

## Discover a Swamp! Maryland Day, 25-April-2015



Altar Pond, Beltsville – Source of swamp critters.

Aquatic insects are important components of local swamps, ponds, and wetlands, and demonstrate a variety of adaptations for aquatic life. At Maryland Day, the Lamp Lab provides an opportunity for visitors to sample a micro-swamp with small nets and pans. By observing what is caught, visitors learn about the morphological and behavioral adaptations for living under water, such as swimming, breathing, and eating. In particular, we view live insects such as giant water bugs, predaceous diving beetles, backswimmers, and dragonfly larvae. Aquatic insects are

important in the trophic structure of aquatic systems, and serve major roles in the ecosystem services provided by wetlands.

We celebrated the 14<sup>th</sup> year of “Discover a Swamp!” at Maryland Day this year on April 25, 2015. Organized by Dr. Bill Lamp, Bill was joined by postdoctorate Alan Leslie, graduate students (Ryan Gott, Becca Wilson, Becca Eckert, Jessica Grant), lab manager Alison Post, and undergraduate students (Anthony Zhao, Cullen McAskill). We had hundreds of visitors view our displays and collect insects from our pond water.



Ryan Gott collecting macroinvertebrates.

Each year brings surprises. This year, we found several of the giant water bugs were found to be carrying eggs (females in the genus *Belostoma* lay their eggs on the backs of the males, who protect them from predators and make sure they get enough oxygen; see picture to the right). We also found the large *Ranatra* water scorpion, a true bug that breathes through a siphon and waits for prey to swim by. We also found dragonfly and damselfly larvae, water scavenger beetles, backswimmers, and water boatmen in abundance. Ryan demonstrated predation by beetles, Becca explained the role of algae as food, and Anthony helped pick bugs out of the swamp (see pictures below). Children, in particular, delighted in the



discovery of life under water. The life from the “swamp” will return next year to Maryland Day.

