

# POND & GARDEN'S Pond Contest 2000 Entries

**F**or the next several issues, you're in for a treat! We've received hundreds of entries in our first Pond Contest, so many that it's hard to chose winners. Some entries were sent directly to us, while most were submitted by our nursery distributors across the country. We'll share them all with you and invite you to visit our website in September to cast your vote for the winners. (www.pondandgarden.com)

**From Ardella's  
Garden Center,  
Norman,  
Oklahoma**



(above) Bruce and Sharlene Wellenberg, Norman, OK  
(left) Gary and Almira Grammer



Miller and Jean Maddox, Norman, OK

**From Ardella's Garden Center,  
Norman, OK**



Jim and Barbara Berger, Norman, OK



Jim and Wanda Dunlap, Norman, OK



(above) John and Donna Mennig, Norman, OK  
(left) Jane and Harry (Jiggs) McLaughlin, Norman, OK

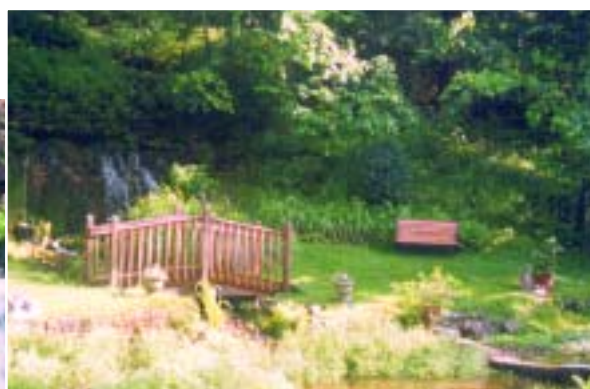




**From Casey's Garden Center  
in Bloomington, IL** Michael and Cindy Cook, Carlock, IL



Maynard and Mary Ann Hughes, Borden, IN



Ernest and Mary Lou Braswell, Ozark, MO

**From Ardella's Garden  
Center, Norman, OK**



Steve and Janet Terrones, Norman, OK



(above) Rick and Pam Vidmar,  
Norman, OK  
(right) Bob and Shirley Rice,  
Norman, OK







**From Horticultural Services in Council Grove, KS**  
 Dick Montgomery, Council Grove, KS



Jim and Martha Hanna, Roanoke, VA

**From Vermillion Waters in Rosemount, MN**  
 Patti Ek, North St. Paul, MN



**From Aquatic Gardens in Birmingham, AL**  
 John Powell, Birmingham, AL



**From Concrete Gardens in Mt. Dora, FL**  
 Mary Ann Harris, Mt. Dora, FL





**From Concrete Gardens  
in Mt. Dora, FL...**

The Ponds of Terry and Joe Rodriguez.



The first pond...



and the second pond.



Terry and Joe Rodriguez



# Gone to Pot: PLANTING WATER LILIES

by Paula Biles

Spring is around the corner, and it's high time to prepare for planting your water garden. Whether you're repotting old water lilies or getting new ones, the paraphernalia is the same – pots, soil, and fertilizer. While everyone has their own preferences, we'll discuss available options. (Perhaps you've always wondered why grow lilies in a pot and not in the pond bottom. It's to keep runaway plants contained, allow for their easy moving, and make fertilizing possible without growing green water.)

There are numerous types of containers available, including several designed just for aquatic plants. No matter which you choose, shape and size are important. Water lilies send out horizontal roots and need wide, shallow containers. This shape is also important for other aquatics, especially the taller marginals like iris, cattails, and papyrus. It makes them more stable in the pond, so top-heavy plants won't tip over in the breeze. Pot size is a crucial factor for healthy, long-term growth – use the largest pot your pond can accommodate. The bigger the pot, the bigger the blooms and the less frequently you will need to repot. A three-gallon pot allows ample room for one or two season's healthy growth.

Plastic aquatic containers come in two styles: mesh baskets with small holes, and solid pots without any holes at all. Both are black, which makes them almost invisible in the pond. Plastic

is the most popular material because it is light and easy to handle. However, any broad shallow container will work.

Some people think pots with holes provide a better exchange of gases and get more air to the roots. Others, like me, think holes are a pain in the neck and allow more fertilizer to seep into



The pot option is infinite, however, select the largest that fits into your pond. Shown here: black hole-less water lily pots (1 & 3 gal); 1-gal mesh basket (more useful for marginal plants); a clay azalea pot; and a dishpan. Any shallow wide container will work.

the water. If you use pots with holes, you'll need to keep the soil in the pot and out of the pond. Several materials will work to cover the holes: coffee filters, landscape fabric, and wet newspaper. For mesh baskets, first line them with burlap or other cloth material.

Soil is the critical component that anchors your plants, while allowing the roots to spread out and obtain nutrients. Just like with containers, there are several alternatives. The simplest is actually no soil at all. One link in a fishpond's



Planting ingredients are simple: top soil, gravel, and rocks. Heavy loam (with some clay) from your yard is the ideal planting media. Never, ever, use potting soil mixes.

nitrogen cycle is nitrate, which is plant fertilizer. Some soil-less options utilize this property of water chemistry. They do so by providing a sterile growing material, like coconut fiber, that only holds the plant up. It does not provide any nutrients, which must all be absorbed from the pond water. This system has been successful with marginal plants but not lilies. Another sterile material used is sand, which provides a good solid anchor but no nutrients. Kitty litter (without any chemical additives or dyes) can be used, although it always makes a big mess for me. None of the above options provide sufficient nutrients to sustain growth, so apply fertilizer regularly. Soil is the only planting material that both feeds and supports the plants. It comes in different compositions and textures, depending upon where you live. The ideal soil for water lilies is heavy topsoil with some clay. Few of us are lucky enough to have it in our yards, so we must mix up our own special blend or buy a bag of topsoil, which is cheap, works very well, and is easy to store.

How often you should fertilize depends upon the pot's size, length of time since planted, soil type, and the length of growing season. Newly potted plants should always be fertilized. Later in the season, the plant itself will give you clues (see photo). The most visible signs are changes in the leaves and blooms. If the lily pads gradually become smaller, or become slightly yellowish too soon, it's time to feed. If the blooms become tinier and less frequent, it's time to feed. Plants lacking in nutrients are also more susceptible to pests and diseases. During the active growing season, it's best to fertilize monthly. However, during times of rapid growth, fertilizing even more often will produce the most and largest blooms. Remember that water lilies are voracious eaters, producing foliage and blooms in direct proportion to the amount of food available.

Okay, you've gotten all this stuff. Now what should you do with it? Well, potting or repot-



Signs of insufficient fertilizer are usually easy to identify. Compare the healthy plant on the left with the smaller nutrient-starved one to the right. The lack of food causes stunted growth, plus paler leaf and blossom colors.



ting a lily is actually easy. Block any holes in the pot. Put your fertilizer tablets in the bottom. If you're using loose fertilizer, mix it with some topsoil and fill about 1/3 of the container. (Putting the fertilizer only at the bottom keeps it away from the water and puts it where the roots will need it once they develop.) Fill the pot about 2/3 full and put the lily in the middle, if it's a tropical, or against the edge, if it's a hardy. Spread the roots out and cover them with soil, leaving the growing tip exposed. Cover the soil with a layer of gravel. If you have koi, use large pebbles or small rocks to prevent them from dismantling everything as they forage around looking for koi delicacies. Be sure to leave the growing tip exposed. Add some water to saturate the soil before you place it into the pond. This will remove air from the soil and prevent it from bubbling up when you put the pot into the pond. The last thing you need is a miniature Mt. Vesuvius spewing soil into your pond water. Carefully lift the container, which will be very heavy, into your pond. Float it to the right place before gradually sinking it. For optimum growth, place the water lily close to the surface, then gradually lower it as the water temperature rises. Prop it up on black milk crates or bricks. This will provide enough light and warmth to get its growing season started quickly. General guidelines for planting depths are 8-18 inches for hardy lilies and 6-12 inches for tropicals. And remember, tropical lilies shouldn't be put out until the pond water is 70 degrees.

That's all there is to it. A well-planted water lily will be healthy and produce lots of blooms throughout a long season. With regular fertilizing, it will not need to be repotted for at least a year or two, depending upon where you live.



The critical step when planting a water lily is to leave the growing tip exposed. As shown with this tropical lily, the tip must stick out from the soil. It must also be above the top layer of gravel or stone.

Now, just sit back and enjoy.

## The Big 2 Water Lily Killers

The #1 Killer of newly potted water lilies is PTD – Planting Too Deep. Almost all cases of mortality are directly attributed to this single cause. Unlike terrestrial plants, lilies need the growing tip exposed. It should stick out above the soil and gravel to get the light and warmth it needs. If covered, the plant will usually rot and die back. This quick and painful death leaves only a smelly mess in the pot. Prevention of PTD is simple. When potting or repotting, always leave the growing tip exposed, whether planting into soil alone, or using a gravel topping.

The #2 Killer of freshly planted lilies is using the wrong soil. Potting soil, the bagged stuff used for houseplants, is to blame. It usually does most harm to the pond water, but it may cause the water lily to become stunted and sometimes die. Potting soil contains several things that float out of pots or drastically change the water's pH: perlite, vermiculite, and peat moss. Potting soil should NEVER be used for planting aquatic plants. Another soil that never should be used is natural muck. It is often very acid, lacks any nutrients, and since

it is still decomposing, may release gases harmful to fish.

## Plant Fertilizer 101

Fertilizers are labeled with three numbers, the available percentages of the major plant nutrients: Nitrogen (N), Phosphorous (P), and Potassium (K). Sometimes trace elements or micronutrients are also included, of which lilies need 12. All nutrients are essential for the production of leaves and blossoms.

- **Nitrogen** – for healthy green leaves
- **Phosphorous** – for production of buds and roots; to stimulate growth, especially at beginning of season
- **Potassium** (or Potash) to regulate plant growth; influence blossom color and structure; and build resistance to certain diseases, pests, and cool weather

Many fertilizers are suitable for aquatic plants. Loose fertilizer comes in two flavors — regular and timed-release. Ordinary garden fertilizer is cheap and easy to mix with the soil when first planting or repotting. Timed-release brands are coated beads that gradually release fertilizer. They, too, can be used when first potting a plant, and will last longer than regular fertilizer. Special aquatic plant tablets are the most expensive fertilizers, but are easier to work with. They are the most convenient way to fertilize later in the season. Just poke a hole in the soil and push it down by the plant's roots. (It's much easier if you first make a hole with a dowel or dibble.) Less expensive but similar alternatives

are tree or tomato spikes, available at home and garden stores. Use them like the tablets. (First break the tree spikes into smaller pieces.) Whichever fertilizer you use, select formulas like 10-26-10 or 10-15-10. (*Formulas with nitrogen, the first number, over 15 to 20 can burn the plant.*)

Organic fertilizers can also be effective. Most act very slowly, so mix them into the soil when first potting your lilies. They work best when combined with other fertilizers and have the added benefit of improving the soil's structure. Composted cow manure is cheap and available at the garden store, if you don't care to collect your own. (It *must* be composted.) Besides essential nutrients, it provides trace elements that produce the best blooms. Dried blood (also available from the store, thank goodness) is a good source of Nitrogen, and bone meal is excellent for Phosphorous. ♪

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Many kinds of fertilizers can be used for water lilies. Clockwise from the top: ordinary garden fertilizer; timed-release fertilizer; tree spikes, broken into smaller chunks; tomato or potted plant spikes; aquatic plant tablets. The best fertilizers also include micronutrients. Always select formulas like 10-15-10 or 10-26-10.