

**DRAGONFLY.** Anything crawling from flower to flower is a pollinator, including lizards and beneficial dragonflies like this Eastern pondhawk.



*good*  
**DEEDS**  
• with  
*dirty*  
**WEEDS**

// DIGGING INTO THE KEYS' MICRO WORLD //

*Some people* see a manicured yard, with mulch-encircled palms and a white gravel drive as aesthetically pleasing. Naturalists are not those people. In their eyes, those are landscapes of environmental calamity.

“Anything is better than bare pea-rock,” says wildlife biologist Sarah Steele Cabrera. “Well, a monoculture grass lawn is not much better.”

It feels like it's about 105 degrees out, as Cabrera cheerily pushes her wheelbarrow through deep sand, explaining the benefits of her favorite native flowers that are most often regarded as weeds. In her tub is a load of gray nicker-bean seedlings she's about to plant along an isolated beach on Lower Sugarloaf. If her spiny plants survive, she'll realize a goal she's been working toward for several years: reintroduction of the Miami blue butterfly.

Tiny Miami blues weigh only slightly more than air and are smaller than a dime. They are one of the country's rarest insects and depend on the nicker-bean as food for their larvae. Their diminutive size does not undermine their significance, at least for Cabrera, who has been researching them through her job with the University of Florida. She hopes that the endangered flutterer will become an ambassador for other insects.

# “butterflies are a gateway bug,” she says.

## SNOW SQUARESTEM (below).

Cabrera suspects that dead grass and muck from the hurricane might be acting as good fertilizer, since many native wildflowers like snow squarestem have been popping up in healthy numbers.

*“It wasn’t a really great smell for a while,” she says, “but you gotta look for the sliver lining.”*

-Sarah Steele Cabrera

“Most folks aren’t really big fans of insects but it’s hard not to like a butterfly. The Miami blue is just one small species, but it’s a sign of the massive losses we are having in our insects and pollinators.”

Here and around the world, researchers are finding a staggering decline in insects, which is only just starting to come to light. A recent landmark study in Germany showed a 77-percent decrease in flying insect populations over the last 27 years. Scientists cite several probable factors, including pesticides and climate change, but in the Keys Cabrera feels it’s safe to say a major contributor is also habitat loss.

While the notion of a life with fewer insects might seem like a great convenience, it’s actually a huge problem. Without bugs, ecosystems collapse. So Cabrera and others hope Keys residents will rethink the definition of what constitutes a beautiful landscape. Instead of seeing a disorderly patch of weeds on the edge of the yard as something that needs exterminating, perhaps we’ll start seeing it as an intriguing, native

micro-world, where a dominion of flora and fauna go about their business decomposing detritus, pollinating plants, and feeding birds and lizards.

The guy who wrote the field guide to Keys wildflowers, botanist Roger Hammer, says he has noticed a gradual and encouraging upturn in the creation and acceptance of messy yards designed to attract butterflies and birds, even though he laments that Florida is an especially difficult state in which to create a native plant movement.

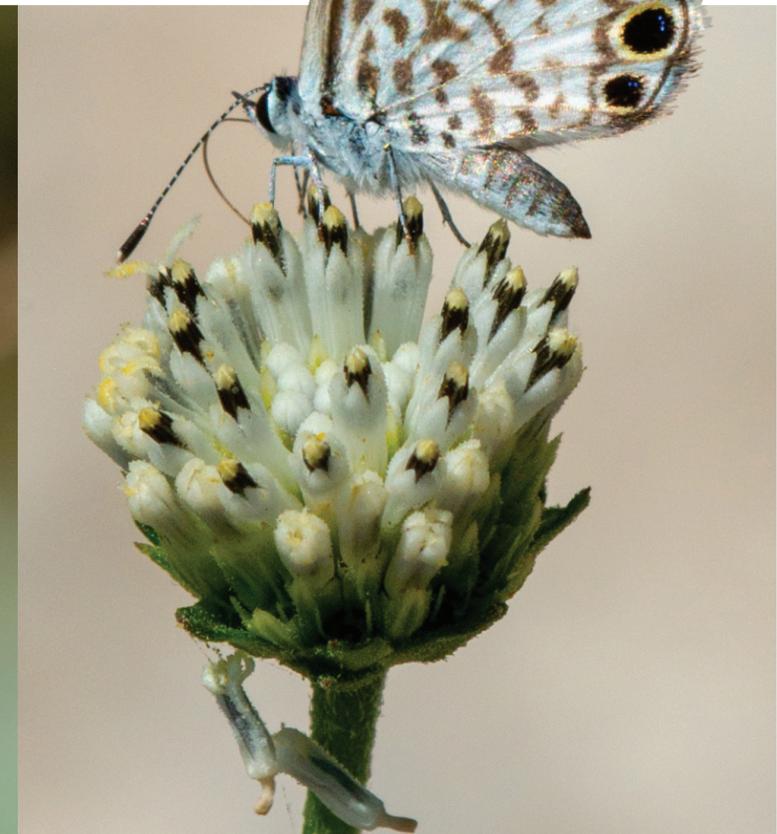
“People move here to retire and just want warm weather,” he says. “They want a lawn and queen palms and red mulch. They just don’t know about Florida’s environment, so it takes a while to teach them landscaping with a purpose.”

Hammer has advised many residents over the decades on how to develop and maintain a beneficial yard. He says adding Florida friendly, non-native plants along with native ones can be equally as helpful to the birds and the bees, so long as people keep an eye out for a

**MIAMI BLUE BUTTERFLY** (below right). The endangered Miami blue butterfly is known to exist on only a couple of uninhabited keys in the Key West National Wildlife Refuge, though efforts are underway to reintroduce them in several locations in the Lower and Middle Keys. It’s strongly suspected that mosquito control practices helped their demise, but today Cabrera believes their greatest threat comes from habitat loss. “Their preferred habitat is beach berms, which happens to be the same habitat we really like to build condos and beach resorts on,” she says.

handful of particularly harmful invasive species, such as Brazilian peppers and Mexican petunias. He further encourages gardeners to put in a water source and a winding trail or two, then certify their yards as wildlife habitat through the Florida Wildlife Federation.

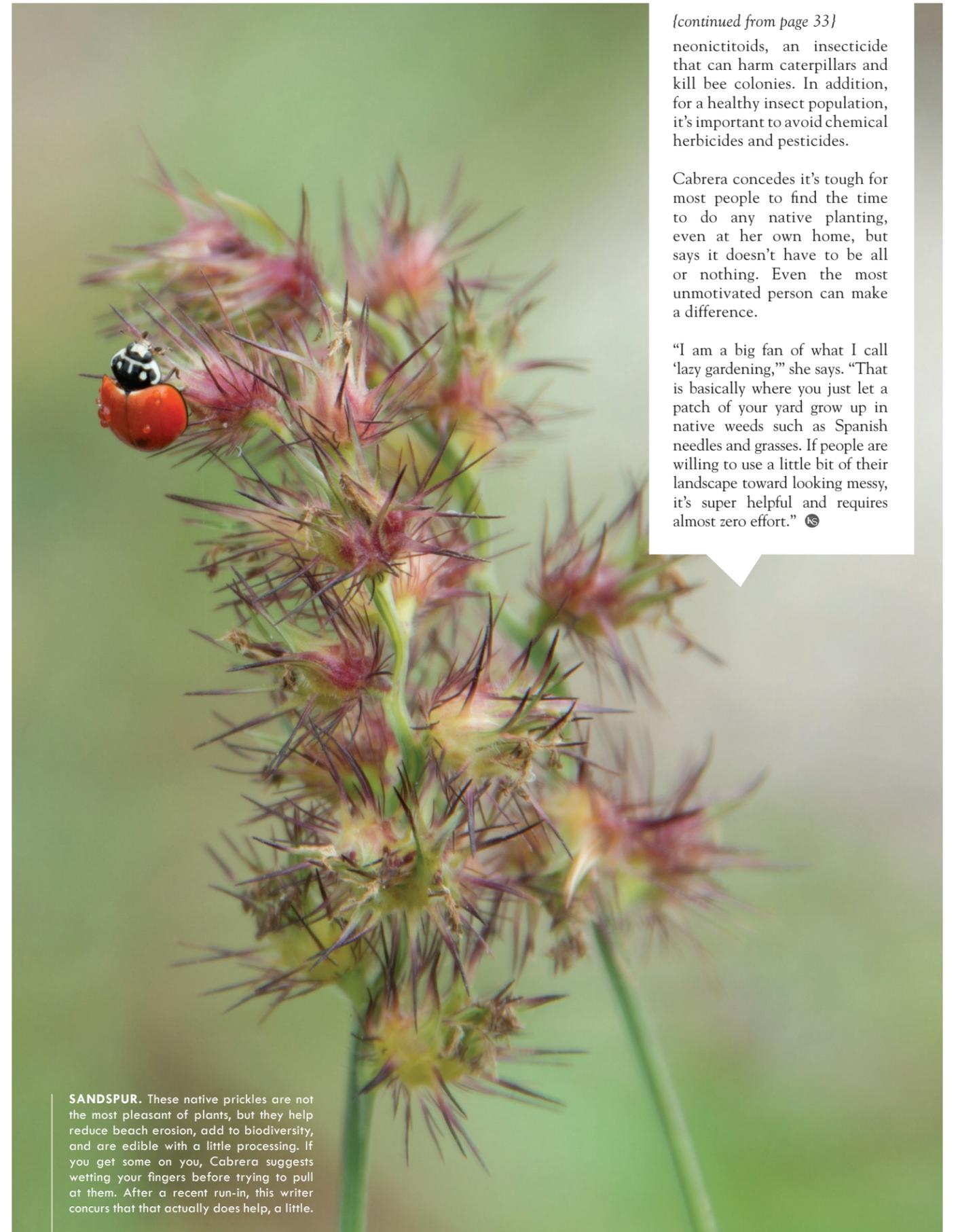
For yard wildflowers, Cabrera and Hammer are particular fans of Spanish needles, fogfruit and snow squarestem. After that, they recommend talking to local nurseries and botanical groups for suggestions. They warn against purchasing seeds and plants from large chain stores, because many of them are pretreated with



**SPANISH NEEDLES.** (right) Native Spanish needles sprout up around houses, vacant lots and gardens. Their seeds inconveniently congregate on socks and dog fur, but a patch will bring in a brigade of butterflies and honey bees, including the dainty yellow sulphur butterfly, which uses it as their larval host plant

**FOGFRUIT a.k.a. CREEPING CHARLIE.** (right) “Creeping Charlie is probably the plant that caused people to make weed-and-feed,” says Hammer. “They’d see it on the lawn and say, ‘Oh my god let’s get out the herbicide.’ But now it’s come full circle.” Nurseries are starting to grow flats of the Keys native, since it’s great for attracting pollinators and is a good ground cover that can handle foot traffic. It’s also the larval host plant for white peacock, phaon crescent, and common buckeye butterflies.

**SARAH CABRERA** (below) plants gray nicker-bean seedlings, which are a host plant for Miami blue butterflies. This summer, she and her colleagues hope to release blues that were bred in captivity in an effort to revive the dwindling wild population. Cabrera works for Florida Museum of Natural History and the University of Florida, but lives in the Lower Keys, where she works closely with the National Wildlife Refuges and the Fish and Wildlife Service.



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neonictitoids, an insecticide that can harm caterpillars and kill bee colonies. In addition, for a healthy insect population, it’s important to avoid chemical herbicides and pesticides.

Cabrera concedes it’s tough for most people to find the time to do any native planting, even at her own home, but says it doesn’t have to be all or nothing. Even the most unmotivated person can make a difference.

“I am a big fan of what I call ‘lazy gardening,’” she says. “That is basically where you just let a patch of your yard grow up in native weeds such as Spanish needles and grasses. If people are willing to use a little bit of their landscape toward looking messy, it’s super helpful and requires almost zero effort.”

**SANDSPUR.** These native prickles are not the most pleasant of plants, but they help reduce beach erosion, add to biodiversity, and are edible with a little processing. If you get some on you, Cabrera suggests wetting your fingers before trying to pull at them. After a recent run-in, this writer concurs that that actually does help, a little.