

“HIGH-TECH FISHROOM”, Talk by Matt Bielski

SWAMAS Program, October 2013



Matt Bielski's Fishroom

Photo by Matt Bielski

DESIGN

Matt started by talking about how to design a high-tech fishroom. He emphasized that the goal is to design a fishroom that utilizes new developments to make less work of taking care of our fish. Planning comes first. Determine how many tanks you want, walkways, and access. In building racks for tanks, he recommended leaving some space behind them for wiring, which is important when you want to make changes in your racks later. To make the racks stronger, he screws pieces of plywood on the ends and attaches them to the wall with braces so they can't be pulled over. For appearance, he uses some plywood and paints the front. Matt is a construction engineer by trade and had some very good pointers on how to wire and plumb a fishroom and tanks. Timed lighting and automatic centralized water changing were discussed and can save much time.

VENTILATION

He also mentioned a ventilation system that can remove excess humidity found in most fishrooms. Do not go over 50% humidity. Excess humidity can result in mold, wall destruction, allergies, and even infections. Plan for a sink and workplace area in the fishroom for better access and efficiency. He stores his water in barrels and uses pumps to move it around. When making RO water for softwater fish, he saves his wastewater, which is very hard, for his African cichlids. The temperature of the stored water is not a problem because his automatic system adds it slowly to his tanks. He uses softened water to run through the RO unit so the

membrane lasts much longer. Make sure that your drainage pipes in the fishroom all tilt lower at least ¼ inch per foot to prevent bad smells from standing water.

ELECTRICAL

Matt recommends GFI breakers for all fishroom outlets. He recommended T-5 bulbs as the best for plant growing, although LED lights are more energy efficient and will grow some plants well. For air systems, he likes linear pumps and recommends loops in the airlines to assure even pressure on all outlets. Matt has helped several others design their fishrooms. Many thanks to Matt for this valuable information!