



WATER GARDEN



Easy to maintain Water Gardens bring the world of colorful fish and beautiful aquatic plants to your landscape.



WHAT IS A WATER GARDEN?

Water Gardens are biologically active gardens that contain water and living creatures. Plants thrive on the humidity and feed on the nutrients from the fish, birds and insects drawn to the pond, in turn providing them shelter and food. When in balance, bacteria, plants and fish thrive, water stays clear and clean and maintenance is minimal, so achieving balance is critical. Atlantic's Skimmers, FilterFalls and Treatments complement fish and plant life to provide the tools needed to create a naturally balanced ecosystem.

BENEFITS OF WATER GARDENS

Water Gardens are living water features, offering not just the sight and sound of water in the landscape, but the enticing charm of the many plants and animals that inhabit them.

- Water Gardens offer an attractive and accessible stage for pondowners to observe and enjoy the fish, insects, plants and animals that live and visit there.
- The allure of the pond attracts live-in guests like frogs and turtles; dragonflies come to mate; birds to cool off and bathe, while fox, deer, rabbits and many other species come to drink.
- Water Gardens provide plants and plant lovers the ideal habitat for favorite blooming aquatics, like fragrant waterlilies, exotic lotus and showy canna lilies.
- Splash and evaporation raise humidity and moderate temperature around the pond in summer, while the water warms the surroundings in winter, creating a more temperate environment.

THE ATLANTIC WATER GARDEN SYSTEM

Atlantic's Water Garden System offers a complete solution for every pond builder, from full-featured Skimmers that allow for every plumbing and pre-filter preference, to versatile FilterFalls that can be upgraded as ponds mature and organic loads increase. Whether you prefer to individually select the custom accessories for your Water Garden System, or to simply choose a Pond Kit that comes with all the equipment, liner and plumbing you'll need to complete the project, Atlantic has it all.

- Full range of Skimmers and FilterFalls for every size water garden
- Crush-proof Skimmers and FilterFalls with lifetime warranties eliminate concerns of warping and deformation in the ground
- More filtration options accommodate multiple fish and plant stocking levels
- Pond Kits containing everything needed for a complete installation save you time and money
- A complete line of accessories to complement and enhance your water garden allows for full customization



- 1 Skimmers feature Super Flow weir doors, stainless steel hardware, and a heavy-duty rotomolded shell for the ultimate in durability, backed by a lifetime warranty.
- 2 Skimmers feature large stainless steel-framed nets and stainless/nylon filter brush panels or Matala matting for excellent pre-filtration and accept Matala cartridge upgrades.
- 3 Large pump chambers capable of housing multiple pumps provide the versatility to improve energy efficiency by using two smaller pumps instead of one large one.
- 4 Optional installation accessories such as the Triton Ionizer, Bottom Drain Kit and Auto Fill Kit allow you to keep your pond clean while reducing maintenance at the same time.
- 5 Atlantic's flexible PVC piping, geotextile underlayment and EPDM liner are proudly made in the United States to the highest quality standards.
- 6 Heavy-duty rotomolded polyethylene FilterFalls feature stainless steel hardware, molded inserts and solid lips for watertight liner attachment and lifelong durability.
- 7 Sturdy support bars and top grates support the weight of natural rock camouflage and prevent crushing or warping from the surrounding soil.
- 8 Oversized interior volumes provide tremendous filtration capacity out of the box, expandable with any combination of Bio-Tech media, Bio-Balls, Bio-Rocks and Matala for near infinite custom filtration options.

FILTERFALLS

Atlantic FilterFalls are biological and mechanical filters that remove suspended solids and dissolved wastes in the water. Filter pads intercept debris pumped into the bottom of the Filterfalls, while colonies of beneficial bacteria in the pads convert toxic ammonia into benign nitrates, for plants to take up. Fast and easy to install, the liner attachment design eliminates the chance of leakage at the top of the falls or stream, and the clean, clear water overflowing from the top of the FilterFalls is aerated as it tumbles back down into the pond.

Plumbable from every angle, and with multiple media options to accommodate every need, FilterFalls adapt to any water garden, and media can be easily upgraded to accommodate increasing filtering requirements as water gardens mature. Versatility and the ability to upgrade filter media, combined with exceptional strength and durability plus a lifetime warranty make Atlantic's FilterFalls the only biological filter you'll ever need.



SKIMMERS

Just like in swimming pools, pond skimmers remove surface debris before it can sink, keeping water gardens cleaner. Skimmers also house and protect pond pumps at the water's edge, for easy access and maintenance. As water is pumped out of the skimmer, surface water is drawn in from the pond and into a net, collecting floating debris for fast easy removal. Because only filtered water reaches them, pumps in skimmers tend to stay cleaner, require less maintenance and last longer.

Most Atlantic skimmers accept two pumps, to accommodate every size pond and flow requirement. Multiple filtration options and plumbing ports for overflow drains, automatic fill valves, satellite skimmers and bottom drains make these the most versatile skimmers available. Impervious to crushing or weather, with black anodized stainless steel hardware, massive construction and internal bracing, all carry a lifetime warranty.



PUMPS

The pump is the heart of the Water Garden system, and must be long lasting, efficient and dependable. TT-Series asynchronous pumps carry a three-year warranty, deliver more water for less watts to medium head features under 15' and are fully rebuildable for long service life. For higher head features, long plumbing runs or wherever higher pressures are required, stainless steel PAF- and A-Series pumps deliver. For very low head heights, L-Series axial pumps propel huge flows at very low head heights extremely efficiently. With the best line of continuous duty submersible pumps, Atlantic has what you need for your project.



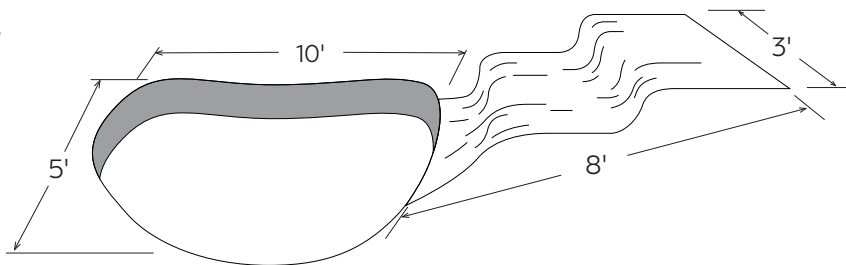
All pumps have an optimal range in which they run best and last the longest. Ensure you are choosing the right pump for your project by using our Choosing the Perfect Pump Bifold to calculate Total Dynamic Head, available on our website, www.atlanticwatergardens.com.

SURFACE AREA

Upon start-up, the pump draws water from the pond to fill the streambed, from top to bottom, until the water overflows back into the pond to complete the cycle. We call the amount of water needed to complete this cycle the 'transitional' water volume. If the streambed is built improperly, or is built too big, the water level of the pond could drop below the opening in the skimmer before the water levels equalize. This would result in the pump starving for water and running dry.

This situation can be easily avoided by using the formula provided to calculate the surface area of your pond. With that number, you can then determine the maximum surface area of waterfalls and streambed that your pond can accommodate.

To limit the transitional volume of water needed to get the system cycling, the stream surface area should be half of the pond surface area or less. Follow guidelines for proper Streambed Construction, below.



MAXIMUM AREA OF STREAM (IF YOU KNOW YOUR POND SIZE)

Average Length of Pond x Average Width of Pond ÷ 2 = Maximum Area of Stream

MINIMUM AREA OF POND (IF YOU KNOW YOUR STREAM SIZE)

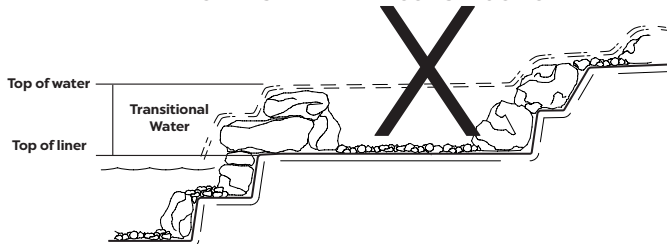
Average Length of Stream x Average Width of Stream x 2 = Minimum Area of Pond

STREAMBED CONSTRUCTION

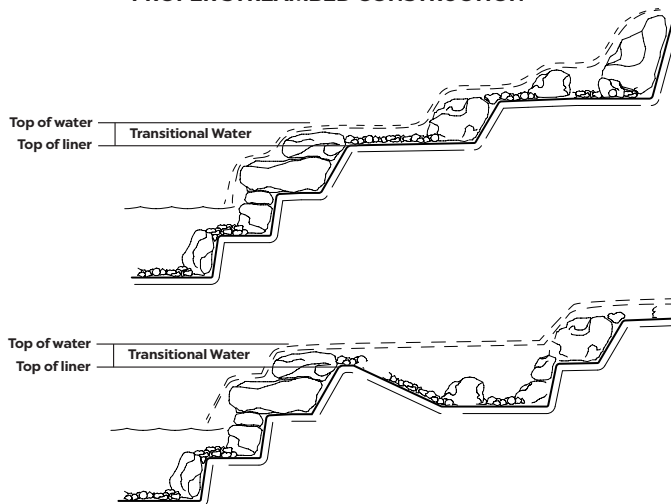
The less the water level in the pond drops as the pump turns on and the stream fills, the better for proper skimmer function. Proper streambed construction can reduce the amount of water needed for this transition.

Since transitional volume is determined by how high the rock extends above the liner at the spillways, minimizing that height reduces the amount of water necessary to fill the streambed. The drawings to the right display two examples of proper streambed construction to keep the transitional water to a maximum of 3-4" in depth.

IMPROPER STREAMBED CONSTRUCTION



PROPER STREAMBED CONSTRUCTION



SIZING & CALCULATIONS

SIZING LINER (LENGTH, WIDTH AND DEPTH MEASURED IN FEET):

Pond Liner Length = Maximum Length of Pond + (2 x Maximum Depth) + 2'

Pond Liner Width = Maximum Width of Pond + (2 x Maximum Depth) + 2'

Stream Liner Length = Maximum Length of Stream + 4'

Stream Liner Width = Maximum Width of Stream + 4'

APPROXIMATE VOLUME OF WATER IN POND IN GALLONS:

Average Length x Average Width x Average Depth x 7.5 = Total Gallons in Pond

APPROXIMATE GALLONS OF WATER IN A STREAM:

Average Length x Average Width x Average Depth x 7.5 = Total Gallons in Stream

QUANTITY OF BOULDERS AND GRAVEL NEEDED FOR A FULLY ROCKED AND GRAVELED POND:

Tons of Boulders = Length x Width ÷ 40

Tons of Gravel = Tons of Boulders ÷ 4

QUANTITY OF BOULDERS AND GRAVEL FOR A STREAM:

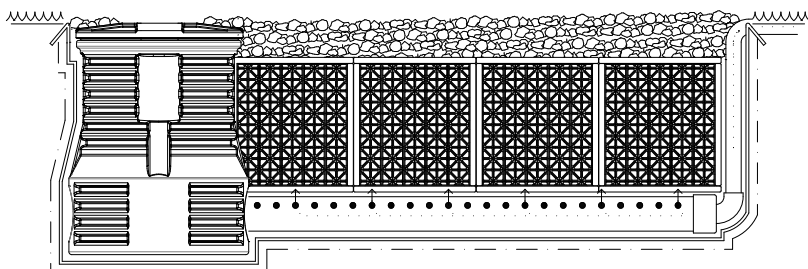
Tons of Boulders = 1.5 tons for every 10' of stream

Tons of Gravel = Tons of Boulders ÷ 4

RATIO OF SIZES OF BOULDERS:

For every 1 ton of 6" - 12" boulders, get 2 tons of 12" - 18" boulders and 1 ton of 18" - 24" boulders

BOG CONSTRUCTION



Atlantic's Eco-Blox and Pump Vaults make excellent, easy to maintain bog filters. When installed with perforated pipe underneath a field of Eco-Blox, the Pump Vaults act as distribution nodes and clean-outs for upflow bogs of any size and configuration. Pond water pumped into the perforated pipe, flows up through the Eco-blox, shedding velocity and settling out sediment. Plants set in gravel on top of the Eco-Blox remove fine solids and nitrates. Simply flush the chamber from above into the Pump Vault to remove sediment.

