

# LANDSCAPING WITH WATER FEATURES

By Ed Dillingham

**A**dam Tucker, with Fantasy Falls and Water Gardens, provided a thought provoking discussion on the many aspects of water features as a landscaping option at the May 2 meeting of Master Gardeners at Grace United Methodist Church. Adam has been in the water landscaping business for over 15 years and, being an installer of these systems, knows the business from the ground up, literally.

There are many types of water features, including plain water ponds; waterfalls with ponds; pondless waterfalls; bubbling rocks, fountains and animal character spitters; and any combinations of these. (He doesn't do little boy statues peeing in the pond. That's your little grandson's job!)

One of the first considerations needs to be the location of the water feature.

The location should be where you spend most of your time – indoors or outdoors, close to a window overlooking the feature or beside a deck. You should really place you water feature where you can enjoy it the most. Also, consider access to the area for installation of the water feature and access to the water and electricity supply for lighting and pumps. Another consideration is the needs of any plants you want in and around the water feature as far as shade, sun or partial shade requirements. Finally, consider drainage, both from excess rainwater accumulations and the release of water for maintenance purposes including water quality control.

Before making any final decisions, a professional should be hired to guide the owner in making good decisions on what works, what doesn't work and the estimated costs. Costs can range from a few hundred dollars for simple systems to many thousands for larger, more complex systems. Costs also involve access to the area for installation, access to the water and electrical supply, and disposal of excess rainwater and wastewater from draining the ponds for maintenance. Most municipalities will not allow the dumping of rainwater or draining large ponds into the sanitary sewer system. Therefore, other disposal methods may need to be considered.

Activities to expect from the installer include, measuring and laying out the water feature, digging the pond and using the excess material to build up the waterfall area, installing the pumps and filters and the plumbing thereto, laying the under layer and then the pond liner, rocking the sides of the pond from the bottom up, hooking up the waterfall and skimmers, leveling the sides of the pond, installing lighting, if any, graveling the top side of the pond for liner physical protection and enhanced UV protection, building the waterfall, adding plants, if part of the contract, starting the water feature and making any tweaks to assure the water feature operates as expected and then covering all man made parts so the entire water feature appears to be part of the natural overall landscape.



Some of the owner's maintenance chores are to keep the skimmer and pump filters clean, add makeup water for evaporation (be sure to dechlorinate it first if fish are in the pond) and keep control of aggressive water-loving plants by partial removal, as needed. Water fountains should be thoroughly cleaned and algae removed annually. Drain and clean activities plus system checkout should be completed annually to once every two to three years by an experienced water feature service person, depending on how well regular maintenance activities were completed.

There were questions from the Master Gardeners:

What about solar power? Solar power is not quite ready yet. The manufacturers are still working out problems with reliability and longevity of solar powered equipment.

What about types of liners and how long should they last? Synthetic liners with built in UV protection are best. Concrete liners are expensive and tend to crack and leak over time requiring them to be retrofitted with synthetic liners eventually. Good commercial liners, at least 45 mils thick and properly covered to avoid direct sunlight, should last 20+years.

Will the chemicals used in these features hurt my dog or cat? Recommended chemicals, used as instructed, are safe for domestic animals.

How many fish can be put in a pond? It depends on the size of the fish and pond. Bigger fish varieties will not grow to full size in a small pond and smaller varieties will tend to grow bigger in a large pond.

Will the pond water be murky? The water will not be swimming pool clear, especially if there are fish present, but it should not be murky either.

What are the problems with a water feature? Tree roots growing through or creating holes in the liner, snakes, frogs, and excessive algae growth, especially if the pond gets a lot of sunshine. Mosquitoes should not be a problem if the feature is built to preclude any dead water areas.

