## by Lucie Lehmann

In his book, *Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard*, University of Delaware professor and entomologist Doug Tallamy throws out a game changing challenge: "What if each American landowner made it a goal to convert half of his or her lawn to productive native plant communities?"

I took up that challenge, and you can, too. As residents of South Village, an eco-community, we should be among the leaders in planting native pollinator gardens. Why? Because going native has myriad benefits, critical among them creating habitat and food sources for insects and birds, both migrating and resident species. According to Tallamy, an astonishing 557 species of moths and caterpillars are found on native oaks versus sometimes just one or two —or even none --on introduced species like lilac trees. Why is that important? Because birds rely overwhelmingly on caterpillars, which are packed with fat and protein, to sustain them on migration stopovers and to provide food for their growing young. And introduced tree species, which unfortunately make up the vast majority in South Village, don't attract native species of caterpillars and other insects the same way that native "keystone" species do.

It's the same with shrubs and perennials, especially in our small yards here in South Village. Introduced species create food deserts for birds and native insects —especially bees — which pollinate nearly 90% of all plants and rely on native host plants for their food and egg laying needs. By now, most of us are familiar with how monarch butterflies depend on milkweed for both food and reproduction, but to reverse the plummeting numbers of bird and other insect species, it's critical that we change the way we plant our land and gardens, no matter how big or small. Garden should and can be both beneficial *and* beautiful. Some guiding principles: 1. Shrink your lawn 2. Educate yourself about native species 3. Remove invasive species 4. Plant keystone genera and 5. Plant for specialist pollinators.

Here are some general guidelines for our area: In the tree world, native oaks, birches, maples, serviceberries, fringe trees, hollies, cedars, spruces, and pines are keystone species. Fortunately, there are dwarf varieties of some of these species, which are better suited to our neighborhood with its height restrictions.

In the shrub world native viburnum, winterberry, dogwood, serviceberry, chokeberry, beautyberry, blueberry, buttonbush, pepperbush, azalea, and elderberry are all pollinator-friendly and critical food sources for birds, especially berry-loving species like cardinals, which stay in Vermont year-round.

Sun-loving native perennials including goldenrod –probably the single most important plant for native bees, according to Tallamy – hyssop, milkweed, vervain, ironweed, Joe-Pye weed, aster, mountain mint, tickseed, penstemon, phlox, rudbeckia, sneezeweed, bee balm, and perennial sunflower are all critical host plants and food sources and provide long lasting color

and beauty, as well. In the shade, native columbine, black cohosh, foam flower, trillium, coral bell, phlox, meadow rue and some woodland aster species are all good choices for understory plants. And don't forget native ferns and vines and native grasses including sedges and bluestem, which not only create beneficial habitat but provide nesting material and vital food sources for sparrows, finches, and other seed-loving birds.

You don't have to be a master gardener or even particularly attuned to what might be best suited for your yard to effect a positive change. And you don't have to change everything in your yard to make a difference—just start somewhere in the garden and add some natives. Heightened awareness of the importance of native plants has created a plethora of resources that virtually any homeowner can use to educate him or herself on what specifically might work in their gardens, no matter how big or small, shady or sunny, or the type of soil they have. National Audubon Society ( <a href="https://www.audubon.org/native-plants">https://www.audubon.org/native-plants</a>), Vermont Fish and Wildlife (<a href="https://wtfishandwildlife.com/conserve/conservation-planning/plant-inventory">https://www.uvm.edu/extension/mastergardener/gardening-resources</a>) and the National Wildlife Federation (<a href="https://www.nwf.org/nativeplantfinder/">https://www.nwf.org/nativeplantfinder/</a>) all offer online, downloadable native plant guides that are excellent and provide detailed guidelines on what plants are right under what conditions in Vermont. We also have excellent local nurseries, including Horsford's, Gardener's Supply, Full Circle, Claussen's and Red Wagon, that carry native plants and whose staff are knowledgeable about them.

There is no one size fits all plant. Birds, insects and all wildlife for that matter need varied habitats to meet all of their nesting and foraging needs, which is why it's critical to consider diverse and layered plantings. Again, your garden doesn't need to be exclusively native to help the pollinators—about 70% native is what I aim for. But as you think about the best native plants to introduce to your garden, think about including an overstory, a mid-canopy area, as well as an understory. By doing our part, all of us can help not only to reduce lawns and eliminate invasive and other introduced species, but provide the food and habitat for the insects and birds that our planet depends upon, all while making our neighborhood even more beautiful.