



Every year, our DC-area Wild Plant Nursery sells some plants to raise money for local ecological restoration projects. And every year, we end up selling more than we sold in the previous year. Back in 2019, for example, we sold \$192,885 of nursery stock; last year, that figure was \$243,207.

For us, this raises an obvious but somewhat elusive question: why are people buying more of what we're selling? What we're selling hasn't changed — it's still local-ecotype native plants. But there have been lots of other changes, and no doubt more than one factor is driving our sales. For example, "epidemic gardening" seems to have boosted demand. Another enabling factor may be that the nursery is now more accessible to people who aren't professional landscape managers. But we suspect that the most important factor is a change in the way that our homeowner clients think about their purchases.

Just to judge from the many conversations that we have had with these clients, there seems to be a growing realization that the burbs are not as green as they look — and that, at least in part, the remedy is to give over a portion of one's property to wild, native vegetation. Although our evidence for this is just anecdotal, it seems to us that more and more people are thinking of their residential landscapes, not just in terms of ornament, but also in terms of function, and especially ecological function. So maybe we're at the beginning of something much larger than just little native-plant spot gardens.

Could extensive plantings of locally-native species boost the conservation value of your lawn? There is reason to think so: one intriguing study of DC-area lawns focused on the Carolina chickadee, a common native bird in our region. (See below.) The study found that plant biomass had to be at least 70% native to sustain chickadee populations. Given the heavy use of nonnative species in

DC-area yards, the status quo is not very encouraging — not for chickadees, not for the insects that they feed on, and not for many other native birds either. So, yes, it's a good bet that an appropriate selection of locally native plants could help keep native wildlife around, if you plant enough of it.

Of course, in much of the DC region, 70% won't happen on many lawns, but that doesn't mean that the vision is hopeless. Around here, almost everywhere you look, assuming that you know what to look for, you'll find room for substantial improvement. Suppose, by some measures and in some areas, we could get to 50%?

What would that look like, that kind of smart regrowth? We're not sure overall, but we can make out a few components — there would be less turf, for example, and more care of our big oaks and hickories. Roadside plantings might be native. Some stormwater dry ponds could be planted with native vegetation. Maybe native plantings could become a standard part of schoolyard landscaping. And so on. Once you start looking, it's not hard to find possibilities.

We do know one thing: if we're going to reinvent our landscape, we'll need to do it together. We will need a great deal of "civic invention" — new ideas for the common good, a little like our nursery was back in 2001, when we first set it up. And we'll need those ideas in many fields — maybe even in fields that haven't yet been invented! We don't know what that would look like either. But as we write, we note that the swallowtails are on the Joe-pye weed, and the painted turtles are sunning themselves on downed logs in the water. Maybe the answers aren't so far off.

— Chris Bright & Katherine Isaacson.

Chris is the Sangha's President.

Katherine is our Development Manager.

Desirée Narango, Douglas Tallamy, and Peter Marra, "Nonnative plants reduce population growth of an insectivorous bird," PNAS 115.45 (November 2018), 11,549-11,554. Available for free at [pnas.org](https://pnas.org). Required reading for all suburban naturalists!

**Photo:** From left to right, meet Matt (our Conservation Manager), Katie (Operations Coordinator), and Kelsey and Sophie (two of our amazingly competent interns). The photo was taken in May at our Wild Plant Nursery in Springfield, Virginia. See inside for more on new staff.



# COWS

The Tree Bank is protecting a 45-acre property that adjoins the headwaters of an important stream. (The Tree Bank works along a section of the Dominican Republic / Haiti border, on the Dominican side, to restore native forest and improve the incomes of small-holder farmers.)

We call this property the “Gran Reserva” — the Big Reserve. The stream is important, not just for its own sake, but also because it supplies water to the little village at the heart of Los Cerezos, the municipality where the Tree Bank is based. The property had been put up for sale in 2013. It attracted the interest of a plantation developer who wanted to plant it in Caribbean pine (*Pinus caribaea*), a thirsty, fast-growing species that is not native to the island of Hispaniola, where the DR and Haiti are located. Under such management, that stream would likely have dried up.

The locals, understandably, were not keen on this idea, so we provided our Dominican partner organization with enough money to buy the property and turn it into a nature reserve. About half of the Reserva was already forested, to varying degrees. The rest was degraded pasture. The idea was to replant the pastures with native, local-ecotype trees.

Since then, the Reserva has seen occasional plantings, mostly of over-flow stock from our Tree Bank Nursery, which is only about a mile down the road. (Tropical tree seedlings grow fast. Sometimes they outgrow their containers before we can schedule them for planting.) But over the past year or so, our nursery production really picked up, so we decided to try to do an initial planting of the entire Reserva. And this spring, we managed it! More or less. The entire property was planted, except for a few little areas that we’ll get to later this year.

But just a few days after we finished, the owner of an adjoining property, a young man named Onelio, released his herd of about 15 cows into the Reserva, so that they could browse the freshly planted hillsides.

Fortunately, one of the Tree Bank’s Co-Directors lives at the top of a steep hill about a mile from the Reserva. Standing on the road that runs past his house, Cosme can see part of the Reserva, and he noticed the cows, probably within a day or two after they were released. So he hopped on his motorcycle, drove over to the Reserva, photographed the cattle to prove what happened, shooed them back into Onelio’s pasture, fixed the fence, and surveyed the damage. The little trees were much better forage than the tough, unpromising grass into which they had been planted. And the trees that the cows didn’t eat, they mostly tore out or trampled. There wasn’t much left of our recent plantings.

**Photo:** Cosme took this photo in June. It shows a group of Onelio’s cows chewing their way through the Gran Reserva. We had to replant this area once the cows had been evicted. Other vegetation here includes pine, both native and exotic (cattle mostly don’t like pine), some native scrub in a gulley (at left), and some big trees on the ridge, most of them probably remnants of forest that was lost years ago. There may also be some mangos up there; mangos are not native to the New World but they’re very common on Hispaniola.

Over the course of the next week or so, our two Tree Bank Directors, along with the Mayor of Los Cerezos and the board-members of our partner association — in short, virtually all the local dignitaries — took turns berating Onelio for his transgression. And to make matters even more awkward, Onelio is one of our drivers. He’s one of the few people whom we trust with our pickup truck. The hundreds of little trees that his cows destroyed — they had all been ferried from the nursery up to the Reserva by Onelio himself.

We’re sure that Onelio got the message. And within a week, he was trucking more seedlings up to the Reserva to replant the damaged areas. That job is now complete, so we can congratulate ourselves again. But there’s an important lesson here for conservation. Owning a few cows can make sense for small-holder farmers, but in the American tropics, cattle have proved to be powerful instruments of ecological harm (not always, it’s true, but in general). Because of their power, they must be managed with care. It’s not fair, and it’s bad for conservation, when the owner benefits from the cattle, without also “owning” the collateral damage that his cattle are causing — especially when the damage is greater than the benefit, as it frequently is. This is where the Tree Bank, and programs like it, can help. They create community ownership, and that can rearrange both community and personal priorities. So a few cows are OK, but only if you respect the trees.

## ONE OF THE BEST

In May, after an extensive independent review of our programs and finances, the Earth Sangha was once again chosen by the Catalogue for Philanthropy as one of the best small charities in the Greater DC area. Recognition by the Catalogue means that donors can be confident that their contributions are being spent effectively, in a way that will advance our work. This is our fifth time as a Catalogue charity. (Recognized charities are eligible to reapply every four years.) We are grateful to the Catalogue for helping to enable our local conservation projects.





## NEW STAFF: MEET SARAH & KATIE

**S**arah Mard, formerly one of our interns, is now the Sangha's Volunteer Coordinator. She accomplished this transition in June, to the immediate benefit of both our Wild Plant Nursery, and the volunteers who donate their time to it. Same hat though.

Sarah and her family moved to Fairfax County in 2018, from a suburb of Dayton, Ohio. She and her husband, Rick, have four kids, ranging in age from 13 to 19. Sarah was born in Arizona and grew up in the Florida panhandle. This is her first time living in the mid-Atlantic, unless you count Ohio. (Is that part of the buckeye mystique? No doubt someone will tell us.) Rick is a data scientist for the Army, which explains their presence here. They're hoping that the Army will let them stay put for another six years or so. Sarah gives the region a positive review, for both its biological and cultural diversity.

Sarah's first encounter with the Sangha was back in 2018, when she attended our fall plant sale, and, she points out, "some of the things that I bought back then are still alive!" That winter she and the kids volunteered with us at some of our seed-cleaning sessions, and after that she explored the joy of invasives control.

Our volunteer agenda appealed to her — and not just because of the plants. "The people were so welcoming," she says, "and without a lot of expectations."

Up to now, Sarah has seen herself as a kind of "professional volunteer." That's partly a coping mechanism for dealing with the stresses of being an Army mom. But it has also been a chance to explore. "Being a volunteer," she says, "kept me engaged." She has volunteered with the scouts (for the kids), at a library, and at an urban garden.

In her new role, one of Sarah's priorities is matching the volunteer with the activity. "More intricate tasks require more experience," she says. At the nursery, that's true even of weeding. "It's so specific — you have to be able to distinguish the weeds from everything else." But obviously, not everyone is good at everything. "So on volunteer days, who shows up will affect what kind of work we can do."

This is where the coordination comes in. The Sangha's agenda is powered largely by the efforts of our amazing volunteers. We have to manage our work with both sides of that equation in mind. Or as Sarah puts it, "Our volunteers are contributing something very valuable: their time. We have to use it wisely. That's the challenge."

**K**atie Danner joined the Sangha full-time in June, to become our Operations Coordinator. Katie does some nursery work and some office work, but her main job is to make sure that those two realms are in sync. Are the invoices ready for pickup tomorrow? Can we organize these accessions for more efficient irrigation? Did someone remember to print the labels for last week's transplants? (If so, that would usually be Katie herself.) "I love the variety of the work," she says. "But it's very detailed. I really have to pay attention to what my colleagues need."

Katie grew up near Milwaukee, Wisconsin, and came east in 2003. She was 14 when her family moved to Northern Virginia, so she knows the NOVA burbs very well. She graduated from William and Mary in 2011 with a degree in Art History and a year later with a master's in elementary education. Like most recent graduates, Katie's first few post-college years were challenging — and somewhat experimental. She taught English in Japan for four years, but ultimately wanted to live nearer to her family. She returned and taught kindergarten for Fairfax County Public Schools, but eventually concluded that, while she enjoyed teaching, the classroom was just not the right venue for her.

She began interning at our Wild Plant Nursery in August 2019, and continued to work at the nursery, on and off, while studying horticulture at Northern Virginia Community College. "In my view, horticulture has a lot to offer to everybody, but the Sangha's mission really resonates with me. I want to help people understand their relationship with the landscape, and the importance of conservation. There's Truth, Beauty, and Goodness there." She still loves horticulture, especially for its historical and cultural perspectives. But there is a difference between that and her current work: "Of course, there is a lot of aesthetic depth in horticulture, but that's not our focus here. Ecology and related fields show us how sophisticated nature is in terms of function. That gives us a valuable set of insights into what's happening in our world. The world is a gift freely received, and it's our responsibility to steward it well. What a privilege to work to that end here."

**Photo:** That's Sarah, the Hatted One, and Katie at our Wild Plant Nursery in July, during a volunteer workday. Late-season potting always makes people smile, right? Maybe just if you have irrigation.





## THE TREE BANK NEEDS A NEW GUA-GUA

It's time to retire the Tree Bank "gua-gua." Our little pickup is a 1998 Toyota Tacoma. We bought it in 2010. It has puttered along for at least 264,400 miles, and maybe a lot more; we're not sure because the odometer takes occasional breaks. Many of those miles involved hauling soil into the Tree Bank nursery — and big plastic barrels of water too, during droughts, which are common. And of course it has also moved thousands of trees out of the nursery, to reestablish native tree canopy wherever we can in our largely deforested program area, near the Dominican Republic / Haiti frontier. (For more on the Tree Bank, see inside.)

Great work! But the gua-gua is 23 years old now and it's showing its age. Almost every month brings a new problem and some months become a pile-up of automotive dysfunction. In June, for example, we had to replace the alternator and the transmission, and rebuild a differential. (We tried to buy a used differential but we couldn't find one old enough to fit in our gua-gua.) These repair costs are really beginning to add up.

We are probably going to replace our current gua-gua with another Toyota pickup: a used Hilux. We want to make this transition soon, before the current gua-gua sheds any more parts!

The Hilux will likely cost around \$35,000. Why so much? Partly because the Dominican Republic is an island economy, so most goods have to be imported; on big-ticket items, that can add a lot to the price tag. And markets are small there, by US standards, so there may not be much downward pressure on prices from competition. And the pandemic has exacerbated things by setting off a round of inflation.

Of course, the Sangha can dip into its savings to help cover the cost. But we're also hoping that you will give the project a boost. And to make the most of your gift, two very generous donors have already contributed \$10,000 toward the new gua-gua; another generous donor has added \$1,000 to that. Please help us grow this gua-gua fund! To donate, see the enclosed card, or go to [earthsangha.org](http://earthsangha.org). No disrespect intended towards our old gua-gua, but the Hilux will be a far better vehicle for getting around the rugged country of our project area — and a much more durable tool for fighting deforestation.

**Photo:** A forest arrives in our old gua-gua! In June (from left to right), Manolo, Ysidro, Enrico, and Juan unload our pickup and prepare to move several hundred native tree seedlings, grown at the Tree Bank nursery, into our Gran Reserva. It's too rough in there for the gua-gua, so the little trees will be packed onto burros for the rest of their trip.

# EARTH SANGHA

## CONSERVATION IN PRACTICE

The Earth Sangha is a nonprofit 501(c)(3) charity based in the Washington, DC, area and devoted to ecological restoration. We work in the spirit of Buddhist practice, but our members and volunteers come from a wide variety of religious and secular backgrounds.

Want to contact us or make a donation? You can support our work by becoming a member. Membership starts at \$35 per year. Donations are tax-deductible. You can mail us a check (made out to "Earth Sangha") or donate on our website. We will send you a receipt and include you in our mailings. (If your name and address are correct on your check, there is no need to send us anything else.) To donate specifically to our DC-Area programs, write "DC-Area" on the check memo line; to donate specifically to the Tree Bank, write "Tree Bank" on the memo line. [earthsangha.org](mailto:Contact us at: Earth Sangha, 5101 I Backlick Road, Annandale, VA 22003 | (703) 333-3022 | <a href=). Complete program information is available on our website. Want to volunteer with us? We work with volunteers at our Wild Plant Nursery and our field sites in northern Virginia. For more information see our website or call Matt Bright at (703) 333-3022.

The Acorn: Our newsletter is printed on paper that is 100% post-consumer waste recycled, process chlorine-free, and manufactured entirely with wind-generated electricity. This issue copyright © 2021, Earth Sangha.

Gold-rated: The Earth Sangha has a gold rating from GuideStar Exchange for commitment to transparency.

One of the best: The Earth Sangha is recognized by the Catalogue for Philanthropy as "one of the best small charities in the Washington, DC, region."

