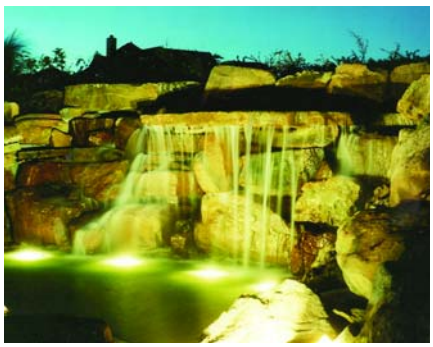
Tips for Successful Pond and Water Garden Lighting

By Roger Shank, *Landscape Lighting by Viewscapes*

A landscape and water garden design should complement the home and its associated hardscapes. Often during the construction, one will start to make trade-offs to trim costs and manage the projects bottom line. Many times during my 15+ years of experience I have discovered that the landscape and the lighting have suffered the most damage.

Landscape and pond lighting used to be simple. Just buy a few fixtures, plug a transformer into an outlet, hook the lights to a cable with clips and your all done. The results were usually pleasant but often do not satisfy the owners desire to create an outstanding visual display of the total environment.

This is often where the professional lighting designer is consulted. Outdoor/pond lighting can be both functional and aesthetic. It is an art to understand how much light to place in a landscape or pond to highlight the desired focal points of the area.



When lighting a water feature or pond, several things need to be considered. A waterfall should be lit from two directions with fixtures on each side of the feature. Path lighting is used to provide depth and softness to the area. Often back lighting of something behind the water surface will surprise you with an outstanding reflection in the waters surface. Underwater lights will highlight the fish as they swim through the light at night. (Your pond is clear isn't it?)

When considering the fixtures around your pond, you need to know the difference between water-resistant and waterproof. Most above ground fixtures are considered water-resistant. Manufactures have their fixtures tested by an independent testing laboratory and carry the UL (Underwriters Laboratory) Mark. Submersible fixtures (waterproof) must be entirely sealed to prevent water from entering the lamp housing. In my years of using these "waterproof" fixtures I have yet to find one that will provide more than two years of leak proof service. Usually the water will enter the fixture causing the socket to fail.

One of the most exciting developments for pond lighting and the associated landscape lighting is the development of light emitting diode (LED) lighting. In the waterproof area these fixtures are permanently sealed. No water can enter the LED chamber. These fixtures use very little power and last a very long time. Considering the average lighting system is operational about 2400 hours a year, LED fixtures are rated between a 50, 000 and 75,000 hour life span. That is about 20 years of trouble free service. An added plus is the cool operating temperature. Algae usually do not collect as fast on these fixtures.

LEDs are also making an inroad into above ground fixtures. A 5 watt LED with a MR-16 base will produce about the same output of light as a 12 V, 20 watt MR -16 lamp. They will cost about 6 times as much as the 12 V bulbs but will last about 16 times as long.

When choosing a fixture to be installed near a water feature, use housing material made of brass, copper, stainless steel or some of the new composite materials. Aluminum is not a good choice because it will deteriorate. Cast aluminum is naturally porous and can leak water into the socket housing.

Transformers for use around water features must be listed as acceptable for use with underwater lights. They have an isolated secondary to prevent harmful voltages from entering the water and must be plugged into a Ground Fault Circuit Interrupter (GFCI). This unit will shut off the power if it detects a faulty circuit.

The beauty of a lighted waterfall, pond or fountain can be magical at night. There is something magical about seeing the movement of fish passing underwater lights. One, two or three lights may be all that is needed to bring out the beauty of the fish, plants or decorative stones. Keep your landscape lighting simple and subdued. More is not always better.