

TREE BANK

WHAT WE DID THIS YEAR & THREE BIG THINGS FOR 2017

n its 10 years of operation, our Tree Bank Hispaniola has never had a more productive year than 2016. The Tree Bank works along a section of the Dominican Republic / Haiti border, on the Dominican side, to boost the incomes of small-holder farmers and conserve forest on their lands. This year's main achievements:

We improved our Forest Credit procedures. Forest Credit makes small lines of credit available to farmers in exchange for conservation easements on their forests. The program is very popular but has suffered from late repayments. In 2016, we discovered that the problem can be greatly reduced just by frequent, regular reminders.

We built a second tree nursery. The nursery was built with support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German international aid agency. It's just a mile-and-a-half down the road from our main nursery. Capacity at both nurseries is about the same: each holds about 20,000 tree seedlings.

We expanded our native-tree accessions. We are paying "seed bonuses" to farmers who collect wild native-tree seed for us, and we're

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HELP US GROW!

s you'll see from this issue of the Acorn, the Sangha has had an extraordinarily productive year. Our Tree Bank Hispaniola is growing in several dimensions at once. Our DC-area work is creating opportunities not just for conservation but also for environmental education.

Next year promises to be even busier, in both of our project areas. We're embarking on, not just more projects, but more kinds of projects. Conservation is complicated, and progress requires a variety of approaches.

Amidst all of this activity, we need your help with two key items:

- 1. The Tree Bank's native-tree nursery effort is crucial to the Tree Bank as a whole and unique in our project region. More funding will produce more forest.
- 2. Our DC-area Wild Plant Nursery badly needs more indoor growing space. (See page 2.) We will need to build a hoop house somewhere, preferably on a schoolyard. That would do more than just address our production problems; it would also help create a better informed and more powerful constituency for conservation.

So please, as you close out your year, help us grow!



THEY'LL MATCH YOU!

hey're at it again: our two very generous year-end benefactors 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 to either one of our program areas. See the enclosed card, the back page of this newsletter, or our website at earthsangha.org. The match runs through December 31. One \$50 match per household. And don't forget: to claim a 2016 tax deduction, you must donate before the year-end!

Photos: Above, in October we put in a selection of native tree and shrub seedlings along the edge of the display meadow at the Fairfax County, Virginia, Government Center. The project began this spring. At left and also in October, our volunteers replanted along a recently built trail at Sunrise Valley Elementary School in Reston. Plants for both projects were grown from locally collected wild seed at our Wild Plant Nursery.

ENVIRONMENTAL AWARENESS. ECOLOGICAL RESTORATION NATIVE PLANT PROPAGATION FROM LOCAL ECOTYPES. GREEN BUDDHISM



TREE BANK: 2016 & 2017

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learning how to germinate it. We have increased the number of native tree species in our inventory from 11 to about 25, but we cannot yet produce reliable seedling stands of most of them.

We planted five test sites for our new Bosques Rentables ("Profitable Forests") project. The project is intended to restore large areas of degraded pasture and scrub to native tree canopy, with understory plantings of coffee and cocoa. Profits from those crops should provide an incentive for bringing more and more land into the program. Our test sites are each about three-quarters of an acre. All are doing well; coffee and cocoa are already being planted into several of them.

We began replanting the deforested area in our 45-acre Reserva, the region's only community-owned park. Forest covers about 24 acres of the Reserva; the rest is degraded pasture. We planted four acres of the degraded area with about 2,700 native-tree seedlings from a variety of species.

We got professional help. You knew we needed that, right? We are now collaborating with GIZ, the Dominican Republic's National Botanical Garden, and the Virginia Society of Ornithology. (For these latter two partners, see the November *Acorn*.)

We began mapping our project area. We are using high-quality satellite photos and an ArcGIS database to try to locate the biggest opportunities for conservation.

Our Goals for 2017

We expect a very full 2017 agenda for the Tree Bank, but most of our work will focus on just three critical goals:

- **1.** Expanding and improving Forest Credit. Our region continues to lose forest every year. Conserving the remaining fragments has to be a top priority, and Forest Credit is our best tool for that.
- **2.** Improving our native-tree propagation. We need more native tree species in our system, and for each of those species, we need reliable techniques for producing large seedling stands.
- **3.** Scaling up Bosques Rentables. We hope to reach an aggregate total of at least 20 acres, but this will depend on the seedling supply from the Tree Bank nurseries.

GREENHOUSELESS AGAIN

ad news: the Fairfax County Park Authority has informed us that we will probably not be able to continue using the agency's 3,000 square-foot greenhouse in Chantilly, Virginia. An engineering consultant discovered that the facility, built in 1988, does not meet current building codes; this has provoked liability concerns.

Loss of the greenhouse is a serious setback for our DC-area work. We had only started using it last December, but with impressive results: by early spring, it had produced at least 23,000 plugs and pots of various herbaceous species. We used many of those plants to give our spring season an enormous boost.

We are trying to turn adversity into opportunity by approaching other agencies and jurisdictions to see if they are interested in greenhouse or hoop house projects. We have two encouraging leads from other jurisdictions but at the time of writing, no commitments.

But the most interesting option would be a schoolyard hoop house. In addition to producing plants for parks and stormwater projects, such a facility would provide important benefits to the host school. The hoop house could:

- ** Supply students with interesting volunteer opportunities right on school grounds.
- ** Produce native plants for the school's own landscape.
- ** Supplement environmental science courses.
- ** Offer hands-on vocational training to students interested in horticulture, landscape design, botany, natural history, ecology, and related fields.

We've taken the idea to several teachers and school administrators in Fairfax County and can report a very enthusiastic response. One school has made a preliminary offer of space. We think that this space would work, but it will take some time to evaluate our proposed structure there for compliance with zoning regulations.

Whether this space works or not, we could really use your help! If you want to help conserve the region's wild flora and bolster the ecological literacy of local students, this is your chance. Our school-yard growing facility will be a very efficient tool for improving both parks and minds. To donate, use the enclosed reply card or see page 4.



AN AGENDA FOR ECOLOGICAL LITERACY

s the newest member of the Sangha's staff, I still have a lot to learn about our work. Whether I'm working at the Wild Plant Nursery, collecting seed, planting natives at a field site, or pulling invasives, I am always thinking about how what I learn could be passed on to others. The Sangha's DC-area work focuses on conservation in a heavily developed landscape, and in this setting it is easy to remain unaware of the unique ecosystems that exist around us. Working here has made me more familiar with our natural areas, and through my daily interactions I have come to appreciate the value of these places in a way that I couldn't have before. I think the nature of our work provides a great opportunity to educate the community, especially young people, about the ecological value of places we pass by every day.

School grounds account for a lot of public land in our area. In the City of Alexandria and the counties of Arlington and Fairfax, they make up over 2,000 acres, or 3 square miles, of public land. In working with schools, I see a great opportunity to create valuable habitat for native species in urban areas where space is often limited. In the November issue of the *Acorn*, Chris introduced our Schoolyard Garden Kits and mentioned a forthcoming manual that will help schools plan native gardens and restoration projects.

We are also working to start native-plant propagation efforts at interested schools—we're hoping to find a site that could host a greenhouse or hoop house, but students can do a lot with a few cold frames too. For a schoolyard native-plant garden, it would be great to supplement our stock with plants the students had grown themselves. (For more on the schoolyard hoop house idea, see the opposite page.)

In addition to the schoolyard greening projects that we have in the

Photos: On the opposite page, in May, Tree Bank Co-Director Manolo Sanchez showed off a native tree seedling in a Bosque Rentable planting. Above, in July, Conservation Manager Matt Bright verbally transplanted students at our DC-area Wild Plant Nursery. The kids were in the "Young Scholars" Program at Bren Mar Park Elementary School.

works, the Sangha provides educational opportunities for students as well as school staff. I really enjoy having student groups volunteer at our nursery and field sites because it gives people a chance to learn as they work. By planting a meadow in a degraded area or pulling invasives from a forest floor, students have a chance to really understand the rationale behind our work, and to see in a new way the concepts that they are learning in school. As I learn more about the Sangha's work, I hope to increase our interaction with students through school visits that involve planting natives, seed collection, and plant propagation on school grounds.

Communicating with teachers, administrators, and maintenance staff is essential to all our work with schools. On October 26th, we held a workshop for educators at our nursery; the presentation focused on our Schoolyard Garden Kit initiative. Looking ahead, we'd like to provide an opportunity for maintenance and grounds staff to learn about our work with schools, as they are often responsible for maintaining gardens and restoration projects after the initial plantings have been done.

Our goal is to involve students and schools in projects that benefit their immediate surroundings as well as the curriculum. A schoolyard garden could be relevant to a biology or environmental science class, but it could also provide leadership experience for the students working on the project. We have met with environmental club members who are interested in plant propagation at their schools, and I'm encouraged by the work that these groups are already doing. But whether students are already involved in local environmental work or not, I think that they stand to benefit from projects like ours. In addition to real-world experience, we want to offer them a chance to explore new academic and career possibilities.

I think the Sangha's environmental education efforts should focus on helping students develop a sense of place that includes the natural features and native species of our area. If developed early in life, I believe that this connection could promote decades of engagement in local environmental issues.

— Emma Lanning, Environmental Education Coordinator



DC AREA

THIS YEAR AND THE YEAR TO COME

In 2016, we ...

Distributed a record number of plants from our Wild Plant Nursery — over 25,000. All plants were grown from local, wild seed.

Supplied at least 63 restoration and schoolyard plantings.

Managed our first large-scale greenhouse propagation effort. It was very successful — until it wasn't. (See page 2.)

Clobbered 17 acres of invasive forest understory at the Marie Butler Leven Preserve.

Launched our Leven House upgrade, also at Marie Butler Leven. (See the November *Acorn*.)

Developed our Schoolyard Garden Kit concept. (See page 3.) **Hired** Emma! (See page 3.) We now have a full-time staff of five. **Added** hundreds of data points to our ArcGIS database of local, wild plant populations.

In 2017, we're aiming for ...

More plants: We hope to begin expanding our Wild Plant Nursery at Franconia Park. We plan to recruit more local government agencies into our propagation work. We're also looking for hoop house sites. (See page 2.)

More for the parks: We'll help on at least as many restoration sites as we did this year. At Marie Butler Leven, we'll start on several nativeplant demonstration gardens and finish the Leven House upgrade. More for the schools: We'll launch our Schoolyard Kit initiative. We hope to build a schoolyard hoop house. And we're looking to extend our field-site collaboration with schools. (See page 3).

More science: We'll begin publishing some of our ArcGIS data online, and we'll start work on a digital herbarium focused on Marie Butler Leven. (An herbarium is a scientific collection of plant specimens.)

Photo: In May, we visited with Cineida at her store, in our Tree Bank project area. By local standards, Cineida is wealthy. (Her wealth is in cattle and land, not cash.) That little girl is Haitian. She lives with Cineida, and in exchange for room and board, she helps with chores. Such arrangements are common in the region, which lies near the DR / Haiti border. The Tree Bank pays an above-average and uniform rate for field labor, in an effort to boost local Haitian income.

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, 10123 Commonwealth Blvd., Fairfax, VA 22032-2707 | (703) 764-4830 | earthsangha.org. Complete program information is available on our website.

Want to volunteer or meditate with us? We work with volunteers at our Wild Plant Nursery and our field sites in northern Virginia. We meditate in the Del Ray section of Alexandria on Tuesday evenings. For more information see our website or call Lisa Bright at (703) 764-4830.

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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."



GUIDESTAR

