



# *Santa Fe Landscapes & Water Gardens*

**Spring is just around the corner and your pond is ready to awaken. Are you ready?**

## **Early Spring**

**Plan Improvements** - Don't fret if it's still too early to open your pond. Use this time to plan pond improvements. Is this the year to add a fountain? Or a waterfall? Or perhaps install a new, energy-efficient water pump? Call us and speak with one of

**Get supplies for a healthy pond ecosystem** - In early spring, the pond ecosystem is in a fragile, transitional state where water conditions can rapidly deteriorate. Increased biological activity means a greater demand for oxygen, especially in dirty ponds. As organic materials from the previous year begin to break down, they can lower pond pH, release harmful ammonia, and provide an abundant supply of nutrients for algae. Be prepared with pond water conditioners including pH adjusters, biological additives, ammonia detoxifiers, and a pond aeration kit.

**Check plumbing & electrical** - Carefully examine your filtration system to make sure everything is in working order. Check for cracks on the filter or kinks in the plumbing line and also test the ground fault circuit interrupter (GFCI) outlet. Replace all equipment or parts that are damaged or not working properly. This will ensure proper filter operation once the water temperature is warm enough (above 45°F), to start your pond filtration system.

## **Late Spring**

**Get a head start on your pond** - Many natural processes that help maintain a healthy pond environment need time to establish. As soon as water temperatures are warm enough to run your pond filtration system, use bacterial additives to help jump-start biological filtration. Without bacterial additives, it can take a few weeks to establish efficient biological filtration. Natural products such as barley straw also require time to work effectively against algae. Add barley straw early in the season, before you have an algae problem, to reap its full benefits. If your pond water still turns green, API POND ALGAEFIX® can be added to keep algae growth under control without harming ornamental pond plants.

**Planting easier** - Pick a warm day and remove a small amount of water to simplify plant maintenance. Use an extra water pump and tubing to remove water without disconnecting your fixed system. The lower water level will make it easier for you to move over-wintering plants on the bottom of the pond to their respective shelves. As you move the plants, examine their overall condition. Keep extra plant baskets and planting media nearby so you can divide and repot the plants if they are crowded or are growing out of their planters. Use this opportunity to add plant food tablets and to remove larger settled debris. When refilling the pond, remember to use a dechlorinator.

**Lower fish stress** - Fluctuating spring temperatures can be extremely stressful for pond fish, especially goldfish and koi that wintered over in the pond. To help reduce stress, turn off fountains or waterfalls during cold spells to slow the rate at which a pond cools. Do not feed your fish until pond water temperature is consistently above 40°F. Feed an easier-to-digest wheat germ based food once water temperatures remain above 40°F. Add a little bit of pond salt to help encourage a healthy slime coat so fish are able to naturally fend off parasites and bacterial infections.

Spring preparations organize and simplify pond care, leaving you with plenty of time to enjoy a healthy, beautiful pond that is easy to maintain.

The spring pond season is an exciting time especially after a long, cold winter. Many pond and water gardeners are anxious to experiment and try out new products and techniques for a refreshing new look. But for many, spring also means the arrival of the dreaded "spring green." The warmer temperatures and longer days create conditions ideal for algae that turn your pond into pea soup.

### **Get a jump start**

Once algae take hold, they seem nearly impossible to rid. This may be the case if conditions that encourage aggressive algae growth are not addressed in a prompt manner. Simplify algae control by getting a jump-start. Take steps to keep algae growth under control as soon as possible - don't wait until the water turns murky green.

### **Monitor fish food**

Do not feed your fish until water temperatures are consistently above 50°F. Once water temperatures stay above 50°F, start feeding your fish wheat germ food. These low-protein, cool water foods are easier to digest and help minimize waste. Switch to a staple or growth food when water temperatures remain above 70°F. Give your fish just enough food they can finish within a few minutes and remove any uneaten food.

### **Reduce algal nutrients**

Control aggressive algae growth by reducing nutrients available to algae. Replace chemical filter media such as activated carbon on a regular basis and use products designed to eliminate phosphate, the main algal nutrient. Consider taking a multiple approach using Barley Straw products or products designed to limit algae growth.

### **Increase aeration**

When the pond ice has thawed, increase pond oxygen levels with aeration devices. It is one of the easiest ways to improve water quality and curb conditions that encourage aggressive algae growth. Well-oxygenated water not only allows beneficial bacteria to process organic waste materials more efficiently, it also reduces carbon dioxide that feed algae. When using aerators during spring, it is important to place these devices close to the water surface. Even if the air temperature is quite warm, the water temperature may still be significantly cold. Aeration devices placed deep in the pond can churn the cold water, creating stressful conditions for your pond fish.

#### **Bacterial additives for spring**

After a cold winter, the reduced numbers of beneficial bacteria begin to slowly increase. Give these helpful bacteria a boost and replenish their populations by adding a spring or coldwater bacterial formula for efficient biological filtration. Remove leaves and large organic debris to accelerate the decomposition of these materials.

### **UV clarifiers**

Early spring is the perfect time to install an ultraviolet clarifier. These units emit germicidal ultraviolet light similar to sunlight (UVC) to help clarify green water associated with free-floating algae. When the water temperature is consistently above 45°F, start up your filter along with a UV clarifier to maintain clean, clear water. If you already have a UV clarifier, spring is the perfect time to install a new UV lamp for optimum results throughout the season.

## **SPRING**

### **Bringing your pond back to life**

Check your pond filter and pump and prepare for summer. Once spring arrives and water temperatures are above 45°F, you will want to get your filtration system started.

Reassemble the filtration system and start it up. Check for leaks and proper flow rate.

Jump start your biological filtration with bacterial additives to replace those lost over the winter.

Measure water parameters and monitor the development of nitrifying bacteria in your biological filtration system with a good test kit.

Have a pond aerator handy to promote proper gas exchange. Unseasonably warm spring days can encourage abrupt nitrifying bacterial activity that can rapidly deplete dissolved oxygen levels in your pond.

**Tip**

Combat spring green! Place barley straw in a container of moving water inside your home, 6 weeks ahead of time so it will be primed when you are ready to open your pond.

Get your UV sterilizer system up and running to keep your water crystal clear throughout the spring and summer season.

Get those green thumbs wet. Early spring is the best time to repot pond plants. Add fertilizer to water lilies to give them a good start.

Start feeding pond fish easier-to-digest, wheat germ food when water temperature stays consistently above 50°F.

While pond experts don't always agree on exactly which aspects of spring pond maintenance are the most critical, there are many common steps and procedures that we would like to present to help you bring your hibernating pond back to life.