Providing Water in Your Habitat at Home®

by Carol A. Heiser illustrations by Spike Knuth

hen was the last time you saw a thumbnail-sized frog sitting among wet leaves in your yard? How about a neon-colored dragonfly basking next to a sparkling pool, a butterfly lapping minerals from a mud puddle, or a hummingbird preening its feathers after a rain? These animals—and a wonderful variety of others—are all prospective visitors to the environment around your home, but their visit will be limited by the quality of the habitat components found there. Unfortunately, water is one of those critical elements in nature that seems to be missing from most people's yards. Apparently we've become so obsessively focused on maintaining impeccable lawns that we've entirely forgotten about our wild neighbors. By draining wet areas, diverting water off the property, removing every fallen leaf, and keeping the grass close-clipped, we're manicuring nature right out of the landscape.

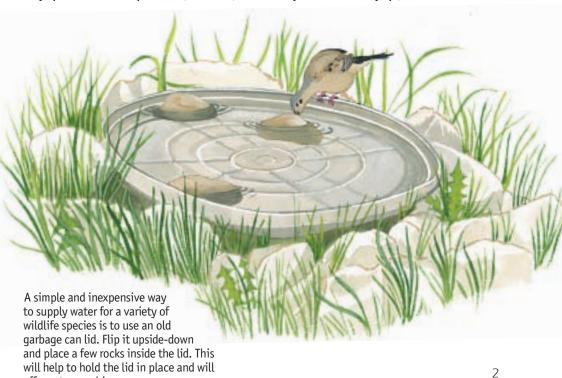
Birds, insects, reptiles, amphibians and mammals all need a reliable source of accessible water to drink and carry out their life cycles, from breeding and egg-laying to finding food and raising their young. If you want to welcome wildlife to your yard and can picture a softer, less barren landscape that includes the sound of trickling water, read on.

Keep it Simple

offer extra perching space.

There are several ways you can provide water sources for wildlife, and a habitat which contains more than one source is ideal. Where to start? If you've ever visited a garden show and looked for new ideas to use in your yard, you may have felt somewhat intimidated by the beautiful water garden displays. The more classy the show, of course, the more sophisticated the displays, which can include



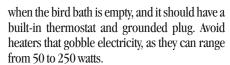


elaborate waterfalls, multi-lighted fountains, and complex rock work under splashing streams. The good news for wildlife gardeners, thankfully, is that a Habitat at Home® water feature doesn't have to be elaborate at all. If we take our cues from nature, we find that even the smallest puddles of water attract a variety of life. A shallow depression at the base of a tree trunk caressed by ferns can be a mini-oasis for tadpoles or salamanders. Bird baths outfitted with a small drip system will provide the tinkling sound of water so attractive to birds. A small pool with an inexpensive bubbler and an adjacent patch of groundcover invites small mammals or passing insects to stop for a sip. Even a trash can lid placed upside-down on the ground can serve as a water feature. As long as there is enough plant material nearby for escape cover and a bit of shade from the summer sun, your water source is likely to be successful.

Make a Splash

Buying an inexpensive bird bath is a good place to start for a novice habitat gardener. Huge bird baths with deep bowls are unnecessary, however: We want a bird bath intended for small songbirds, not ducks! Choose a bird bath with a shallow bowl no deeper than two to three inches, and place a few stones in it that birds can easily perch on. Try suspending a bucket that has a small hole in the bottom over the bird bath, and fill the bucket occasionally when a garden hose is handy, to provide a tantalizing dripping sound that birds will want to investigate. Remember, too, that wildlife needs water year-round, not just in summer. To keep water from freezing, consider getting a bird bath heater or de-icer from a local garden shop or birding store. A good





When you're ready to graduate from a bird bath to an in-ground water feature, the best options are either a prefabricated liner or a flexible plastic liner. Prefab liners look like black bathtubs and come in assorted shapes and sizes. Be aware that most of them have straight, steep sides, which can make it difficult for small mammals or amphibians to escape if they fall in the water. Therefore, it's prudent to choose a liner that has at least one or two built-in, shallow shelves or levels where you can put potted, bogloving plants and rocks that small critters can crawl over. The deepest part of the liner should be an average of 18 to 24 inches to accommodate submerged plants and overwintering fish.

A flexible plastic liner, on the other hand, will provide opportunities for more creativity, because it can be shaped to any depth or configuration. The most durable flexible liners are 30 to 45 mil plastic. When you dig the hole for this type of liner, design it so that at least one side of the water feature is very shallow for birds and amphibians, and include a 4- to 6-inch shelf for submerged plants.

Left: Spring peeper, *Pseudacris* (*Hyla*) crucifer.



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Rules of Thumb

Whether you use a prefab liner or flexible plastic, be sure to call Miss Utility first before digging, to locate any electrical or phone lines. Put the water feature where it will get at least five hours of sun a day as well as some shade in the afternoon. Also, a good rule of thumb is to cover two-thirds of the surface area with plants, which will minimize algae growth and provide cover for aquatic organisms. Circulating the water with a submersible pump will ensure adequate oxygen and minimal mosquito growth (see the "Did You Know" section on this page for more about mosquitoes).

Refrain from adding goldfish to your water feature, because goldfish will eat many of the native, beneficial aquatic organisms you're trying to attract. Also, goldfish waste products increase the water's organic matter which can in turn promote excessive algae growth. In addition, goldfish may escape during a storm or flooding event and enter a local water body or stream, potentially introducing these non-native species into the environment. For the same reason, never purchase tadpoles or snails from pet stores or other suppliers, as these are bound

Above: Common whitetail dragonfly, *Libellua lydia*. **Right:** Pipevine swallowtail, *Battus philenor*.

to be non-native. Besides, it's not necessary! A water garden with naturalized edges and native aquatic plants will attract native dragonflies, snails, frogs and other organisms that will keep the habitat balanced.

Choose the Site Wisely

Providing cover near the water source can not be over-emphasized. Most wildlife is wary of predators and stays on the constant lookout for signs of danger, which could be a hawk, a fox, or free-roaming cats and dogs. As we look for the best arrangement of food, water and cover, our goal is to avoid extreme conditions. At one end of this extreme is the "naked bird bath" syndrome, where the bird bath stands forlorn in an expansive ocean of lawn, nary a creature in sight. Birds are usually hesitant to venture far out into the open; instead, they prefer a shrub or tree near the water where they can land first and see if the coast is clear. At the other extreme is a tiny water source practically smothered by thick vegetation. This is a great place for a cat or other stealthy predator to lie in wait.

Therefore, strive for a "happy medium." If the yard is very small with only a few foundation plants, try siting the water several feet from the plants, on a side of the house that won't be absolutely baked by the afternoon sun. On the other hand, if the plant material is very scattered throughout the yard—"there's a bush over here and a tree way over there"—

to be the "anchor," and place the water feature about 5 to 10 feet away from it. If the yard is mostly grass with only a border of shrubs or trees, install the water feature near the edge of the vegetation. Constructing a brush pile or planting a couple of shrubs or small trees may be necessary to round out the habitat elements. Remember to include evergreens, which will provide winter cover as well.

Did You Know?— Mosquito Hot Spots

It takes a minimum of one week (or up to four weeks, depending on the species) for a mosquito egg to complete its life cycle and develop into a mature adult during the warmer spring and summer months when these insects breed. Since mosquitoes require quiet, still water for egg-laying and development, they are attracted to water that is allowed to stand or stagnate for an extended period of time. Contrary to popular opinion, however, wetlands are not entirely to blame, because these ecosystems are home to a wide variety of bird and insect species that form an intricate food web of checks and balances. Instead, the most prevalent—and probably least likely to be noticed—place for standing water around our homes is in the gutters, where leaves



