

"Green" Ideas for Ponds and Water Gardens

Drs. Foster & Smith Educational Staff



An eco-friendly pond or water garden is one that keeps its focus on environmentally-friendly practices. When planning an eco-friendly pond, consider using native plants, avoid over-use of chemicals, employ water



conservation methods, use energy-efficient or solar-powered products, and increase pond filtration through dense planting.

Native plants

Native plants blend well with traditional [pond plants](#) and can be incorporated into most landscapes. A benefit of using native plants is less maintenance and care. Native plants have adapted to local conditions and do not have the special care requirements certain non-native species may need to thrive. Increasing the use of native plants also reduces the potential of introducing and spreading non-native species that may be considered invasive in your area.



Avoid over-use of chemicals

Whenever possible, consider alternatives to harsh chemicals. For example, you can reduce dependence on pesticides and algacides to manage nuisance algae. The eco-friendly approach to algae management relies on improving water quality to create conditions that do not encourage aggressive algae growth. There are several ways to keep algae at bay in your pond without using harsh chemicals.

- **Routine maintenance.** Use a [vacuum](#) to siphon the bottom of the pond. Remove dead leaves and fallen debris with a [skimmer](#) or rake before they have a chance to break down and release nutrients such as nitrogen compounds or phosphate that contribute to aggressive algae growth.

- **Add** our [Revitalize with Barley](#). As it breaks down and decomposes, the barley straw releases an enzyme and natural extracts that help condition and clarify pond water.

- **Enhance** pond biological filtration with [beneficial nitrifying bacteria](#). These bacteria actively process nitrogenous waste products that feed algae. Reducing algal nutrients is an important step in improving pond water quality and preventing conditions that favor aggressive algae growth.

- **Create** a [water fountain](#) or use an [aeration kit](#). Proper gas exchange through active water movement increases oxygen levels for efficient biological filtration. Actively moving water also helps expel dissolved carbon dioxide to reduce another algal food source. Keep water moving, especially near the sides of the pond, to eliminate stagnant conditions favored by algae.

- **Increase** pond plants that compete for algal nutrients. Whether [marginal](#), [submerged](#), or [floating plants](#), increasing the number of plants in your pond is a beautiful way to maintain good water quality. Make sure you have enough surface covering plants (like [water lilies](#), [water lettuce](#) and [hyacinths](#)) to cover roughly 1/3 of the surface of your pond to help provide shade.



Water conservation

As part of your water conservation program, capture rainwater in large barrels. The collected rainwater can then be used to

replace water lost through evaporation. After collecting rainwater, be sure to use a tight-fitting lid to keep out wind-blown contaminants and egg-laying mosquitoes. You can also re-use your dirty pond water. Instead of emptying dirty pond water down the drain, use it to water your lawn, flowers, or your garden. The nutrients in the dirty pond water make an excellent fertilizer!

Energy-efficient or solar-powered products

Finding ways to enjoy your pond while lowering your energy consumption has never been easier! There is a growing selection of energy-saving and solar-powered pond equipment available. Here are some great ideas to cut down on energy usage in your pond:



•• **Monitor** your current energy consumption with the Kill A Watt PS. Simply plug your pumps and filters into the Kill A Watt PS and it will assess how efficient they are while the built-in surge protection keeps them safe. It will show you how much energy these items consume, and help you determine if it is time to replace older, inefficient products with newer more energy-efficient models.

•• **Use [automated timers](#)** to control pond lighting. Timers with manual settings let you customize on and off cycles while timers with a built-in photocell turn on and off automatically with the changing daylight and darkness.

•• **Explore [solar power!](#)** There are several products available which only use free energy from the sun. From entire pond systems, to pumps, fountains, and lighting, these are a great way to get off the power grid. While you may expect to pay a bit more up front for solar pond gear, it will typically pay for itself in energy savings.

Plant Filtration

Consider a pond filter that does not use electricity. Lush plantings of gorgeous, water-loving plants are natural filters that remove excess nutrients and improve water quality. Increasing submerged plants or constructing a bog filter are two options.



[Submerged plants](#) take up nutrients in the water and release oxygen during the day to sustain fish and other aquatic life. They also remove excess nutrients from the water, which discourages algae growth.



A [bog filter](#) expands on this concept to function as a natural wastewater management system for your pond. This natural filtration restores balance to the pond environment by increasing the ability to process or export excess nutrients. The result is cleaner, clearer, and healthier pond water. Best of all, unlike bulky conventional filtration systems, you'll want to show off your "plant filters" rather than conceal them!



With these eco-friendly approaches to responsible pond keeping, you'll be on your way to lowering your energy bills, and doing your part for the environment, while enjoying your beautiful pond or water garden.



Recommended Products



[Power Control Center](#)



[Solar Pump Kits](#)