

# Great ponds in a day

*You can build a small pond in a day if you plan your work and work your plan.*

**T**he key to succeeding when constructing a water feature is designing a good system and sticking with it. Building a pond is no different than

building a patio, retaining a wall or even planting a tree. There's a step-by-step process you need to follow to be successful. If you fail to level your base in your retaining wall, your entire wall will be unlevelled. The same principles apply when constructing a water feature. If you fail to follow a sequential step-by-step process, your foreman and crew end up working inefficiently and not as a team.

Ponds under 200 square feet can be built in one day (40-50 man hours) with a trained construction crew of four or five workers. It is very important that you follow the step-by-step sequence to avoid making more work for yourself.

The following assembly process has been used by Aquascape Designs, the country's largest water-garden builder, to successfully build over 500 ponds and waterfalls.



**Left:** once the pond site size is determined, remove the sod and dig out the pond.

**Top:** Contour and remove wrinkles from the underlayment and liner



**7:30 A.M.:** Mark out the pond design with a garden hose and then spray paint where the garden hose is laying.

After you make the determination on the pond site size, it's time to remove the sod and dig out the pond.

Place the skimmer and biological filter where they will be permanently stationed (tip: set filter about 6-10 feet from the pond's edge to create a stream).

Lay the plumbing (two-inch Flex PVC is recommended) from the back of the skimmer to the back of the filter on the outside of the pond. There is no need to bury the pipe, as it will be covered with the excavated dirt from the pond.

**7:45 A.M.:** Hook up the filter by leveling the ground and threading the bulk-head fitting and using the flexible PVC glue to connect the fitting (no glue is needed if you are using Poly Pipe).

While the foreman hooks up the filter, the crew can begin excavation starting at the center and moving out. All excavated soil goes on top of the plumbing and forms the base of the berm and waterfall.

During the excavation process, position the filter system and skimmer (following the detailed instructions given in the filter installation manual). This helps shape the pond edges. Furthermore, the filter must





Left: wash off the rocks by using a garden hose while washing the dirt into the sump pump at the bottom of the pond.  
Bottom: Two or three tons of cobblestones are used around the berm for support. (Photos courtesy Aquascape Designs)



be positioned early so the excavated dirt can be used to bury and stabilize the filter.

After positioning the filter on stable, leveled ground, the filter should be set into a final position so it tilts slightly forward. This encourages the water to exit over the waterfall stone, and reduces the possibility of leakage from plants, interfering with the flow of water over the waterfalls.

**10:45 A.M.:** Lay the underlayment and liner contouring it to the pond edges by walking on it, and pull out any wrinkles.

**11:00 A.M.:** Rock in the pond by forming a chain gang. Use 6 to 12 inch cobblestones to build retaining walls up the vertical edges of the pond, and gravel to cover up horizontal areas.

**11:30 A.M.:** Position underwater lights facing away from the viewing area. Lock them in place between cobblestones.

**11:45 A.M.:** Wash off the rocks by using a garden hose while washing the dirt into the sump pump at the bottom of the pond.

**12:00 P.M.:** Begin filling the pond and break for lunch! Notice everyone is working as a team to accomplish the common goal of having the pond excavated, lined, rocked and filled by lunch time.

**12:30 P.M.:** Back to work! The foreman begins building the waterfall and stream

while the crew brings back topsoil to cover the excavated dirt.

**2:00 P.M.:** The foreman continues building the waterfall and stream while the crew begins to build the retaining wall. Typically two to three tons of 12 to 18 inch cobblestones are used around the berm, for support.

**3:00 P.M.:** Carefully cut away excess liner around the waterfall and pond.

**3:45 P.M.:** Spread mulch over the new berm.

**4:00 P.M.:** Clean up and load the truck.

**4:30 P.M.:** Review the owners manual with the customer, give them the bacteria and receive your payment for a completed project.

You do not need ideal conditions, but you do need standard conditions to construct a water feature in one day. An Aquascape construction crew of four to five workers will build a 100 ponds a season with 90 percent of them taking only one day. The average size pond we build is 11x16 that sells for around \$5,000 (very similar to the price of a hot tub).

It usually takes a landscape crew five or six ponds to get their efficiency down to one day. **LM**