Reduce Mosquito Populations By Adding Water?

By Elaine Franklin

Summer is here and mosquitoes are buzzing. This may seem counter-intuitive, but a great way to reduce mosquito populations is to add a water feature to your property. The key to inviting the critters you want while not providing breeding grounds for mosquitoes is to add vegetation so that mosquito predators will have a place to hide and stalk their prey.

Conservationists have declared 2008 the Year of the Frog, and what better way to support frogs than to welcome them onto your property as natural mosquito control agents? Frogs eat three times their weight in insects, 80 percent of which are pest species. A single frog or toad eats tens of thousands of insects a year. A lot of their hunting occurs at night, so while you sleep, they gulp down pest insects in your garden.

Your water feature will serve as prime habitat for adult amphibians and their tadpoles if it is less than two feet deep and placed in an area that gets a mix of sun and shade. Provide a shallow area a few inches deep, leading gradually toward deeper water, so they can enter and exit. Be sure it is free of pesticides and fertilizers, and remember that whatever you put on the surrounding landscape will wash into the water during rainstorms. Frogs are very sensitive to pesticides. Recent reports on mutagenic frogs note that pesticides stress the frogs’ immune systems, making them more susceptible to parasites that cause deformities.

Vegetate the edges of the water feature with native grasses, wildflowers, and shrubs -- and never mow to the water’s edge. The following plants are excellent choices:

- **Grasses**: Blue wood sedge, red fescue, autumn bent grass, broomsedge

- **Wildflowers**: Butterflyweed, white snakeroot, marsh marigold, partridge pea, turtlehead, mistflower, common boneset, common sneezeweed, ox-eye sunflower, jewelweed, blazing star, cardinal flower, phlox, obedient plant, blue vervain, golden-alexanders

- **Shrubs**: Silky dogwood, wild hydrangea, sweet pepperbush, button-bush, dense St. John’s wort, winterberry holly, Virginia sweetspire, sheep laurel, red or black chokeberry, ninebark, pinxter or swamp azalea, swamp rose, steepbush, highbush blueberry

Submerged vegetation will provide places for adults to lay their eggs. Use native wetland plants such as sallow sedge, three-sided sedge, rose mallow, blue flag irises, Canada rush, arrow arum, duck potato, pickerelweed, and water plantain. Avoid aggressive species such as water lilies, parrot’s feather, water hyacinth, water lettuce, and cattails.

Tadpoles feed on detritus, so it is ok to leave twigs and leaves in the water that fall from nearby vegetation. Resist the urge to add fish because they will gobble up frog eggs as fast as the frogs can lay them.

Your mini-wetland will probably also attract a dazzling array of dragonflies and damselflies, which are also efficient mosquito predators. Adults and larvae alike feed on adult and larval mosquitoes. If you follow these guidelines, the summer buzz at your water feature will be from frogs, toads, dragonflies, and damselflies, instead of those pesky biting pests.

To learn about other local wildlife that help reduce mosquito populations, check out the Audubon at Home Target Species Fact Sheets on our website at http://www.audubonva.org/audubon_at_home/index.htm