

A top-down photograph of a forest floor. Four bright green apples are scattered among a mix of brown, tan, and grey leaves, twigs, and small rocks. The scene is lit with natural, slightly diffused light, creating soft shadows and highlighting the textures of the forest debris.

SHADY CHARACTERS

LIFE AND DEATH IN THE
HARDWOOD HAMMOCK FOREST

by Karuna Eberl



| Photos by **Karuna EBERL** |

“

A WALK IN THE WOODS REALLY RESTORES YOUR HEART AND SPIRIT

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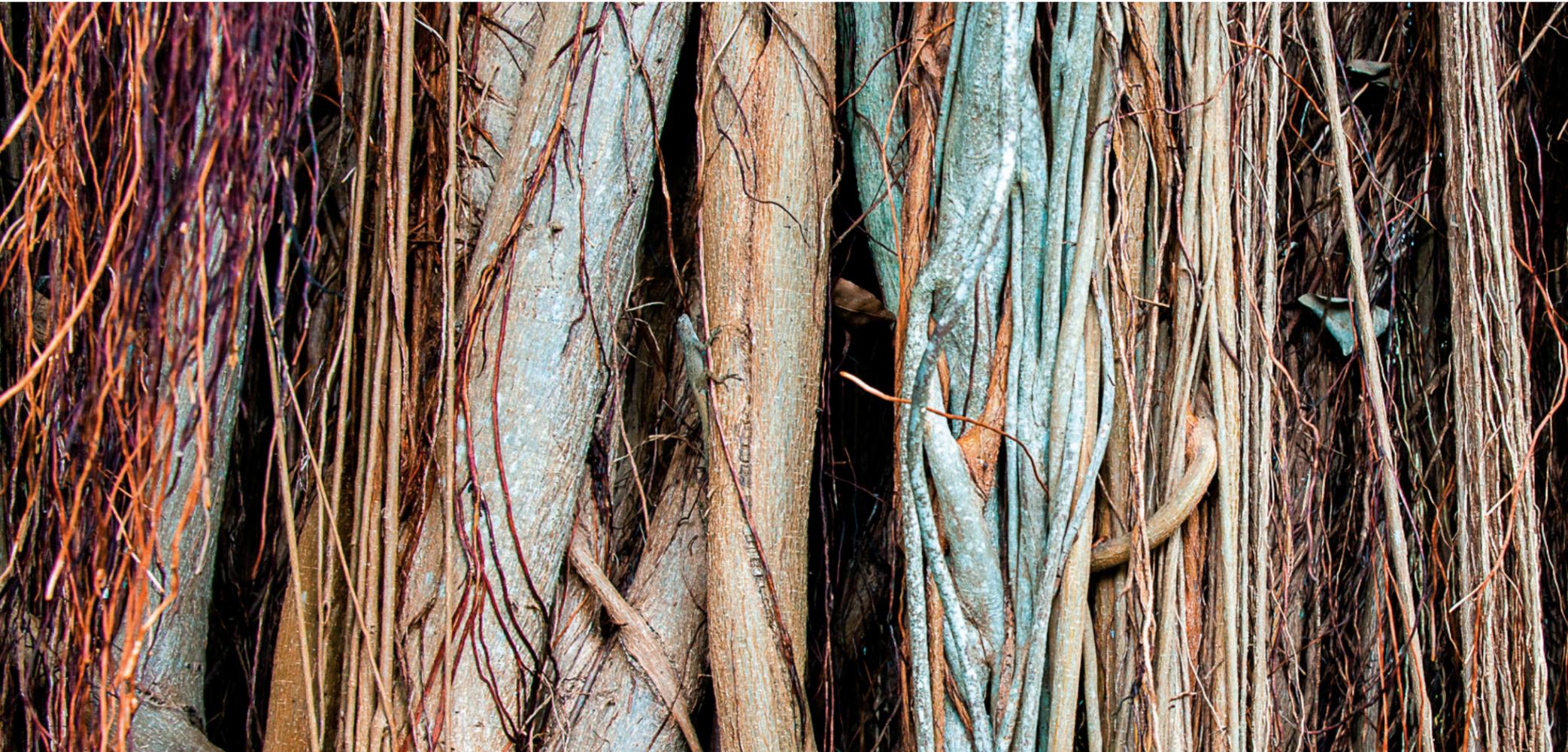
~ Kristie Killam

“Sea grapes are under-appreciated,” says Kristie Killam. She’s nearly sprinting down the trail, darting around puddles from the recent afternoon downpour. She’s said a lot of interesting things on this hike, like white-crowned pigeons feed their young with milk made from poisonwood berries. But the sea grape quote was the only one I was able to write down legibly, while ducking branches and trying to keep pace.

Killam works as the sole park ranger for the Florida Keys National Wildlife Refuges Complex. She’s agreed to show me the world’s deadliest tree, just a 7-minute walk through the hardwood hammock on No Name Key. Back in 1521 a Calusa warrior dipped his arrow in its poison, before delivering a fatal shot to Ponce de León, or so historians speculate. The manchineel, a.k.a. arbol de la muerte, or tree of death, is just one of dozens of native Keys trees with an alluring and often preposterous story to tell.

Elsewhere in the Keys lives the manchineel’s heroic counterpart, whose name translates to “tree of life.” Wood from the vibrant, purple-flowered lignum vitae was used to craft the Holy Grail and Merlin’s wand, or so wrote 15th-century scholars. Lignum vitae was more provably used to ease a slew of ailments, from gout to tuberculosis. Curing Columbus’ syphilis was its greatest downfall. The marauder began its export to Europe. Commercial demand rapidly grew for the ultra-dense, waterproof, self-lubricating wood, and it was soon used in everything from propeller bearings to billy clubs.

| **Previous Page Spread:** Manchineel (*hippomane mancinella*) is highly poisonous, but can be easily identified by its green, crab apple size fruit. A close look at the leaves shows tiny barbs or points around the edges. It grows in the Key Deer and other Keys wildlife refuges. Touching any part of it can cause blistering. It’s also not a good idea to eat it, burn it, or take shelter under it in the rain. **Opposite Page:** Seagrapes (*coccoloba uvifera*) have unmistakable big, round leaves which are great for writing love letters on, explains Robin Robinson with a sly smile. Robinson is an award-winning author and past president of Key West Garden Club. Sea grape trees also provide vital shade and windbreak for houses and wildlife. The grapes themselves are enjoyed by birds and people alike, straight off the vine or as jelly and wine |



| **Above:** The strangler fig (*ficus aurea*) dates back to prehistoric times. Over all of those years its developed one of the strangest pollination systems. A specific species of female wasp crawls into the figs to lay eggs and die. Once the queen's eggs hatch, the male wasp chews a hole to the fig's exterior, not for their own escape, but rather to create an opening for the females to exit. The females will pollinate another fig as queens. The strangler fig's nooks, crannies, caves, and root canopy make homes for thousands of other forms of life, from birds to insects, lizards and frogs |

It sounds exceptionally melodramatic, having trees of life and death growing here and there. But in fact, those two are just the understory of a far greater tale. In the Keys every native tree is literally a matter of life and death, explains Killam. Florida Keys trees and bushes are unique because most of them use berries for seeds, not pods. The berries provide food for hundreds of species of local and migrating birds, reptiles, and our few mammals - not to mention the importance of their flowers to the bees, wasps, butterflies, moths and other pollinators. All trees also harbor hundreds of different small insects, which make for a nutritious meal.

“Migratory birds start their northward-bound migration as far away as South America and can travel hundreds and hundreds of miles to northern latitudes,” says Killam, still walking in full stride. On cue, two white-crowned pigeons flap through the forest. These shy birds spend part of their year here, and migrate south. They survive primarily on the berries of the poisonwood, and also dine on the fruits of sea grapes, blolly and shortleaf and strangler figs.

Besides overhunting in the Caribbean, the white-crowned pigeons’ main struggle for survival is diminishing habitat from development. Fortunately, this is something humans here can actually help with. Key West tree and bird champion Fran Ford went so far as to create a Key West poisonwood park and pigeon preserve. While most people probably won’t want to plant something so toxic in their yards, any native tree or shrub can make a huge environmental impact for the pigeons, as well as the songbirds and butterflies.

“What kind of plants you have dictate what animals can survive,” says Killam. “Almost no creatures use the non-native royal poinciana for something other than a perch and hundreds that use the gumbo limbo or strangler fig. If you have a choice, consider adding natives. Even one tree can make a difference to a bird making it back up north or dying along the way.”

We arrive at the manchineel tree. Actually, I walk straight past it before Killam points it out. It’s surprisingly unassuming. The leaves look just about like most others in the canopy. Despite its name, no one’s actually died from the manchineel in recent history, but every part of it can cause one’s skin to burn and blister. Should a branch brush across one’s face, temporary blindness is likely. It’s so toxic, many experts say don’t even breathe near it, and definitely don’t stand under it in the rain. But here next to the trail, it looks like any other plant just doing what it needs to survive.

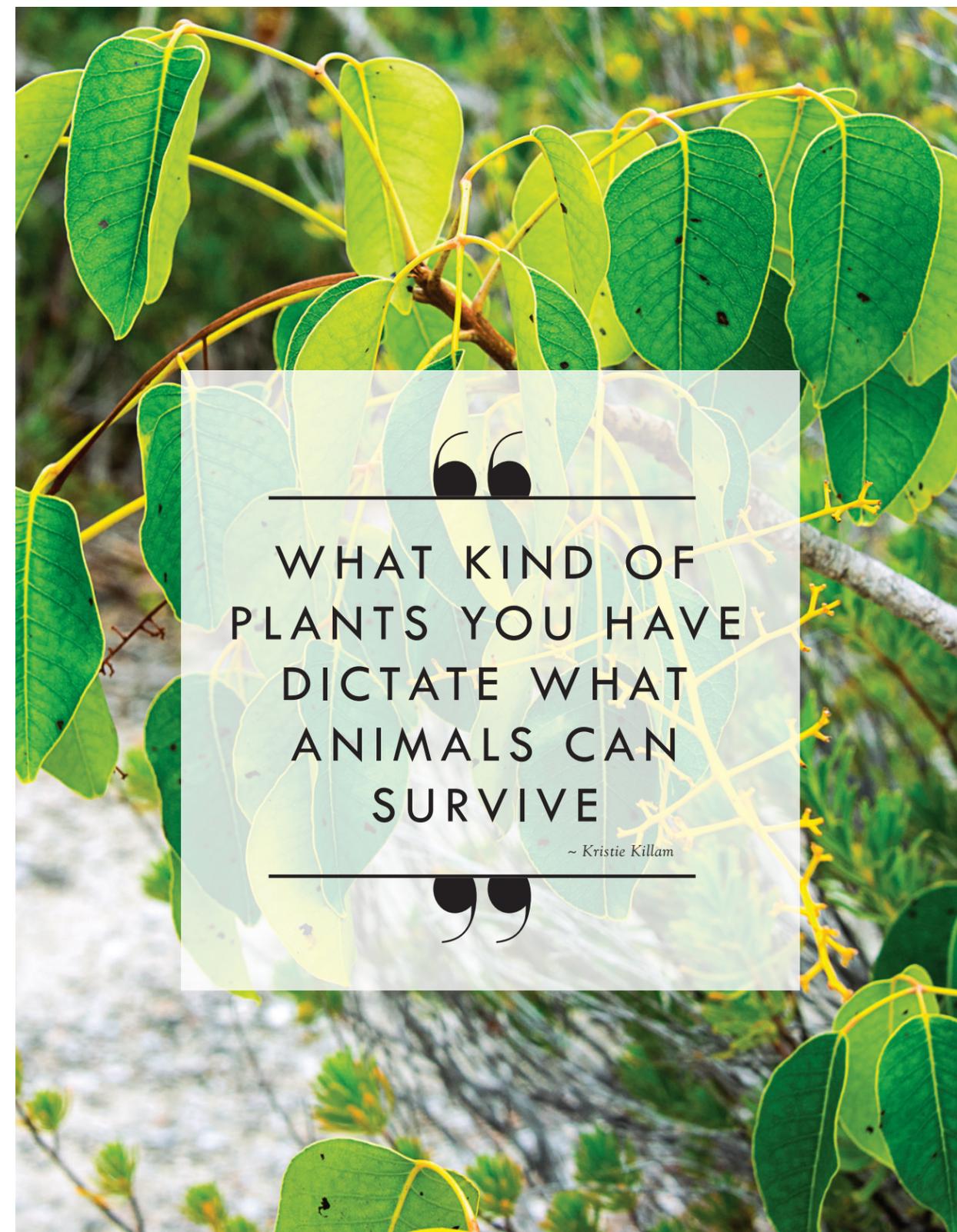


The pigeons don't seem to eat the manchineel. I'm not sure if anyone knows if that's because of its poison, or because the fruits are simply too big to swallow. Not much is known to eat it, except possibly iguanas. But then again, not much is known about it at all. Some of the chemical compounds in its poison can't even be identified. Like the lignum vitae, it's nearly extinct in Florida; though it has yet to be studied enough to realize its purpose in the native ecosystem or the pharmaceutical wonders it may hold.

What we do know, though, is that sea grapes are definitely underrated. As we walk back to the road, we talk about how most trees are under-appreciated. They give life not just to birds, but to everything on the planet.

Killam stops and points up at a particularly tall slash pine, hiding amongst its leafier cohorts in the forest. As she stares at it, she whispers. "Trees are also important to people's souls. A walk in the woods really restores your heart and spirit." 

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| **Opposite Page:** SilverPalm (*coccothrinax argentata*) A particularly graceful stand of silver palm greets visitors traveling on the Overseas Highway at Bahia Honda. It's not just the unusual silver color under the leaves that make this tree so beloved. Its berries are coveted by many birds, its flowers by bees, and its fronds by everything it shades from the sun. While many species of palm are native to the Florida Keys, surprisingly enough the iconic coconut palm is not | **Above:** Poisonwood (*metopium toxiferum*) is like poison ivy but 100 times more potent. To the threatened white-crowned pigeon, however, its berries are a vital meal. Poisonwood is found on most trails here, often flourishing in ground disturbed by development. Its droopy leaves can have black spots, which help in identification |