

Bioactive Vivariums at Manitowoc Lincoln Park Zoo

Objective: Turn all tanks in the Education Center into Bioactive vivariums. These vivariums will have live plants, animals, and isopods working together to create a self-cleaning environment to cut down on annual tank maintenance costs.

The start-up costs for this project are as follows:

1. 26- 8qt bags of ZooMed Tropical BioBlend Substrate: \$389.74
2. 2- 45L bags of Hydroponic Clay Balls: \$106.22
3. 2- 40L bags of Hydroponic Clay Balls: \$96
4. 2- 4.4lbs blocks sphagnum moss: \$53.98
5. 1- 2.8lbs block sphagnum moss: \$19.79
6. Isopods and Springtails for tank cleaning: \$60
7. 2- mister systems to maintain humidity: \$109.98
8. Various reptile safe live plants: ~\$150

The estimated total for this project comes to \$985.71. I would like to request \$1000 from the donation tube to allow for potential changes in price over the course of buying the items for the project.

Overall, this project will cut down our yearly costs for the Education Center. Right now, we empty out every tank, disinfect all furnishings and walls, then set it back up for the animal once a year. Every year we purchase new substrate which comes to around \$250-\$300 annually. One tank takes around 2 hours to fully clean and reset. It takes an entire 40-hour work week to complete all tanks in the Education Center. A properly set up bioactive tank takes care of itself and does not need the full clean out until a new animal is put into the tank. Long term, this project will allow us to spend time and money on other projects that we have on our to do list.