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Welcome, friends!

The title and the look may be different, but inside *Pond & Garden* you'll find the same friends you've grown accustomed to, plus a few more. You'll find old friends like MJ, Bob and Pam Spindola, and Tim Jennings. Chic Kelty continues with his most informative series on pond filtration, and in the next you'll welcome back Rich Sacher with his exploits of the search for Victoria seeds on the Amazon and Jim Leonard with his article on the native blue Louisiana Irises.. You'll find new friends, too, in Internet favorite, Chuck Rush, along with our own 'eclectic gardener' Kay Elser, noted wetland and native plant consultant, Joann Gillespie, and goldfish hobbyist and artist Vivian McCord. Joe Van Hook, President of the Green Country Water Garden Society in Tulsa, Oklahoma begins a how-to series in this issue with all the details of how to make a Japanese style bridge for your garden. In the coming months, he has even more wonderful projects for your pond and garden.

The title of this 'new' magazine reflects our basic philosophy — pond *and* garden. We know water features are not plopped in the middle of your driveway. While digging a hole in the middle of the yard may be an option, often we want the feature to settle in naturally with its surrounding terrain. Each issue of *P&G* brings you features on how to do just this. Phil Alexander's offering this month, for example, shows how to turn a flat, urban, chain-link-fenced backyard into a tropical paradise. Maybe you've had to deal with this very situation. Send us your pictures and your experiences! The underlying theme of the magazine is, after all, *sharing*. Each issue features the common theme of 'sharing the vision' — pond tours with pond and garden design ideas and interpretations by our readers. In this issue we celebrate the people

and gardens of Wichita, Kansas. Future issues will bring you gardens of Philadelphia, Austin, Kansas City, California and the West coast, and Dayton, Ohio. Carol Hunter from Nebraska said it best when she said she felt she had friends she had never met through the magazine. We are all neighbors here, whether we drive only one hour to each other's home....or drive several days. We don't even have to talk with each other to know how we feel when we close our eyes and listen to the water's flow, the frogs and toads calling, or the birds' songs. We go about the business of creating backyard havens — for ourselves, for our family, and for our friends.

Special treats in this issue are Dr. Forrest Mitchell's fascinating information about dragonflies that also tells you how to keep these delightful creatures around your yard and Denny Williams's peek at the history and cultivation of wild rice, a plant we can grow in our backyard ponds. Kathy Thirtyacre's exploration of the world of water gardening for handicapped and disabled gardeners offers helpful tips for all, and wait till you see what awaits in Nashville, Tennessee! Near the back of each issue you'll find a little present from *Pond & Garden* — a tear-out calendar page. Covering both months of the issue, the flip-over calendar also includes seasonal pond and garden tips.

As we move forward with *Pond and Garden*, I wonder at the irony and prophesy of our world of yesterday falling apart, even as the red-winged blackbirds returned with their cheering calls. Shimmering schools of gold in the waters brought smiles and hope as deep maroon lily pads pushed to the surface and the daylilies cropped up like mini-pineapples in the sodden mulch. The seasons of our lives move on. *Pond and Garden* continues the quest for practical informa-

tion and ideas to create those backyard havens that soothe our daily lives. Whether tending the aquatic plants and fish *in* our ponds, or whether planting or entertaining *around* our ponds, there are joys and contentment to be discovered...and shared. Cherish each other. Cherish the world around you. Tend the special life you create in your backyard....and let your smile share it with others. 🌸

Helen and Dave

Pond & Garden

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The 'Accidental Ponder' organizes for spring!

Yahoo! Spring is sprung! Grabbing pen and paper, I begin my to-do list.

Examine filters and pumps for pond clotitis. Clotitis is pond goo that collects and solidifies in firm chunks of ooky stuff in your filter material. It's gotta go!

Assess water quality. Ha... every year it's the same story: a race to outdistance the inevitable algae bloom. Algae always gets a head start because it is such a simple-minded plant. It doesn't seem to give a rat's patootie what the water temperature is. My anacharis and cabomba, on the other hand, open one eye, mumble "Call me when the water reaches 70 degrees," and go back for forty winks. Meanwhile, the fish ARE awake AND hungry...enter excess nutrients in the water — and green water or FOOJIMANOOLY ALGAE. (Foojimanooly algae is that strandiferous stuff that waves in the currents like the tresses of a water nymph.)

Spring fish Diet. Ah, I need to rummage around the kitchen for my handy dandy Fishie/Plantie Slug/Worm Chopper/Shredder. Actually, it is just a regular chopper/shredder — the kind you put over the veggies on a breadboard and pound away on. You want one for your own meals and one for the fish stuff. I have three...a little mix-up there... couldn't be sure which was mine and which had the microscopic shreds of greens and blood worms still on it. My crew likes a supplement of lettuce, carrots, spinach, cabbage, and broccoli with their pellet and flake foods.

Plant pots, fresh dirt and fertilizer. Fresh dirt, now, where do you

get fresh dirt? Assuming that you have all your shrubs in and your beds planted, where are you supposed to get 'regular garden soil'? Tunnel under the house? Raid the neighbors? Got to find an unguarded construction site. This is a chore I hate... driving around new developments, wearing dark glasses and a baseball cap, trying to be unobtrusive with a trunk full of empty containers, gardening gloves, and a shovel. When I



find a likely spot, I slither out of the car, pop the trunk, and shovel like mad, cringing the while, waiting for the Dirt Police to pop over the rim of a dirt pile and yell, "AHA! GOTCHA!"

Dividing and conquering. The dividing part is pulling the pots and determining which plants need dividing and repotting. The conquering part is convincing myself that it is okay to throw away what I can't give away. I

actually follow perfect strangers up and down the aisles at the garden shop beseeching them to set up container ponds so I have somewhere to unload my extra plants.

Now, this is where we get to the real fun. Like all good ponders, I own a couple of good water thermometers. Even though they report the water is 65 degrees, I have to test my endurance anyway. "The water really isn't THAT cold... I don't need my waders. It's spring," I chant, which translates to, "I don't want to load my Rubenesque proportions in and out of those dang chest waders — it will take all day. Besides, I will just slip and end up with like a giant water bottle, filled with icy water." My Native American name is Princess Blue Legs. When your legs make a ringing sound like steel-on-steel as they brush together, it is time to get out and get warmed up.

Mulm-sucker. Mulm is that khaki-colored, fluffy-looking stuff that collects on the bottom and stirs up when you walk through it. A certain amount of this stuff is a good thing — little critters live in it, like dragon and damselfly nymphs, tadpoles, and such. Time to break out the wundermaschine, the Python. Oh, and cheese cloth. Gotta filter that junk before we spray it out and leave unsuspecting nymphs and tadpoles to a dry, gasping death amongst the begonias. (I also have hopes of finding that earring I lost in there last summer.)

Now we get to the part of the list I love best....

New Plants. Nyuk, nyuk, nyuk...time to take my list inside and get on the phone, catalogs spread out before me. I wonder how much is left on my Visa card? 🐛

Spring Cleaning Includes Your Pond

During the warmer spring months, Nature awakens the pond. The fish begin to exercise and their appetites return. Microscopic bacteria and protozoa also revive and begin to reproduce rapidly. Because the growth of some bacteria is hazardous to the koi's well-being, certain precautions are necessary for the koi to survive and thrive.

First, if your pond has been shut off the entire winter or if your pond does not have a bottom drain, carefully vacuum the muck and detritus from the pond floor. The ammonia buildup from decomposing waste can be fatal to your fish. If your filter has not

been running, do the same for your filter. In fact, it is a good idea to thoroughly clean your filter at this time of year. Organic matter has probably accumulated in the bottom of the filter and needs to be removed. Some hobbyists install blowers in the bottom of the filter to make this job easier. Clean your filter with existing pond water rather than with chlorinated tap water. The chlorine will kill the little remaining good bacteria needed to break down the fish waste. Adding a dry or live bacterial starter to the filter for the first two weeks of a pond's operation helps re-colonize the good bacteria. Doing this in the morning when oxygen levels are rising with warming temperatures allows faster multiplication of the bacteria. This additional bacteria is also helpful in controlling green algae bloom. Some feel it is best to increase the movement of the water in the pond as the temperature warms, utilizing additional jets. This increased circulation exposes a greater percentage of the water to the warming sun and increases the water's filtration. Others feel it is best to slow down the flow of water so

that bacteria can more quickly repopulate the filter. A rapid flow rate is then counter-productive as good bacteria are constantly washed through the filter. Each hobbyist has to determine what is best for his or her pond, taking all facts into consideration.

Constantly monitoring the water's condition with a good water test kit is critical to determine the pond's health.

Even in crystal clear water, ammonia levels may be too high for safe fish-keeping. Test for both ammonia and nitrite levels. If the nitrite levels are high, do small water changes daily. I like only 10 percent, but others recommend as high as 30 to 40 percent.

Remember that the spring season can be the most dangerous time for your koi's well-being. Their metabolisms adjust to the warming conditions very slowly. Below 50 degrees, the koi's immune system is not working, allowing susceptibility to all kinds of infections. Many harmful bacteria reproduce at much lower temperatures and attack fish left defenseless by suppressed immune systems. Day and nighttime temperatures can vary greatly in spring. Although the fish beg for food, the water temperatures may still be below 45 degrees. Do not feed. As the water warms, feed sparingly in the morning hours. A koi's metabolism is closely linked to the ambient temperature. When the water is cold and the digestive system is sluggish and inefficient, food moves slowly through the fish's intestinal track. Food may even decompose in the gut and give the fish a very bad tummy ache which can lead to more serious health problems. Some experts recommend feeding sparingly, only every four days, when temperatures are below 50 degrees. Feed foods which are more easily

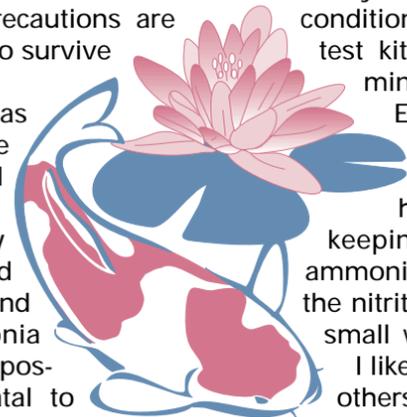
digestible in cold weather, such as wheat germ pellets, whole wheat bread, or even whole wheat cooked cereal. As the water temperature rises above 50 degrees, a balanced diet of fats, carbohydrates, and proteins in a basic koi food should be used. If the weather is unpredictable and the temperature drops again, adjust feeding accordingly. Feeding a high protein koi food when the koi's metabolism is not ready to utilize it results in more protein in the koi's excrement. This additional unused protein converts to nitrogenous wastes which add to the ammonia level of the pond. Some hobbyists actually curb spring feedings in order to limit the potential ammonia buildup in the pond. When the filter has matured and the bacteria are in place, feed the koi heartier portions. Near the end of spring, when the koi are active and feeding well, you may then add a higher protein-content feed along with color enhancers such as spirulina or krill.

In spring, some koi's thoughts turn to fancy and they may start to spawn. To save the eggs and try your hand at raising fry is a subject for another article. Usually the mature fish will eat the eggs if left in the main pond.

Throughout the spring, the hobbyist should:

- Make partial water changes
- Skim any vegetation which has fallen onto the surface of the pond and remove any type of debris
- Observe the koi closely for abrasions, infections, or signs of illness
- Feed good quality fresh koi food as often as the situation allows
- Test the water periodically
- Control algae growth

Bob Spindola and wife Pam own Varsity Pond Supplies, a mailorder garden pond and koi supply business. They can be reached at 800-700-1720 or fax: 714-544-5415.



Forgotten Fancies

For those of us with koi tastes and guppy budgets, fancy goldfish offer the perfect solution. Besides being inexpensive fish requiring much less space than koi, they come in over one hundred varieties. They display intelligent behavior, friendly habits, and gorgeous colors...and these fish only reach a maximum of eight inches in length!

Breeding is fun and easy, if you are so inclined. If not, you can enjoy a delightful display by mixing varieties, as *Carassius auratus* is a very communicable species even when combined in large and small specimens. Incredibly hardy and not as fussy about water conditions, this fish can be kept by even the busiest water gardener.

The two most important rules of goldfish keeping are *not to overfeed* and *not to overcrowd*. While some of the more advanced breeds do better in temperate climates or indoor aquaria, the hardier varieties will live in any body of water that does not freeze solid, emerging perky and ready to eat mosquito larvae and green algae in the spring.

There are ten main varieties of goldfish, their numerous sub-varieties differentiated by combinations of mutations and colors. The less developed varieties are the hardiest and most commonly chosen pond fish as they are more active, brightly colored, of larger sizes, and generally longer lived in a pond setting. These three species are the common goldfish, the comet, and the shubunkin. Also suitable for year round ponds, though not as large, is the Japanese fantail.

The common goldfish is the closest to the wild form and the hardiest with its only mutation being color. Available in very bright colors, they retain a long body and a short, single caudal fin. The comet bears an elongated caudal fin and a love of speed that lends darting color to the pond. Shubunkins come in two

types, the London and the Bristol. Both are calico fish resembling the common goldfish in shape with the London having a better developed 'blue' colored area and the Bristol having a slightly longer caudal fin.

The Japanese fantail or Ryukin, unlike the single-tailed common goldfish, displays a deep round body and a double anal and caudal fin. Very hardy fish, they present many colors — orange, red, white, blue, calico, brown, and bronze. The telescope eye bears the same color variations and body shape as the fantail, with the only difference being the bulging eyes.

Other breeds commonly found in pet stores, lion heads, orandas, pearl scales, bubble eyes and celestials, are not as hardy for the winter pond, although they may be kept successfully in heated ponds, in temperate climates above zone five, or overwintered in tubs with adequate filtration.

The oranda resembles the fantail in body, color and finnage, but grows a "wen," or hood, that is very charming. Red cap orandas, completely white fish with red caps on their heads, add brightness to container gardens.

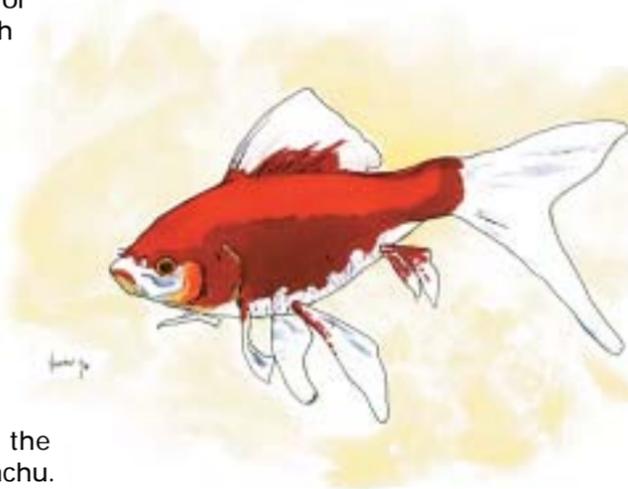
Another variety is the Chinese lion head or Ranchu. Simply orandas without dorsal fins, they are much more delicate than the stronger swimming orandas.

The pearl scale has won hearts with its beautifully raised scales. It has a short, deeply rounded body with a variety of tails, the most common being the shorter caudal fin.

Two other very delicate types of fancy goldfish are the bubble eye and the celestial. Both are very easily damaged because of their strange eyes. The bubble eye has a water-

filled sac under each eye while the celestial goldfish is a dorsal-less fish with telescope eyes that turn completely up. Legend states that this fish was developed for a Chinese emperor who wished for his fish to gaze back at him when he passed their ceramic fish bowls. Remember the delicacy of these two breeds: keep them in shallow water or in small containers by themselves, as they do not compete well for food. They also need to be overwintered indoors as their eyes are damaged by the cold.

When keeping any breed of goldfish, remember that a varied diet is the key to good health, disease resistance, and good color. All varieties enjoy the naturally occurring live foods in an outdoor setting, such as mosquito larvae and daphnia. Occasional treats of chopped



earth worms and live or frozen brine shrimp are nutritional, also. The main diet for optimum health should consist of a good pellet food once a day and 'treats' every other day.

Whatever breeds you choose, you will find fancy goldfish to be a graceful and entertaining addition to any water garden. 🐟

Vivian McCord combines her artistry and goldfish hobby in Cody, Wyoming.

Getting acquainted...

I've been a programmer for 12 years, first with American Airlines and then with the Sabre Group. Prior to that, I was a mechanical draftsman and designer before the bottom fell out of the Oklahoma oil industry. With both of those occupations, as probably with yours, I needed something to unwind with when I got home.

I've done that for years by growing things, creating something with a little sweat and hard work that would not have happened without me. While I was in Tulsa, this energy went into growing roses. I enjoyed the variety of color and fragrance and maybe the opportunity to tinker with nature. I liked the delicate, silky feel of the petals contrasting with the bite of the thorns. I even had a couple of whiskey barrels in a corner with a small, gurgling rock waterfall to ensure that all the senses were covered.

About seven years ago, my company transferred me to Fort Worth/Dallas. Well, I sure wasn't going to try to grow roses where summers got to 100 degrees and stayed there for a month or so. What to do? At a home and garden show, I saw a local company's small display on water gardens. I remembered my whiskey barrels in Tulsa and 'Eureka!' If you can't cool the air, at least cool the gardener!

For the next 6 Saturdays I was off to that company's series of seminars. Dragging my wife to the third seminar on plants, we walked away with the door prize — a 'Charlene Strawn' water lily! We didn't even have a pond yet! As we left the shop, we bought a pond kit. 'Charlene' lived in the bathtub that weekend while I read the kit's

pamphlet and started digging.

My first real pond taught me a lot of lessons. It also shined a glaring light on the biggest problem in water gardening — there's some great information out there, but there's also some really bad information, too. Some of it is just 'old info,' and some is just plain wrong. Over the years, I've used the logic and reasoning skills from my engineering and programming profession, along with some plain common sense to improve my enjoyment of ponding. For the last two years, I've been giving my own seminars on ponding and sharing what I've learned.

With this column, we'll do the same thing. In answering your questions, I'll try to show you the how, where, and/or why of the answers. While ponding is not rocket science, it's not just digging a hole either. We'll also share tips and techniques so you can find your own pony in the middle of that pile of information. If you have questions or tips you'd like to share, you can always get to me at my web page at <http://www.dallas.net/~crush> or via e-mail at crush@dallas.net. You can also reach me in care of *Pond & Garden*.

And getting started...

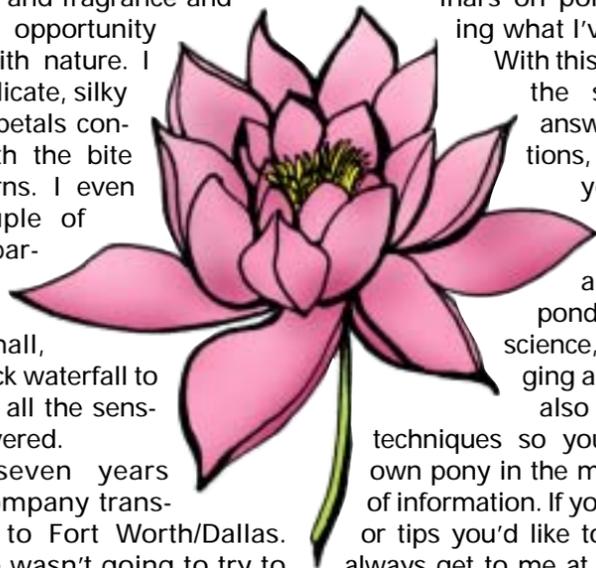
Q. *A friend of mine suggested using concrete blocks to set my plants on, but I've heard that you never use concrete in a pond. Which is right?*

A. Depending on how hard your water is, putting concrete in a pond can raise the pH or make the water less acidic as the lime in the concrete 'leaches' into the pond water. Over time, this can be harmful to your fish and plants. But I do use concrete blocks in my pond. I

can do this because I've sealed my blocks with paint that keeps the lime in the concrete where it belongs. Go to your local paint store and ask them if they have any returned paint. They usually do — maybe the color was off or whatever. You're looking for exterior paint, oil or latex, in a gloss or semi-gloss finish. I frequently get it for as little as \$2 a gallon! You can sometimes get them to squirt in a little more of any dark tint or you can buy tubes of tint. The color doesn't matter since everything in the pond will be dark green in a few months anyway. Paint the blocks very well, making sure all the pores are painted. Then let the blocks sit out in the yard for a few weeks to let any paint fumes dissipate. I usually have extras of these blocks waiting to be used. It's a good winter or rainy day project. They also make good barter material at your local club's plant swaps!

Q. I'm not getting as much volume from my pump as it says on the box. Is it just a bad pump?

A. Probably not. There are lots of things that can affect pump performance. The farther, horizontally, a pump has to blow or suck water will degrade performance. Also, the higher a pump has to push or pull water will affect performance. The height is called "head" and your pump literature will tell you the rate for a given "head". And, typically, about every 10 horizontal feet is equal to 1 foot of head. The other thing that will affect volume is the way you did your plumbing. Make sure you don't have any "humps" in your lines. These can cause air pockets that the water has trouble getting past. Sharp 90 degree fittings will have a big effect. I rarely use elbows. Instead, I use flex-pipe to do the job. It's more expensive, but I paid a lot for the performance of the pump, too. We'll look at all this in more detail in a future issue. 🐸



The Tub Garden

Tub gardens offer solutions to questions of design and practicality. Used in your landscape just like terrestrial planters, they fill voids and provide accents. Practically, they fulfill the desire for a water garden when you haven't the wherewithal to dig a hole in the yard or when young children cause you to put your 'big pond' plans on hold...and, of course, they are the alternative to composting those extra pond plants!

The traditional tub garden is the whiskey barrel, capable of holding some 80 gallons of water, a couple of small fish, and a selection of aquatic plants. The true whiskey barrel, however, must be lined to prevent leaking and to avoid potential leaching of alcohol residues or tannic acid into the water. Readily available premolded liners solve this problem, or you can line the tub with a double layer of 4' x 4' plastic or with a pond liner membrane. Neoprene paint, applied in 2 or 3 coats, properly seals such containers, too. Now available at most building supply and garden centers are inexpensive plastic containers of comparable size. Large terra cotta pots that offer charming or elegant design possibilities should be sealed on the inside with a concrete sealer or spray urethane.

Setting Up a Tub Garden

Materials Needed

watertight container, appropriately sealed if necessary
(liner or plastic, if necessary)
props for plants (these can be concrete blocks, bricks, or free-standing shelf units)
selection of plants

Optional, if desired:

small submersible pump, (up to 80 GPH)
small spouting ornament



DRAWING ONE:

Seal any new concrete blocks used if you will have fish in your tub garden. Blocks with holes in them provide support for plants without displacing too much water. The 'tunnels' provide safe hiding for the fish, too! Use a combination of blocks and bricks to achieve proper depths for your plant selections.



DRAWING TWO:

Fill the tub with water, treating for chlorine if necessary. Add plants. After a few days, you may add 2 or 3 small fish. Spouting ornaments can be affixed to the side of the tub or set in a pot within the garden. Adjust the water flow with a clamp tightened no more than half way on the tubing leading to the ornament.

DRAWING THREE:

Another option for creating varying water depths is the new 'locker shelf' units now available in office supply stores. These open and lightweight metal units are coated with plastic. Available in black, they make



perfect water garden shelf units!

Tub Gardening Tips

*If you won't include fish, use Bt in the form of floating doughnuts to control mosquitoes.

*Include submerged aquatic grasses to help control algae growth.

*Select small-growing fish such as hardy comet goldfish or a couple of the fancier goldfish varieties. Tropical fish often do well in container gardens since the garden is usually dismantled for winter anyway.

*If your summer weather is hot and the water temperature in your tub is likely to exceed seventy degrees, consider siting the garden where temperatures won't be so high, or select fish that are happier with such temps. (Goldfish are a 'coldwater' fish.)

*The easiest way to deal with green water episodes may be to change the water. If fish are present, take care to keep them from temperature changes and chlorinated water. ♻️

The 'garden show' mentality

Spring is in full swing with summer nipping at its heels. Garden shows and spring gardening magazines whet our appetites. They give us the promise of warm sunny days and flowers in bloom. Several years ago I made a discovery that has put these annual spring events and glossy pictures into perspective for me.

After many seasons of working to create perfect gardens with complimentary colors, neatly cut edges, and precisely pruned shrubs and vines like I'd seen at the garden shows, I found that my gardens didn't give me the calm, satisfied feeling I expected. My home is cozy and comfortable — why not my garden?

I'm an 'eclectic' homemaker, my home containing all the things my family and I love, from oriental rugs to antique doll furniture and my children's first books. Mr. Webster describes 'eclectic' as 'not following any one school of thought.' That certainly describes our home! Our favorite room in the house is our kitchen where we sit

surrounded by a full 180 degrees of bay windows that give us a front row seat to the bird garden. Yet the welcoming and comfortable feeling within our home seemed to stop at those windows. Staring out at my properly pruned plants one morning, I wondered if I shouldn't become an eclectic gardener, too. I began to study my gardens from a new perspective.

Looking at these gardens through the four seasons helped me understand why I was not connecting with them. Bleak winter gardens lacked structure and movement. Lush spring and summer gardens were a little too predictable (*or pruned!*) Fall was sad as I clipped and mulched, tucking everything into bed for the proverbial long winter's rest. Each season in the garden existed of itself — there was no flow from one into the next. In spite of practicing organic gardening, the garden lacked organic being. All that is changed now.

My bird garden (*my squirrel garden*) now contains plants and structures to feed, house and protect many creatures. While I had been pruning my black-eyed Susans (*Rudbeckia hirta*) before the little finches could eat the seeds, now the unpruned plants retain their dark seed heads, often covered with frost, into the late fall for dining by these charming visitors.

Trumpet vine (*Campsis radicans*) now twirls around a copper trellis. Ruby-throated hummingbirds drink the nectar through the summer and then migrate to South America for the winter. The long, leafless tendrils left unpruned in the fall serve as launches for the squirrels and perches for the winter birds.

Last year, a huge orange oriental poppy (*Papaver orientale*) appeared in a clump of bright red Japanese bloodgrass (*Imperata 'Red Baron'*). The old me

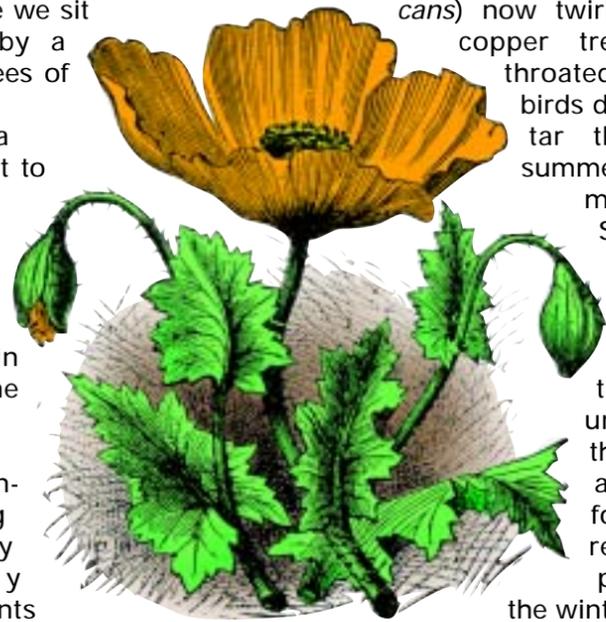
would have composted or transplanted it. It was a stunning combination, especially glowing in the low light of dusk. While it's not feasible to keep all of our garden volunteers, I've learned to give them a chance to show me what they can do. Often these plants that thrive in our particular soil composition put on quite a show.

Allowing plants to fulfill their cycle grants a unique interest and excitement to the garden as it works with the rest of nature. Ornamental grasses lend a cooling ambience in the heat of the summer. In late summer the sun streams through their fuzzy inflorescence, and in early fall the birds feast upon the seeds. Tall sentinels in winter, the dried and brown grasses glisten with freezing rain and snow, a quiet reminder of the season past and to come.

My newfound eclectic gardening philosophy has lent new meaning to companion plantings, too. If you are growing butterfly bushes (*Buddleia doridii*) and butterfly weed (*Asclepias tuberosa*), for example, why not grow some parsley (*Petroselinum crispum*) and/or milkweed (*Asclepias syriaca*) nearby? These plants are hosts for swallowtail and monarch butterflies. The milkweed definitely needs to be harnessed, but the parsley is not only lush and green, it tastes great, too!

There was a time when my garden show mentality would have thought 'eclectic' gardening too haphazard. Yet, extending my interior design style beyond the kitchen window now gives us year-round satisfaction. Tying our home and garden into one organic package allows us to enjoy and to feel truly at home in each. 🐛

Kay Elser is a Master Gardener in York County, Pennsylvania. She continues to work on her Certificates in plant studies at Longwood Gardens

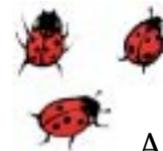


“Heaven is under our feet as well as over our heads,”
Henry David Thoreau,
1817-1862, *The Pond in Winter*

“All they could see was sky, water, birds, light, and confluence. It was the whole morning world.”
Eudora Welty, *The Optimist's Daughter*, 1978



“She saw the water lily bloom.”
Alfred, Lord Tennyson
1809-1892



An old pond—
A frog leaping in —
The sound of water. —
Matsuo Basho 1644-1694

“For all our independence, we remain bound to water sources as firmly as those ancestors who left their first stone tools in beds of river gravel.”
Lyall Watson, *The Water Planet*

Tending the Bluebird of Happiness

Credit Belgian playwright, Maurice Maeterlinck, with the phrase from his symbolic play, *The Blue Bird*, of a small boy and girl seeking the 'bluebird of happiness.' Chosen as the state bird for Missouri, Idaho, Nevada, and New York, the bluebird family is much beloved in its native America. Yet, even without many natural enemies, the bluebird population has drastically decreased, some experts estimating by as much as ninety percent. The primary cause of their decline has been a loss of breeding places. Nesting in the cavities of dead trees or wooden fence posts, the bluebird also needs wide open spaces. As urban developments fill in open spaces, house sparrows and starlings often out-compete the smaller bluebird for available nest-

ing sites. Especially sensitive to herbicides and pesticides, the bluebird must also contend with even we who treasure their captivating color and song. Their primary food source — grubs, worms and other soft insects— may be tainted by our well-intentioned pesticides. Berries that also satisfy them may be treated with harmful herbicides. Bluebirds make a strong case for organic gardening!

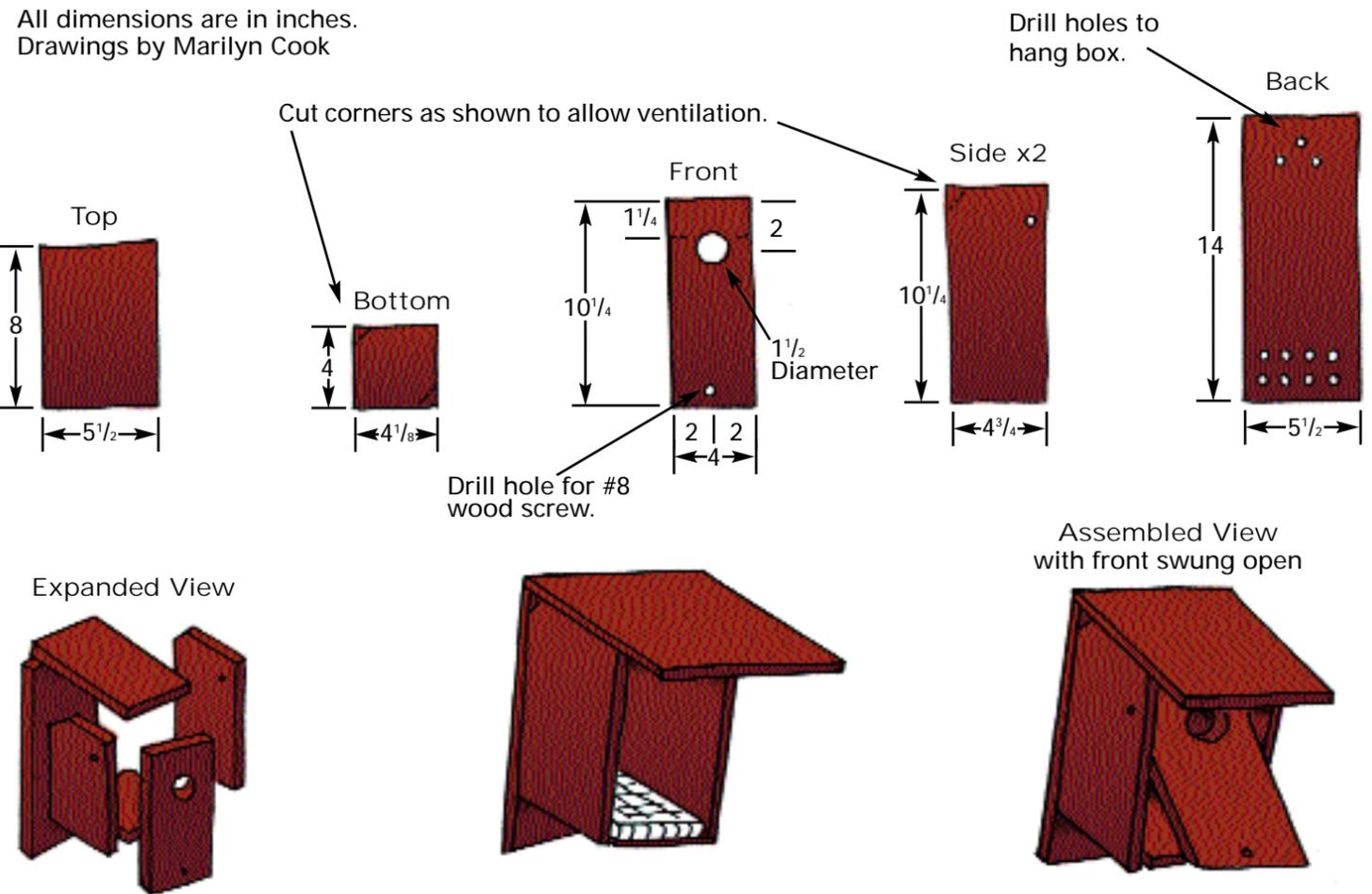
Even if you don't have the wide open space required around their nests, you can join in the campaign to erect houses in your surrounding area. Make the entrance hole to your bluebird houses only 1 1/2 inches in diameter to foil the nest-stealing starlings. Mount the house in an open area among scattered trees facing south or east at 3 to 6 feet

from the ground. In setting up several houses, space them at least 100 yards apart. Hopefully, a male bluebird will spy your construction and seek to entice his mate to build her nest of pine straw or dry grasses inside. Then, keep an eye open for these lovely creatures to visit your bird bath or pond! (And remember to clean out the old nest material after the babies have fledged in 2 to 2 1/2 weeks to encourage your pair to produce another brood.)

Building a Bluebird House

Note: a piece of 3/4-inch hardware mesh, cut to 4 x 10 inches is bent into a box shape to measure 4 inches by 1 inch and tacked loosely onto the top of the floor to prevent blowfly parasites from attacking the nestlings. 🐦

All dimensions are in inches.
Drawings by Marilyn Cook



The Beginning...

My love of the countryside began as a young girl in rural Wisconsin. I grew up in a small community surrounded by lakes, rivers and woods. My mother, who was a teacher, often took my sister and me on picnics in the woodlands of the Koehler farm. We spread our blanket and lunched between the woods and the sedge meadow. Beneath and around us, a vibrant carpet of marsh marigolds, iris, shooting stars, sedges and coneflowers imprinted itself in my mind.

Years passed. I was off to high school and college and then married a young physician who loved the land as much as I did.

Eventually we planned to build a home and bought a 21 acre parcel containing wetland, woodlands, prairie and old fields. As an unused property for many years, wildlife and wildflowers abounded. I became very interested in the plant life of the many different ecosystems we now owned — a marsh, a wet prairie, a sedge meadow, a shrubb carr, a wet woods, a low prairie and a hardwood forest. The only feature missing was a pond. We dug it in the third year. Intercepting a spring, it slowly filled with crystal clear sparkling water. However, the area around the pond was disturbed. I decided to return it to its original state



by using native plants from the surrounding area. I transplanted sedges and bulrush into the emergent edge of the pond. I waded into the water and planted water lilies and pickerel weed. Although I was not aware of it, I had created my first native landscape.

Inspired, I investigated the rest of our land. I walked it, photographed it and identified and catalogued the plant life. The more I assessed it, the more stucken I was with the beauty and symmetry of the natural vegetation. I began to think of our natural landscapes as my living laboratory. They were lovely gardens, sustaining themselves with little or no maintenance, yet in a constant stage of change as one community competed with another to maintain its niche in the ecosystem.

The wetland held my attention more than any of the rest of the land. Most people at that time thought of wetlands as wastelands. I saw them as wonderlands of beautiful plants that changed along with the hydrology.

Realizing that I knew too little, I returned to college to earn a Master's Degree in professional development. I did my thesis on how to grow carex (grasslike plants) from seed.

During graduate school I became aware of the huge

loss of wetland as development erased them at an alarming rate. I decided someone ought to grow these plants and collect the seed. Perhaps it would help offset the loss if we could build new ones. Already owning the land for such a venture, I decided to grow these native plants and collect their seed. Country Wetland Nursery and Consulting was born.

When we had purchased our land, the lands surrounding it were still rural. Development began to occur around us as others decided to leave the city and find their place in the country.

Most of the farm lands with their woods and prairies were dug up for construction. The people who came from the city had to rebuild the landscape. They brought with them ideas of creating horticultural landscapes like they had in the city. In no time it was evident that such landscapes didn't 'feel' like country. Many became interested in native landscaping and added areas of native plants to their new landscapes. Putting back the plants that were there in the first place invited birds, butterflies, animals and insects to return again to the country. The natural landscaping created mini ecosystems and brought more diversity to the horticultural landscape.

Natural landscaping found its way into the hearts of the new breed of homeowners in the suburbs. It has become not only a way of landscaping but a way of life. Man began to learn how to live with the land and enjoy it. The land was not only attractive but also functional. It was cost efficient requiring little management. It left the homeowner with more time to enjoy his land. The homeowner was akin with nature and had become a steward of the land. Diversity was returning to the landscape. The elements of plants, shrubs, trees, birds, animals and plants blended well. Last but not least, water became an integral part of the landscape in the form of water gardens, ponds and aquascaping for other inaccessible places. The landscape was complete.

My column on native landscaping of urban sites will, in the future, deal with the design and plant life of native landscapes. I am in hopes that you will become interested in this method of landscaping and incorporate it in your landscape. Perhaps it will become an integral part of your life too. 🐦

Jo Ann Gillespie is a noted wetland mitigationist and consultant. She can be reached at Country Wetlands Consulting at 414-679-8003 or by fax at 414-679-6866.

Sharing... Letters & More

Zone 3, Wyoming!

Ponding in the Rockies! My first season was an eye-opener! For example, predators here have no fur or feathers. Try scales?! The common garter snake was a large problem. After finding several large orandas drying on the grass, I began to check the pond almost hourly, as we didn't know what was doing this. However, my husband, not myself, discovered a medium-sized garter snake trying to lunch upon my largest female oranda (whom I had hopes of breeding) and scared the rascal into dropping 'Mama,' as we call her. The wonderful man took my traumatized darling and swished her around in the water (fishy mouth to mouth!) until she came to, and I'm proud to report that she has since spawned. As for the snake, he met a rather nasty fate as my son's pet and lives in his pocket most of the time.

Which brings us to water temperature in the mountains. Never buy tropical lilies and don't expect your fish to spawn until August. That's right, AUGUST. Water temperatures ran from 80 degrees Fahrenheit in the day to 37 degrees at night as late as early July. Tadpoles take two summers to turn into frogs, and you need to bring fry that you wish to keep indoors by late September as they do not have enough time to mature sufficiently before the onset of winter. I don't believe many of them would survive as we get temperatures of -20 degrees for at least one full month in the winter here.

Did I mention not to plug everything into a circuit breaker that is plugged into an extension cord that is plugged into the house? Well, in my own defense, I really had meant to call the electrician to wire a separate outlet outside, and once he finished turning my house back on, he promptly did so!

We did have one casualty, my son's painted turtle took a vacation in the pond. As soon as the sprinkler system came on, it filled the pond enough for the naughty thing to escape. We never saw him again, but he was gulping tadpoles like candy anyway.

By the way, ditch water is very well tolerated by fish and plants. We have a raw water system that costs a certain amount per year and you use all you need. This came in very handy after I killed the tropical lilies, and again after the snail explosion.

Still, problems aside, I had an exciting and wonderful year with my first outside pond. My fish enjoyed the extra room and I enjoyed the easy maintenance (compared to

an indoor tank). The fish spawned, the anchor worms died, the hardy lilies bloomed vigorously, and the kids and neighbors were suitably impressed.

I'm really quite proud of myself, and am eagerly awaiting spring!

Vivian McCord
Cody, Wyoming

Bluegill!

From 17-year-old Ashley Harrison in Prattville, Alabama, where she is learning the joys and skills of photography — you'll see her efforts soon!

Bluegill! I have those in my pond. I love them! They keep the goldfish population in check AND eat mosquitoes and other pesky insects! All three have different personalities, too! They're so fun to watch! One of them won't eat the pellets. He waits on the worms that he knows are coming! One is shy and only comes out occasionally to snatch a pellet. (She likes the worms better, too!) And the other is my favorite! He comes and sometimes takes the pellets from my fingers! I LOVE them!

Gimme-more!

From Kathy Thirtyacre (Person) in Richland, Washington. (See her feature on ponding for handicapped and disabled gardeners on page 70.)

Helen!!!! The Christmas letter I sent you was adapted from an essay I sent to *Deck, Garden and Landscape* last fall. I thought they tossed it, but I got an e-mail today saying they want it for the Fall '98 issue!! They also want to know if it was printed anywhere else. Can I trade you a poem for the Christmas letter? Here is the poem — a fair warning needs to be issued — I dearly love 'bad' poetry. Ahem, clearing my throat — with apologies to Edgar Allan Poe —

*Once upon a noontime cheery, while I rested,
tired and bleary,
O'er pages of Pond and Garden, quaint garden lore,
While I rested, napping, napping,
Upon the pond, upon the shore, came a flapping.
Came a heron, snacking, snacking,
Came a heron, this dreadful predator,
Begone, peace to mine own I wish restored,
Begone, take wing, I do deplore,
Quoth the heron ~ 'gimme-more.'*

