



Urban Harvest

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## Garden Ponds

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Over the last year, I've spent a lot of time pondering. This happens when you've got a pond in your garden, and every moment sitting in slack-jawed amazement at all the life thriving in a few gallons of clear amber water is time well spent.

My pond is a standard amorphous lumber-yard black-fiberglass prefab, eighteen inches deep in the center with a pair of ten-inch deep shelves molded along what wound up as the east and west ends of the pond, with a capacity of 125 gallons. If I had it to do over again, the financial bullet would have been bitten and a 200 (or more) gallon model purchased; still, even a small pond is one of the most rewarding furnishings a garden can have. A pond is also both a classroom for, and an affirmation of, the organic method of gardening. As the enthusiasm for water gardening grows, countless gardeners who "only wanted to kill the fleas" (or the fire ants, or the aphids) have learned from the fish floating belly-up among the lilies that pesticides kill much farther up the food chain than they realized. Meanwhile, gardeners who refrain from chemical poisons that kill (at least) fish and amphibians in addition to insects fall asleep to the sound of toads in lust, and waken with delight to the sight of gelled ropes of eggs streaming through the water and, later, hundreds of tiny black tadpoles tumbling about in the pond.

Toads are the most immediate payoff of having a pond in your organic garden. Toads, who are said to fill their big ol' bellies three times a day during the summer with things that like to munch on your crops, are also said to have no resistance whatever to pesticides. I strongly suspect there is a connection between noting that the garden I am currently working was designed from the beginning to be as toad-friendly as possible (shelter, water to breed in, absolutely no chemical pesticides or herbicides) and noting that problem bugs were not among the knotty obstacles I encountered during my first year's stewardship of the West End Victory Garden. (Nut grass, proof that Satan is into biotechnology, was a different matter.) Aside from the inevitable (albeit organically controllable) fire ants, and squash borers (which I deserved for trying to grow summer squash in Houston,) I simply had no insect pest problems serious enough to demand attention - but it seemed like every time I moved a handful of mulch or a concrete bed-wall block there was at least one toad happily digesting the bugs that had dared to stray into the garden.

It helps to think of a pond as a complex perennial garden happiest in warm weather. A spring installation is best; after six months or more of warm weather, most ponds over 75 gallons seem to establish a hardy enough eco-system to survive a typical Houston winter. Although most ponds are installed at ground level to collect runoff, I chose to install this prefab pond with its lip seven or eight inches above ground level and build banks around it because of slightly uphill areas - mulched with

wood chips for the foreseeable future - which tend to leach a tannic-colored runoff not wanted in the pond. Rainwater collection as a pond function may not be as critical on the Gulf Coast as in other areas; my limited experience has been that either we have enough rainwater to keep even an elevated pond topped off or we go long enough without rain that adding tapwater becomes a necessity with all ponds.

A ground-level installation, although involving more digging than a banked-up pond, does allow for a bog garden to be established around the pond. I compromised on this point by selecting a shell with shelves just deep enough to keep the crowns of Louisiana irises in 3-gallon pots above water. Although the irises were too traumatized by being uprooted to flower during their first season, the subsequent months of immersion in this nutrient-rich water have caused the original bulbs to calve triplets and I expect a delight of beyond-golden blooms in the coming months.

Another organic advantage to having a pond is the water itself. By the time the toads, goldfish, lilies, iris, parrot feather and anacharis had established themselves comfortably, the unfiltered water circulated only by the life growing in it looked and smelled like a mild solution of kelp extract and fish emulsion. Intrigued, I began using pond water to irrigate seedlings and as a foliar spray for plants that needed a shot in the arm. Results? I haven't opened my jugs of emulsion and extract in six months, and doubt I will next summer. Although I still use compost tea as a side dressing for mature plants, I'm convinced that I cannot mix a better all-around foliar spray than the complex, ready-to-use formula which fills that little pond.

In lieu of a bog garden, great fun was had landscaping the banks of the pond. The west bank of the pond is a miniature desertscape, with a selection of cacti that seem to agree with the conventional wisdom that cactus, once established in a well-drained sandy soil with a reasonable humus content, would prefer that you just leave them alone. The other sides of the pond (basically fill dirt augmented with compost) are a combination of perennial bed (lantanas, bouncing bettes, Mexican heather, and bee balm) and herb garden offering dill, cilantro, chipeltepín peppers, rosemary, and Mexican mint marigold. Organic gardeners will recognize many of these plants for the role they play in attracting beneficial insects. The variety of life that developed a fondness for my amateurish attempt at wildscaping - both in the water and around it - was astounding. Pollinators and predators flocked to the pond; there were many hours this summer spent marveling at all the bees, butterflies, dragonflies, and wasps who stopped by for a sip of nectar or pond water in the midst of tending to their chores in the garden.

The lessons I've learned from advice taken, mistakes made and mistakes fortuitously avoided, are:

1) Use a five-foot carpenter's level to ensure the top sides of the pond are as level as humanly possible before filling with water. The north bank of my pond is a classic example why this is a good idea; it's a good inch higher than its southern counterpart, and no one has yet believed that I deliberately wanted to give happy toads enough elevation to do backflips.

2) Don't bother with expensive fish. Native gambusias are the best choice for mosquito control; those desiring underwater color should invest a pittance in dime-apiece "feeder goldfish." The survivors soon grow to respectable size and gaudiness on the food available, and the rest can be composted without feeling a pain in the wallet.

- 3) Never add straight tap water to the pond. When first filling the pond, let the water sit at least four days before adding fish. During a dry spell (like last summer) let tap water sit in a clean five-gallon bucket for at least two days to let the chlorine and what-not evaporate. I composted some fish learning how inflexible this rule is.
- 4) Don't overstock. Most water plants grow like weeds in a healthy environment, and what look like a few scraps and smidgens will soon grow into an underwater jungle. Ask around before going to the nursery for plants; any experienced water gardener is likely to be eager to give away surplus plants that will be composted if they don't find a home. Resist encouragement from the nursery person to buy Lilytabs or other chemical fertilizers "especially needed for water gardens." The fish poop you already have is better - and won't destroy your organic integrity.
- 5) Provide adequate, comfortable seating around the pond. A lively, thriving pond has social and therapeutic uses as valuable as the environmental considerations. I've had wonderful times sharing the concrete benches around the pond with friends without a word (beyond a sotto voce "Wow" at the antics of a dragonfly) being said; there have been times when friends who were about to pop a head gasket have evaded stress trauma by counting the fish (in extreme cases, the tadpoles) in solitude for a while. For maximum enjoyment of dragonflies (especially the big orange critters that look like flying goldfish) and other cool bugs, get a pair of wide-angle, low-magnification binoculars.
- 6) Don't stick the pond in the shade to make more room for vegetables. Full afternoon sun, although causing somewhat higher evaporation rates, will make a much healthier underwater environment and is essential for getting water lilies to bloom. Submerge a cinder block so that the fish will have a roof over their gills during our temperate, balmy Augusts and Septembers.
- 7) A wildscaped pond is not an aquarium, and slightly murky water is normal. There's a "water food web" that mirrors the soil food web, and if the plants and fish appear healthy despite limited visibility you've probably done a good job of creating a natural, nurturing environment. Of course, a small pond that mimics nature (much like an organic garden that mimics nature) will require a measured amount of human intervention on occasion, lest it become a silt-clogged puddle where nothing flourishes. Drain and clean the pond in late winter, taking care to first dip off a bucket of familiar water to net the fish into as they turn up during the draining. The "mud" at the bottom is a superb soil amendment, and this is the best time to divide, separate, cull, compost, repot and share the tangle of plants that seemed so manageable in the springtime. Aside from this annual chore, you'll find that a well-balanced pond requires almost no maintenance while serving as a focal point - social, environmental, and aesthetic - of your organic garden. Happy pondering!