Native plants lure abundant wildlife

Gardening for wildlife at home brings me great joy. At one time I thought I needed to visit a park to see amazing things.

I still love parks — they are far more biologically rich than my yard — but I have found that the emotional benefits experienced at home are more accessible, more personal, and deliver a more consistent reward. You can experience this too, if you garden with plants native to Florida, and use varieties that are mega-attractors of interesting insects.

Mega-attractors? In scientific terms, we might call them "keystone species." The fact is, not all plants are created equal. Plants differ wildly in their ability to attract interesting wildlife, and if you plant just a few mega-attractors, you'll see mega-wildlife at home.

Take for example two common trees in our area: southern live oak and green buttonwood, both native to Florida. According to the National Wildlife Foundation, the oak trees of Southwest Florida are host to 395 types of moth and butterfly caterpillar.

By comparison, buttonwood, though an important tree by other measures, hosts just eight types of caterpillar.

The reason is chemical. Imagine you're a tree, and you can't move. How do you protect yourself from hordes of insects? One approach is to produce chemicals that are distasteful, or even poisonous. Other types of tree do the same, but with a different mixture. This divide-and conquer approach splits the insects into groups. Some insect groups eat only oaks, some only elms, others only pines, and so on, down the list of hundreds and thousands of plant groups. And, by a quirk of life, some of the plants are more edible than others.

Exotic plants are a particular problem because the insects that are able to eat them remain in their home country. The various plants and insects can no sooner change their genetic and chemical makeup than you or I can produce enzymes to digest bark. The outcome is that Florida insects don't eat foreign trees. On the surface, that may sound good, but it's actually a major problem. In effect, landscaping with exotic plants creates green deserts, devoid of life. To illustrate the problem of landscaping with exotic plants, consider a pair of nesting birds. A 2018 study followed nesting Carolina chickadees through a suburban neighborhood, watching the caterpillars they collected. (Caterpillars are like baby-bird rocket fuel.) In order to raise their young, the chickadees collected more than 6,000 caterpillars from six types of native trees in about a 300-foot radius around their nest. The birds skipped the exotic trees, presumably because there weren't caterpillars on them. The study was ultimately able to quantify that a chickadee population could be stable (not growing or declining), so long as 70% of the trees in the neighborhood were native, allowing for 30% nonnative trees. Now, I'm only scratching the surface with birds and caterpillars. We haven't talked about insects that turn dead leaves and animals into fertilizer (decomposers), insects that make crops and flowers produce fruits and seeds (pollinators), or good insects that eat pesky insects (biocontrol agents). I'd love to delve into planting Florida wildflowers to attract Florida bees: mason bees, leaf-cutter bees, bumblebees, oil digger bees ... to name just a few of Florida's 316 bee species. Bird-caterpillar-plant interactions are just one wonder in the miracle of life. And planting native plants is the common thread through it all.

If you want to learn more, Dr. Doug Tallamy explains it well in a recent webinar on YouTube, <u>Doug Tallamy: A Guide to Restoring the Little Things</u> that Run the World. See also his website, <u>BringingNatureHome.net</u>.

Now if you want to bring joy to your own yard, I have a few tips. First, visit the National Wildlife Foundation "Plant Finder" (nwf.org/nativeplantfinder), which will use your ZIP code to provide a list of native trees and shrubs, ranked according to the number of moth and butterfly caterpillars they support. Then, purchase plants from a local native plant nursery (Sarasota — floridanativeplants.com; Parrish — sweetbaynursery.com).

For inspiration, pay a visit to the Conservation Foundation's headquarters, the beautiful, mostly-native landscape at Bay Preserve at Osprey, 400 Palmetto Ave.

My final piece of advice, for now, is to start small. If you need one tree, one bush, one flower, use the plant finder and the experts at the native plant nursery to select that one best plant. Make it a mega-attractor. In time, you'll find what I discovered: Gardening with native plants brings amazing life to the world, to your yard, and to your day. I hope you enjoy it. Lee Amos is Land Steward for the Conservation Foundation of the Gulf Coast.

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