GROW WITH EXTENSION

This Microclover-Argentine Bahia grass blend was seeded in June of 2019. [CONTRIBUTED PHOTO]

Plant diversity brings healthy landscapes

By Lloyd Singleton

Many of our traditional residential and commercial landscapes are a homogenous gathering of a few shrubs, a tree and a monoculture of turf. The science of ecology reminds us that nature thrives with diversity. Can we do better?

Some Extension colleagues in Florida released a podcast this week: Extension Cord, "The Mixed Up Lawn" found here https://www.listennotes.com/podcasts/extension-cord/the-mixed-up-lawn-KhaIySF2Dgb/. In this engaging chat, Taylor Clem speaks with Basil Iannone and UF/IFAS Extension Lake County's Brooke Moffis about their study on multi-species lawn alternatives. When we think about lawns, we largely think of turf grass, which currently takes up more space than any other irrigated crop in the United States . But our lawns can be so much more. Lawns can offer greater plant diversity that can serve a greater ecological function.

Some pandemic reading material for me this summer includes a book by University of Delaware professor Doug Tallamy, Bringing Nature Home. He suggests that "we must abandon the notion that humans and nature cannot live together. Though vital as short-term refuges, nature preserves are not large enough to meet our ecological needs so we must restore the natural world where we live, work, and play. Because nearly 85% of the U.S. is privately owned, our private properties are an opportunity for long-term conservation if we design them to meet the needs of the life around us. To succeed we need to redesign residential landscapes to 1) support diverse pollinator populations and complex food webs, 2) store carbon, and 3) manage our watersheds." A diversity of plantings is a good step.

In another summer read, author Benjamin Vogt "addresses why we need a new garden ethic, and why we urgently need wildness in our daily lives — lives sequestered in buildings surrounded by monocultures of lawn and concrete that can harm our physical and mental health. He examines the psychological issues around climate change and mass extinction as a way to understand how we are short circuiting our response to global crises, especially by not growing native plants in our gardens. By thinking deeply and honestly about our built landscapes, we can create a compassionate activism that connects us more profoundly to nature and to one another."

These may seem lofty thoughts and ideals, but there are simple steps you can take to encourage the natural ecosystem in your landscape. Add to the diversity of plantings, including native species and varying heights. Tolerate a few alternative plant species in your grass and just keep it mowed. And exhibit patience when observing what are typically considered plant pests; aphids can be ladybug food.

An experiment in plant diversity is underway in a yard area at Arboretum. Last summer, we seeded a blend of microclover and Argentine Bahia in a level area between the native plant garden and the stormwater infiltration zone. The mix was intentional, selected to requires fewer inputs than a St. Augustine, Zoysia or Centipede lawn. The hypothesis is that the nutrient typically provided by a fertilizer, nitrogen, could be derived from the air by the clover, a nitrogen-fixing legume. And the deeply rooted drought tolerant Bahia might assist in water needs of the clover with some potential hydraulic redistribution. A risk in the experiment is that our location falls at the northern limit of the Argentine Bahia and the southern limit of microclover. A year later, the yard is looking quite good; visit the Arboretum to see for yourself, free and open daily from 8 a.m. to 5 p.m.

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