

THE ACORN

DECEMBER 2022

25 years of native plant conservation

We couldn't have done it without you

When my wife Lisa and I founded the Earth Sangha, back in September 1997, we really did not know what we were doing. We had only moved to Northern Virginia, from Montreal, five years earlier. I did have some useful context: the DC region's flora was vaguely familiar, since I grew up in rural Pennsylvania. Lisa grew up in rural South Korea, which is definitely not like DC, botanically or any other way. But our problems were not just botanical. We also didn't have any money, we didn't know anyone in the field, and we had no idea how local land-managers practiced conservation, or to what extent they did that. But I could see one thing clearly: there was a big need for large quantities of locally native, wild plants. Even back then, that was obvious. I regret to say that it still is.

The Sangha has grown prodigiously since then — and in several directions. Take a look at Katherine's numbers, on the right. But that growth is not so much our doing as yours — since if you're reading this, you're probably a supporter. (I should mention one strategic retreat: Lisa also led a meditation group up until June 2018. But the region has plenty of resources for that kind of practice and we concluded that our efforts were best focused on forest and field.)

How did all this growth happen? Or to be blunt: what is causing people to volunteer with us and write us checks? Of course the reasons vary, but the most common theme seems to be this: conservation should be a civic responsibility. And perhaps like most civic responsibilities, it seems to work best when it's close to the ground. Well grounded: that's our specialty, in both of our program areas, both here in the DC area, and in our Tree Bank program area, along the Dominican Republic / Haiti border.

That perspective, plus big doses of patience and generosity, have built a funding, volunteer, and partnership system that has proved effective, even though it is still pretty small. Of course, we do want to keep growing — to create larger benefits for the natural areas that we serve. And we hope that you'll want to be a part of that. Conserving native-plant communities is not a bad way to spend 25 years. And what about the next 25? See the articles inside. Let's just keep going!

— Chris Bright, President

25 YEARS OF GROWTH

A few crucial numbers help to define our work

During the past 25 years, in the DC Area:

397,648 local-ecotype native plants have been distributed from our northern Virginia nursery.

10,742 volunteers donated their time & effort to our work.

201,000 hours of volunteer labor planted, built nursery structures, & worked to clear invasives.

305 local schools were supplied with plants.

52 "Plant Grants" were awarded to strengthen low-budget conservation.

39 Interns learned conservation inside & out.

And in our Hispaniolan Tree Bank project area:

165,690 coffee, cacao, & native Hispaniolan trees have been distributed from the Tree Bank Nursery.

468 acres of forest & degraded pasture have been brought into care.

\$276,257 have been lent to small-holder farmers, through our Forest Credit facility.

What I find most remarkable is how much our work has grown over the past five years. It took us 20 years to distribute about 140,000 plants from our DC-area nursery, but in the past five years we've distributed some 260,000 plants — almost twice that number — to bring our total to nearly 400,000. (Most of these numbers are estimates. All are cumulative except for the Tree Bank area estimate.)

— Katherine Isaacson, Development Manager

Photo: In October, Matt, our Conservation Manager (blue shirt and orange pants), worked with students at Fairfax County's Marie Butler Leven Preserve to cage a planting to protect it from deer.

THEY'LL MATCH YOU!
see the back page

The Tree Bank: what can we expect in 5 years?

The Tree Bank works along a section of the Dominican Republic / Haiti border to boost small-holder incomes in ways that conserve and restore native forest. Here's how it might grow in five years.

Coffee and cocoa are finally being produced, more or less reliably, in quantities and qualities that are worth exporting.

We are continuing to bring more little patches of degraded pasture into the program, perhaps at the rate of five 1- or 2-acre patches per year. Coffee and cocoa continue to drive the enrollment.

At the Tree Bank Nursery, we have begun to produce substantial amounts of 20 native tree-species. (That would be up from about 10 species now. It can be hard to boost the inventory because we need to know where we're going to plant everything, and not every species is welcome on every farm.)

We will have built a little office for our community association. The office will allow for secure storage of documents; it will also serve as a venue for private meetings. (Most association meetings are large and loud — and definitely not conducive to negotiation.)

We will also have built a “secadero” (a drying structure) to help farmers improve their cocoa and coffee harvests. (Drying sharpens the flavors of the beans and reduces any mustiness.)

Our expert birders will have returned for another round of surveys to complement the ones done in 2016-2018. Intermittent surveys will help us keep track of the local bird populations.

And in at least one other region, somewhere in Central or South America, we will have founded another branch of the Tree Bank. By

working on two project areas, we'll learn how to modify our procedures to suit different circumstances. We will also create more benefits and make a larger contribution to climate stability.

& in another 25 years?

We might be a little foggy on some topics, but we do have a sense of direction:

Our project area has become partly cloaked in patches of forest, both young and old. On the region's upper slopes, young stands of Hispaniolan pine emerge from the grasses and ferns. (This is the island's only native pine; it is still common but is in rapid decline and is redlisted as endangered.) At the base of those slopes, older and taller stands of broadleaf forest offer a cooler, shadier habitat to the birds and lizards stalking insects along the forest streams. Younger stands of planted broadleaf forest shade understories of little cocoa and coffee trees. As for ownership, most of the region remains in the hands of individual local farmers — but we will have helped our community association to purchase some areas that are of special significance for conservation. A kind of quilt of public and private land has spread over the region, and accommodates both the native forests and traditional crops.

We will have founded an institution, somewhere up in Los Cerezos (the municipality where the Tree Bank is based), for the study of Caribbean forestry, agroforestry, and ecology, and with housing available to visiting scientists and students — and maybe also to visiting artists and photographers.

Drawing on our experience with birding, we have begun to sample other wild plant and animal populations. We make the data

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Photos: At left, in October, Tomás Aquino spoke with a group of our Tree Bank farmers (above) at our partner-association's center — which your dollars built. Tomás is a vice-minister for the federal ministry of the environment, and, as we learned, he's a fan of our work! The man sitting in the middle is an executive for “Productos Mamá,” a major food processor in the Dominican Republic. The other man is a colleague of his. They are interested in the local pigeon pea crop (“guandules,” as they're known in the DR). It has taken a while but our team is finally getting some well-earned recognition!

Our DC-area work: what will it look like in 5 years?

I hope that we will have begun to expand our nursery operation, offering more consistent access to our most in-demand species for restoration purposes.

We will continue to make progress growing types of plants that we typically have had only in limited quantities — for example, native blueberries and ferns.

Our efforts to produce high-value canopy tree species, like oaks and hickories, will begin to pay off, as larger quantities of these species are more regularly available, and our production is not so heavily dependent on past years.

We will expand our efforts to revisit restoration sites, remove invasives, and assess the need for future plantings.

We will have begun to experiment with clonal techniques, including tissue culture, as a tool for local-ecotype conservation. Here's why we think this could be important. We currently work almost exclusively with seed that we ourselves collect (only two species in our inventory are currently grown from cuttings). Hand collecting works well for common species, but not so well for species that are locally uncommon-to-rare, where seed viability is poor — a scenario that may be due in part to the increasingly common stress of habitat fragmentation. To deal with this situation effectively, we will likely need a low-impact propagation technique that doesn't rely on seed alone. It's true that the results of clonal propagation would not be genetically diverse, since all the plants from any single lump of clonal material would be genetically identical. But the plants would still represent local genotypes, and would allow us to maintain species that might otherwise disappear from the region. And, of course, the clonal plants could interbreed with their wild relatives to form subsequent generations that are more genetically diverse.

The educational component of our work will also have expanded. In addition to the classes I give for the Arlington Regional Master Naturalists, our Wild Plant Nursery and various restoration sites will host formal and informal classes to share information about our native flora and promote local conservation.

& in another 25 years?

My predictions get murkier as we peer further into the future. Some huge factors are largely out of our hands, for instance, the pace of development, the spread of invasive species, or the effects of a changing climate. Of course we will try to prepare for the worst, but my predictions here are somewhat more optimistic.

Our efforts to build out information resources like our Native Plant Compendium, and our on-the-ground expertise should position us as a go-to resource for advice and consultation for native plant restoration in the DC region.

Decades of training our Plant Conservation Interns will have produced a generation of conservationists for the Northern Virginia region (and potentially beyond), helping to spread our vision for practical plant conservation that preserves local genetic diversity.



Our work to remove invasive plants and replant with locally native species will, we hope, have helped reestablish secure populations of a variety of rare to uncommon plant species.

On the less sanguine side, we will likely confront species extirpations and potentially even extinctions. We hope that our work will help prevent such losses, but substantial conservation efforts, both on the ground and at the policy level, will be needed to confront this potential wave of species loss. We hope to work with land managers and ecologists to get out ahead of declines in local populations.

Climate change will no doubt have accelerated and we will be feeling the effects more directly. Both conservation and climate-change mitigation will have taken on a more urgent tone. We will likely be working on local mitigation issues like reestablishing wetlands or enlarging riparian buffers. Such measures could help reduce the effects of increasingly frequent major storms, or increasingly intense urban heat island effects.

As development and climate change continue in the DC-area, the task of working with landowners to recreate habitat corridors and fight fragmentation will become increasingly urgent. We expect to be among the groups working to understand how vibrant urban-suburban communities can embrace an ecologically sound landscape.

— Matt Bright, Conservation Manager

Photo: In October, Sarah, our Volunteer Coordinator, finished up the first in a set of Oak - Hickory Incubators, designed to protect these valuable seedlings from mice, voles, and other critters of that ilk.

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available online in layered GPS maps. We have also developed a soil monitoring program for checking on soil fertility and the local carbon reserves. How useful are we for farming or fighting climate change? Soil monitoring should help us figure that out!

Our “Forest Credit” facility has begun to work with our partner farmers on projects beyond just ordinary crops — but that still make good conservation sense. Maybe some projects are for water management. Maybe some focus on farming without commercial fertilizers, which have become very expensive. And maybe some projects are social. For instance, people often ask us for help paying their medical expenses. (We have helped some people some times, but a systematic approach is beyond us, at least for now.)

— Chris Bright, President

HELP US GET BACK TO NORMAL!

In both of our program areas — here in the DC area, and in our Tree Bank program area along the Dominican Republic / Haiti border — we have spent the last few years focused on our nurseries. This was logical, since the epidemic had greatly reduced our capacity to do anything else. It was also successful: in both program areas, our nurseries are in great shape, and well primed to drive our restoration efforts and those of our colleagues.

Of course, we never completely abandoned fieldwork. Planting and invasives control continued, intermittently, and with small groups of volunteers. And we did some important work, most notably with our Fairfax County Park Authority partners on the restoration of several rare meadow species. But the time has finally come to return to what we and our volunteers and colleagues had come to see as our pre-epidemic norm.

For the DC area, that would mean a more systematic approach to our fieldwork, including more invasives control, and more frequent evaluation of our sites, especially some of the older ones, which haven't had this kind of attention for a while.

For the Tree Bank, “normal” would also involve more evaluation, as well as more planting on many of our sites. The Tree Bank has a huge site inventory — I think we have about 70 sites now — but this year, many of these sites lost substantial numbers of native-tree seedlings due to a prolonged rainy season, which promoted dense growth of weeds that out-compete the little trees for light and soil if they aren't chopped back — and we couldn't keep up with the chopping because of a lack of farm labor occasioned by the Dominican government's efforts to prevent Haitians from crossing the border. Not much that we can do about that! Our imperfect remedy: hope for better weather and pay more for farm labor. One way or another, we will restock those sites and maintain them.

Both here and in the DR, your generosity has created some wonderful spaces. Please help us care for them! Staff time, insurance, materials, repairs, tools — as you probably know, the costs can really add up, even for a small organization.

— Chris Bright, President

THEY'LL MATCH YOUR DONATION!

Two very generous donors will match the first \$50 of your gift! You give at least \$50, we get at least \$100 — and you can designate the full amount for either our DC-area work or the Tree Bank. See the enclosed reply card, or give on-line at earthsangha.org. The match runs through January 2. One \$50 match per household.



Photo: In October, Lisa Bright, one of the Sangha's founders, cleared invasive groundlayer from a section of Long Branch Stream's flood-plain in Fairfax County's Rutherford Park.

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. [Contact us at: Earth Sangha, 5101 I Backlick Road, Annandale, VA 22003 | \(703\) 333-3022 | earthsangha.org](http://earthsangha.org). 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.

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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.”

