

First-Time Pondkeeper

It all started with a tub of water.

By Karen Randall

I have always enjoyed the garden ponds of others, and often thought I'd like to have one of my own. But with two small children and a too-busy schedule, somehow I never felt I had the time or money to devote to the project.

Last spring a close friend of mine decided to put in a small pond beside her deck. She asked me if I'd like to accompany her on a trip to the local water garden supplier. Knowing that these folks grow a lot of aquarium plants as well, I said yes, figuring I might run across something interesting for my tanks.

BIG mistake! Seeing all those lovely ponds and plants in person was more than my willpower could withstand. I did have enough fortitude to put off buying plants then and there, but I left determined to set up at least a tub garden in my yard.

Because we also have horses, we had a couple of large Rubbermaid stock tanks around that hold about 100 gallons. I had a little talk with the horses and explained that they could all share one tub, as I had plans for the other one. They actually found it quite amusing watching me drag the big tub through the gate and out of their paddock!

I set the tub up against the southern side of the barn, where it would receive at least eight hours of sun. It is in the midst of a bed of day lilies, which helps to hide the sides of the big black tub to some extent. One thing I didn't really consider when I chose the location for my tub was that it was under the wide overhang of the barn, and would get regular renewals of rainwater. This turned out to be a significant and positive factor later on.

I filled the tub with water from the garden hose, and called in my plant order! I was a little bit concerned because my experience with our moderately hard, high-pH tap water is that for most of my aquarium plants to do really well, I do need to add supplemental carbon dioxide (CO₂). I hoped that between the fact that most pond plants are planted in soil, and that most also grow either floating or emergent foliage, they would be able to meet their carbon dioxide needs from the atmosphere. The pond suppliers assured me that the plants would do fine.

While I waited for my plants to arrive, I hunted up a number of containers for planting my new treasures. As directed by the pond center, I filled the containers three-quarters full with garden soil and topped them with gravel. One thing I didn't consider, which caused me to re-pot a few plants, is that if the water is clear, you will be able to see the pots quite clearly. I found that black containers were far less obvious than any other color. The pink dish tub I thought would be just perfect for my lily just had to go!

Knowing that my day lilies would be done blooming by mid-July, I wanted to add some other flowering plants to this garden, because I wanted it to be a focal point of the yard for the whole season. I chose cleome (spider flower), an annual that performs reliably in my gardens right up until the first hard frost. Cleome can be sown as seed directly in the ground, or, for a quicker start, seedlings can be purchased at garden centers in shades of pink, purple and white.

Two days later, my plants arrived. I unpacked them carefully from their wet newspaper, potted them up and inserted pond plant fertilizer tablets around their roots according to the manufacturer's directions. Then they were each placed in the tub at the proper depth. The pots of those plants that were not supposed to be too deep in the water were placed on top of bricks.

I got a miniature "changeable" hardy water lily (*Nymphaea "Fulva"*) as the star attraction. Changeable water lilies open as one color and slowly fade to another color over a period of days. "Fulva" starts as a deep cherry red and fades to a peach color. Because my small tub had room for only one lily, I thought a changeable would give more variety. The other reason that "Fulva" attracted me was its pretty, variegated green and wine red leaves.

Another floating leafed plant I got was floating heart (*Nymphoides peltatum*). Floating heart spreads rapidly and blooms profusely all season. The blooms last only a day, but every morning brings a fresh crop of bright yellow flowers. This plant is such a vigorous grower that I had to trim it back repeatedly during the season to prevent it from crowding the lily.

I bought several water hyacinth (*Eichhornia crassipes*), but these actually didn't do very well. I'm not sure whether it was the hard water or the fact that the water was fairly nutrient-poor, but the water hyacinths stayed small and pale, and never

bloomed, although they did produce many offsets.

Because I wanted to include some bog plants, and the tub is quite deep (36 inches), I bought two plastic-coated wire hanging racks to attach to the edge of the tub. These are fairly adjustable, so you can set bog plants at any depth they prefer. On these racks I placed pots of variegated flag (*Pseudacorus* species), lizard's tail (*Saururus cernuus*) and pickerel plant (*Pontederia cordata*).

Then I went to my aquariums for some oxygenating plants, and just to see how some of my indoor plants would adapt to life in the big outdoors I included *Myriophyllum*, *Hygrophila angustifolia*, *Bacopa monnieri* and *Rotala macrandra*. All of these plants were potted in soil capped with gravel, just like the pond plants.

After leaving the plants to settle in for about a week, it was time to think about fish. Obviously, with a tub set above the ground in New England, there was no question of leaving the pond set up through the winter, so I had my choice of many tropical fish as well as coolwater species. My main objectives were to add some movement to the pond and to prevent it from becoming the neighborhood mosquito factory. I wanted to avoid goldfish because of the small size of my "pond," let alone the fact that I did not want to use any filtration. Koi were obviously out of the question for the same reason.

Because many barbs are small in size and tolerate relatively cool water, I had pretty much decided on either rosy barbs (*Barbus conchonus*) or odessa barbs (*Barbus ticto*). Although both species are available quite regularly in this area, as luck would have it, there were none to be found when I wanted them!

In the end, I bought six red platies (*Xiphophorus hybrid*). They turned out to be a very good choice. They were bright when viewed from above, kept the mosquitos under control, and produced a bumper crop of babies over the course of the summer. They stayed small enough that even as the population increased, they never threatened the stability of the pond.

After a couple of weeks, I hit my first snag in pondkeeping. The water turned pea soup green, and large quantities of a slimy algae developed. This algae seemed to collect oxygen in the process of photosynthesis during the day, and would rise to the surface in the afternoon. During the night it would sink down again, repeating the cycle the next day. It became my afternoon chore to go out and scoop as much of this muck as possible off the surface.

During this period, the marginal plants and floaters did fine, but the submerged "oxygenators" were definitely flagging. Because most plants don't do well in my tap water without supplemental CO₂, I suspect this was a contributing factor. The other problem, I'm sure, was the lack of light caused by the heavy algae infestation.

One of the things I've learned in my years of aquatic gardening is that patience is one of our most useful and often most overlooked tools. With that in mind, I simply waited. I manually removed as much algae as possible, and topped up with added water as necessary to make up for evaporation. This period was not without its rewards. Although the algae was annoying, the lily started producing blooms, the floating heart was sending up a bumper crop of blossoms daily, and the *Bacopa* from my tanks had quickly climbed beyond the surface and was covered with lovely little flowers. The pickerel plant also had a striking spike of blue flowers.

Then nature came to my rescue. We had a period of heavy rains, and for several days water sluiced off the barn roof and into the tub. The resulting softening of the water seemed to tip the balance of power in favor of the higher plants. Within a week, the algae was gone and the water was crystal clear! With this in mind, I set up barrels to collect rainwater for my next pond effort.

Another aggravating problem was raccoons. Unfortunately, we have a large population of masked marauders in our area. Several times in the course of the summer they got into the pond and knocked over pots. Fortunately, the fish seemed to be small enough to escape notice, and the raccoons moved on after their nocturnal vandalism. I was able to right the pots with no more damage than a broken leaf here and there.

There were many forms of smaller wildlife that descended on the pond. There were snails that most likely were imported with the plants, and water boatman skittered across the surface. Beautiful moths often rested on the stems of the marginal plants by day, and one intrepid spider daringly crossed the lily pads regularly in search of prey.

With the fish keeping mosquito larvae under control, the pond actually became an asset in the war against mosquitos. Many colorful dragonflies made the pond and our garden their base of operations, eating untold quantities of adult mosquitos. We had the pleasure of watching the female dragonflies laying eggs in the pond, and while I suspect we lost the occasional baby platy to them, it was fun watching for the lurking dragonfly larvae among the plants.

Toward the end of the summer, the surface of the pond was covered with the fuzzy seeds of the floating heart. The gelatinous seed pods of the water lily opened up as well. Other obligations kept me from trying to sprout these seeds, but I'll give that a try this summer.

My aquarium plants held some surprises, too. Did you know that the immersed form of *Rotala macrandra* is mostly green? Did you know that outdoors it will produce lovely pink/purple flower spikes? Whether it was a hitchhiker from the water garden center or from my own tanks, *Glossostigma* took hold in the pots of several of the marginal plants, creating large mats that I was able to move indoors in the fall. I had huge quantities of *Myriophyllum* to remove from the tub, and the *Hygrophila angustifolia* had taken on a lovely bronze hue rarely seen under aquarium conditions.

As the first fall frosts approached, it was time to dismantle the pond for the winter. In a tub of this size, it was no more than a couple of hours work. I siphoned most of the water onto the lawn, removed the plants that I intended to overwinter, and started catching fish.

With no supplemental feeding from me, the platy population had climbed from a half dozen to over 30. I suppose that's not a great surprise, but what was surprising was that I also caught a baby sunfish and several unidentified minnow-like fish. My guess is that their eggs arrived with the plants I put in the pond.

As suggested by the water garden center, I stored the lily moist, in a plastic bag, in the basement. The iris and pickerel plant were dug into one of my flower beds, and everything else found a home indoors.

You don't need to invest a lot of time, money or effort to be able to enjoy water gardening in your backyard. Give it a try!