitats that pull excess nutrients and pollution directly out of the water, and creates habitat for many wetland birds, fish and critters.

Phosphorus fertilizers, decomposing leaf litter, and legacy pollution are the root cause for algae blooms in the struggling lakes, ponds, and creeks in Madison.

That's why plants, bacteria and fungi growing on these floating islands are able to thrive on these nutrients, break down pollutants from the road/city, outcompete algae, and provide homes for many wetland species.

At the end of the summer, the plants will be harvested by volunteers, successfully removing phosphorus from our lakes.

What is Biohaven?

Biohaveven is a patented Floating island design that has been used all over the world as a low cost, highly effective alternative water treatment method for water bodies suffering from eutrophication (too much nutrient pollution).

Floating Islands West is a company from California who works with and sells Biohaven floating islands, currently offering the lowest price on this product. They have also agreed to give our Madison initiative a discount on our first island if we experiment with methods of incorporating **biochar**, a charcoal like material that can be made from plant waste materials, and can serve as a home for millions of beneficial bacteria and fungi that help clean the water. They were also thrilled to hear that our project will be planting native and naturalized fungi on our islands to harness the fungi's amazing ability to degrade fossil fuels using extracellular enzymes in a process called **Mycoremediation**.

Here's a link to their website! There's lots of great info about floating islands there.
Floating Islands West | Water Quality | Science

Case Studies for Floating Islands:

FLOATING ISLAND INTERNATIONAL - BioHaven Proprietary Case Studies

The Wild Mile: Floating Wetlands Restore Diverse Wildlife to the Chicago River — Healthy Lakes

Who are we?

Floating Island Madison is a collaborative project to empower Madison's neighborhood communities to take direct action on water pollution through fundraising, implementing, and improving of the floating islands method to best serve Madison's eutrophic water bodies.

We are supported by a growing number of community partners including **Northside Planning Council, Tenney Lapham Neighborhood Association, Friends of Starkweather Creek, Brainplate Grows, Ekosfera, and Myco Rising**, and community members who share our desire to partner with nature and bring new levels of ecological resilience to Madison through citizen science. We are calling this growing network **WI Clearwater Collective,** and you are welcome to join! Email or message Aaron at collectiveclearwater@gmail.com (608) 422-3786 if you want to get in the loop.

What's the plan?

(We are currently on step #1)

Step #1 Location:

Find a location to launch our first island test study. An ideal spot would be a relatively small local waterway that is suffering from toxic algae blooms and Anerobic conditions, with an area that is at least 5 feet deep. We are currently working with City Engineering and the Parks department to get permissions to launch in public waterways.

Step #2 Fundraiser:

Once the location is established, it's time to organize a fundraiser in the area. The goal is to raise at least $2500 to purchase a 5ft by 8ft bio haven floating island from Floating Islands West, native plants and all the materials needed to launch.

Step #3 Build and Launch:

This is the really fun part! 3 main volunteer days will be set up. One day to build an anchor out of wood and concrete, another day to set up the island with planting material (including biochar), fungi spawn and plant all our beautiful wetland plant starts! After the plants have had a chance to get established, then we will launch the island onto the water, sink the anchor, and have a little celebration!

Step #4 Monitor:

Thanks to our collaborators in WI Clearwater Collective, we have access to a handful of scientific tools to monitor water quality, as the floating islands do their work. We will plan on taking pictures and water samples at least once a month for phosphorus levels, oxygen levels, and we even have a microscope to look at aquatic life!

Step #5 Harvest:

When Fall comes around we will schedule a volunteer day to harvest the overgrowth from our plant. This harvested biomass will be sent to the state laboratory of hygiene and tested for total phosphorus so we can understand exactly how much phosphorus we are removing from the water! We are leaving the plants alive and well, but in doing so we are successfully removing phosphorus and nitrogen from our waterways and one step closer to preventing algae blooms in the future!

Step #6 Expand the project:

After all the data is added up and we are able to look back at all our hard work, this small scale project can serve as a demonstration for what is possible when we work together as a community, and more importantly, as an ecosystem. If this method works well, let's launch more islands and repeat the process!