

Pond Care Spring, Summer, Autumn, & Winter

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To enjoy your pond year round, set up a seasonal care plan. Most care is on a preventative schedule to maintain a healthy pond, which generally equates to a visually appealing pond.

Spring

Maintenance in Spring plays an important role in general pond health and enhances enjoyment throughout the growing season. Spring is a transition time in the pond. Sunlight is increasing, temperatures are warming, fish are increasing their activity, and algae begin its growth cycle.

Even the best-balanced ponds experience algae growth until the plants grow to a level to provide shade and absorb nutrients in the water. Reducing sunlight and nutrients also discourages algae growth. A little effort now can decrease water "greening" that may be unhealthy to pond life and unpleasant to the onlooker.

Using a pump or siphon, remove 25% – 30% of the pond water. You can also choose to remove all of the pond water. If you remove all the pond water, you will need to relocate any fish. Depending on the number and size of the fish will determine the size of the holding tank. Use the pond water you are draining from the pond to fill the tank. You will also need to aerate the water. The fish will be easier to capture as the water level lowers from the pond. Move potted plants from the pond to a shady area, or they are in the sun, cover them with wet newspaper. Try not to stir up dirt and debris any more than necessary so the pond bottom remains visible.

Using a fine mesh net, scoop along the bottom and edges to remove leaves, debris, and dirt that have blown and fallen into the pond, creating a layer of muck. This process is called "mucking" the pond. Origins of this term are the Middle English Norse work "myki" meaning dung and the Indo European work "meuk", meaning slippery.

This blackened "soil" containing excess fish food, fish excrement, and decaying matter has a very unpleasant odor. Remove as much of this matter as possible, as this contributes to the growth of algae and deprives fish of needed oxygen. Add the muck to the compost pile. Leave the moss-like algae growth on the pond sides, as this has beneficial microorganisms that help balance the pond ecosystem.

Look closely at the fish for any unusual behavior, injuries, swollen abdomens, and white or red flecks on their fins or bodies. If any problems are apparent, consult your fish supplier for treatment options.

Inspect mechanical equipment such as pumps, cords, filters, and tubing for damage or wear. Clean and replace equipment as needed. Assess the condition of the liner or pre-formed pond for possible deterioration from sun or punctures. Check the electrical circuit and make sure the GFI (Ground Fault Interrupter) is working properly. If all is well, refilling the pond can commence. Water should be trickled in from the garden hose; this will decrease any rapid temperature change that could affect the fish. A dechlorinator and chloramine remover should be used at the rate specified.

When pond refilling is complete, filtration and circulation can be started. If a waterfall or stream is included in the circulation, watch the pond water level for several days. If the water level drops, it is likely that ground freezing and thawing has created a leak.

Check hardy marginal/bog plants, trim away any remaining dead foliage, divide, and repot as needed. Heavy garden soil should be used to pot all water plants. Potting soil, compost, vermiculite, or perlite should not be used, as they float out and foul the water. Soil should be added to a level one inch below the pot rim, and then topped with one-half to one inch of clean gravel to discourage fish from digging in pots.

Hardy *Nymphaea* (lilies) that have grown out of their pots should be repotted. Turn the pot upside down to remove the plant and dirt. Remove dirt from the rhizome and roots by flushing with water. Using a sharp knife on a hard surface, cut off any brown or black roots, and rotted (mushy) areas from the rhizome.

If water temperatures are in the 40° Fahrenheit range, fresh cuts on the rhizome can be rubbed with powdered charcoal to discourage rot. Separate side growth ("eyes") from the primary rhizome for propagation. Hardy lilies grow horizontally and should be placed against one side of the pot at a 45-degree angle, with the growth tip (crown) above the soil so it has room to grow across the pot.

Hardy *Nymphaea* prefer at least one cubic foot of soil, but can do well in smaller pots. Growth is commensurate to soil area for root growth: the bigger the pot, the bigger the plant, and the bigger the show.

Fertilize plants using aquatic plant tablets and return them to their growing spots in the pond. Sink repotted plants into the water slowly to prevent the release of soil into the water.

When water temperature reach 50° Fahrenheit, fish feeding can resume using an easily digestible, wheat germ based food. Regular and growth food can be introduced when water temperature reaches 65° Fahrenheit. Another test to see if fish are ready to resume eating is to drop in a sinking pellet of food. If fish rush to consume it before it gets to the bottom, they are totally awake and can digest food. Fish Wintered inside in unheated tanks can be returned to the pond. Water temperature differences should be less than 5° Fahrenheit to reduce any stress to fish.

Summer

Tropical water plants can be placed in the pond when daytime water temperatures near 70° Fahrenheit and night temperatures do not drop below 50° Fahrenheit. This usually occurs by the middle of June. Fertilize marginal plants every 5 - 7 weeks throughout the growing season.

Lilies should be fertilized every 3 - 4 weeks, until early August. Tablet or pellet fertilizer for aquatic plants is recommended. Excessive yellow leaves or pads, few petals on flowers, or poor blooming can indicate a lack of nutrients. Prune and remove all dead leaves (pads) or flowers from the plant at the crown level, throughout the growing season.

Add water as necessary to replace amounts lost through evaporation. Remember to use a dechlorinator and chloramine remover at the rate specified if you add more than one inch of water.

Autumn

Covering a pond with bird netting can save a great deal of work if the pond is in a heavily treed area. Remove any dead leaves or dead plant material from the pond. Trim back all plants and drop hardy *Nymphaea* to the lowest level of the pond. Move tropical plants indoors for overwintering.

Winter

When water temperatures drop below 55° Fahrenheit, stop feeding fish and shut down the biological filter. Drain all water from any exterior piping to eliminate cracking or breaking from eventual freezing or plan on running your pump throughout the Winter.

To keep an area open for exchange of gasses in a pond with fish, run a small submersible pump all Winter. Check the GFI to make sure it is functioning properly. Place the pump on a brick or pot with the outlet approximately 2" below the water surface. A tank aerator/bubbler (available for stock tanks) also works for this purpose. Place air outlets 6" – 8" below the water surface. If a waterfall is used to keep an opening for the fish, try to move the pump under the waterfall. This movement of the pump will keep the cold water at the pump under the waterfall.

If extremely cold temperatures cause the pond to freeze over, place a pan of boiling water on the surface to melt a hole in the ice. To decrease the possibility of losing the pot in the pond, tie a string or rope to the handle. Do not use a hammer or other instrument to break the frozen surface. This can kill fish. If you are not overwintering fish there is no need to open the surface of the pond or be concerned about gasses building, this has no effect on plants.

Add water as needed to replace any lost from evaporation. Be sure to add it slowly to eliminate temperature changes, which could adversely affect the fish. Remember to use a dechlorinator and chloramine remover at the rate specified if you add more than one inch of water.

If waterfall features are left running during the Winter, it is important to inspect the pond water level to ensure Winter freezes and thaws have not created a leakage of water.

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