The Newsletter of the Earth Sangha

The Acorn

December 2018

This Year at the Preserve

As we wrap up one of the soggiest years we've ever seen at the Marie Butler Leven Preserve, in McLean, Virginia, we want to share some of our successes and challenges, and our plans for next year.

Restoration and Replanting

This has been our busiest year at the Preserve by a huge margin. Planting is a good example: by mid-November, we had installed 6,103 native plants, all from our Wild Plant Nursery, and all donated to the Fairfax County Park Authority. (Last year's total was 1,840.) If our first hard frost comes late, we may be able to get in a few hundred more before we close out the season. Another 120 or so native plants were generously donated to the Preserve by our members and neighbors. Some of these plants were also produced at our nursery.

We focused our replanting on three areas: around the Leven House, to begin a native-plant demonstration garden; in the pollinator garden and other woodland edges near the front of the meadow; and on the forested slopes down from the house, to control erosion after invasives removal.

Most of this year's replanting has focused on the most visible areas of the Preserve. Our goal has been to create areas that are both ecologically valuable and aesthetically pleasing. Katherine and I have noticed a definite uptick in family photo-shoots in the park, so we're counting that as proof of progress!

Invasives Removal

As Katherine explained in a previous *Acorn*, our invasives-control efforts are focused too. This year we dealt mainly with Japanese stiltgrass, porcelain berry, and garlic mustard. Our procedures emphasize rapid, mechanical removal, clearing of debris to discourage dumping and to keep the Preserve looking tidy, and immediate replanting.

We'll detail our methods in a future *Acorn*. I'll just mention here that we've become heavily reliant on our scythes to clear large stands of stiltgrass with minimal soil disturbance. With a little practice (and a hand sickle for detailed work), the scythes also let us clean up replanted areas — with little collateral damage and virtually no soil disturbance.

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2018 by the Numbers

a few of the numbers that define our year

DC Region

47,344 plants were distributed this year from our Wild Plant Nursery (up 75% from last year).

7,755 of those plants were donated to local public lands.

34 schools worked with us on schoolyards, the nursery, or our field sites.

41 parks or other field sites benefited from our plants.

925 volunteer hours were donated to our work at the Marie Butler Leven Preserve (MBLP).

464 staff hours were devoted to MBLP.

6,103 plants from our nursery were donated to MBLP.

Tree Bank

65 small-holder families are working with the program.

29,830 dollars of low-cost Forest-Credit loans were made this year to Tree Bank farmers.

257 acres of forest were protected by those loans (in credit-for-easement agreements).

15 acres were planted this year with Hispaniolan pine, once a dominant species in Hispaniola's Cordillera Central and now endangered.

15 more acres of forest canopy were underplanted with coffee and cacao, to create an economic incentive for conserving canopy.

352 acres were in care by December 1 (including Forest Credit, coffee and cacao plantings, and various other sites).

(Tree Bank area numbers are approximate.)

Photo: In October, students from the Stone Ridge School of the Sacred Heart in Bethesda, Maryland, planted a native groundlayer on a forested slope at the Marie Butler Leven Preserve in McLean, Virginia. The plants are local-ecotype stock from our Wild Plant Nursery.

Marie Butler Leven, continued from the front page . . .

Community Engagement and Volunteering

We've been fortunate to work with many great volunteers this year, during our invasives-control "pull-a-thon" days, as well as during our fall "plant-tathalon." All told, we've hosted over 900 hours of volunteer service at the Preserve this year — roughly a $25,000 contribution to the Fairfax County Park Authority. (For more numbers on our work this year, see "2018 by the Numbers" on the front page.) Our volunteers come from a diverse array of backgrounds: the Sangha's own veterans of the field, Virginia Native Plant Society members, students from Stone Ridge School of the Sacred Heart, Georgetown University First-Year Orientation students, three Eagle Scout candidates, George Marshall High School Key Club, and various other groups. We really appreciate the support — very little of the work mentioned above would have been possible without our hard-working volunteers!

Looking Forward

Using the experience we've gained from our first full year of living at the Preserve, Katherine and I have decided to build a more effective seasonal work calendar. In the winter, we'll focus on removal of woody invasive species. In the spring, we'll target early-season annual and biennial weeds like garlic mustard; we'll also plant some native forbs and warm-season grasses into the meadow after it's mowed. In the summer, we'll focus on cutting stiltgrass, removing mile-a-minute, and denying as many invasives as possible the opportunity to set seed. Fall will be our main planting season, because less drought stress makes for more successful large-scale plantings.

There's important work to do in every season. We hope to see you out at the Preserve sometime soon!

— Matt Bright, Conservation Manager

Photo: In March, Lauren Kinne, a teacher at W.T. Woodson High School in Fairfax County, and Rory McAlevy, one of her students, produced some local-ecotype wildrye (*Elymus* spp.) from seed as part of our Classroom Wild Plant Propagation project. (See Matt's article on the back page of the November *Acorn*.) We're looking forward to working with Woodson again next year!

INTERN WITH US

In the new year we will be looking to fill five paid, part-time, DC-area internships:

2 growing-season internships at our nursery
2 summer internships at the Marie Butler Leven Preserve
1 office internship near the GMU main campus

All internships will pay $15 per hour.
For details contact Matt Bright at mbright@earthsangha.org.

HELP US GROW OUR RESTORATION NURSERIES!

Every year, our DC-area Wild Plant Nursery produces thousands of native, wild-propagated trees, shrubs, forbs, and grasses for local parks, schoolyards, and other public landscapes. Help us make it even bigger! As part of our effort to extend the nursery, we're asking you to help us create a Nursery Expansion Fund. The nursery already plays a unique role in maintaining our region's natural heritage. Help us keep our wild areas healthy! See the enclosed reply card.

The Tree Bank's main nursery could use some help too. It badly needs new shade cloth and posts. The current shade cloth is pretty ragged — it has to be stitched back together after almost every heavy storm, and there are a lot of those down there. We'll probably need $3,000 to $5,000 to fix everything up. Want to help? See the enclosed reply card.

Two very generous donors will match you! Our 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 for either of our program areas. See the enclosed card, or give on-line at earthsangha.org. The match runs through January 4th. One $50 match per household.

COFFEE & COCOA

This year, our Tree Bank Hispaniola program planted coffee and cacao trees in about 15 acres of forest fragments. The Tree Bank works near a section of the Dominican Republic – Haiti border to conserve forest and improve small-holder farm incomes. The coffee and cacao seedlings were grown at the Tree Bank's two nurseries and planted in forests owned by our 65 partner-farmers. Cacao is the little tree whose seeds are the primary ingredient in cocoa and chocolate, although you would never guess that from the way that the raw ones taste. We now have a total of at least 23 acres in this kind of planting, excluding out-of-program plantings. (It's difficult to track all these trees!)

These fragments are hardly Nature Primeval but their canopies are still mostly in good shape. They're fairly high, by Caribbean standards — most at least 40 feet, I would say — and composed almost entirely of native species. The coffee and cacao trees are strictly understory; they will never grow high enough to reach the canopy. Neither coffee nor cacao is native to Hispaniola, but neither is invasive there either — an important consideration, since the island already has its share of nasty "woody weeds," a legacy of some seriously misguided agroforestry projects.

Apart from their non-invasive good manners, these species have two other virtues of great interest to us: they tolerate shade readily, and their seed is worth a lot of money. Farmers can do much better selling coffee or cacao than they can by burning forest to graze cattle or plant beans.

That's why coffee and cacao plantings are one of our strategies for saving forest canopy. The theory is: if the forest can make money for the farm, then it's worth keeping or even expanding. We also try to make the production as ecologically benign as possible; that means no pesticides or chemical fertilizers, and enough room in the understory to allow native saplings to grow up and renew the canopy. The resulting harvests will be smaller than in conventional production, but forest-friendly crops can be sold for a much better price. (And we do not support coffee and cacao plantings in more natural forests. Instead, we encourage farmers to put these in our Forest Credit program, which offers modest lines of credit in exchange for conservation easements on higher-quality forest.)

Three years ago, a leaf-blight epidemic killed all the coffee trees in our region. Ever since, we have been replanting with blight-resistant varieties and urging people to include cacao where their soil is suitable. I don't know how many coffee and cacao stems we have put in since the blight, but the total must be in the tens of thousands. We're in a hurry. We're trying to reclaim as many of these fragments as we can, before they are lost to the saw, fire, or cattle. Twenty-three acres may not sound like much, but I think it's pretty strong evidence that farmers are buying into our theory.

— Chris Bright, President

PROGRAM COVERAGE

Just a reminder: this newsletter includes coverage of our work in both of our program areas:

In the Washington, DC, area, we are propagating over 300 native plant species directly from the wild, and working on public lands to help restore the region's meadows and forests.

In our Tree Bank Hispaniola area, along a stretch of the Dominican Republic – Haiti border, on the Dominican side, we are working to conserve remnant native forest in ways that boost the incomes of the region's residents, both Dominican and Haitian.

Photos: Above, a truckload of native trees is packed up at the main Tree Bank nursery for delivery to a local farm. The trees are free to local farmers. This is part of our coffee operation: we're restoring native-tree canopy to low-value pasture; once shade begins to form, the coffee is planted in. We hope that the prospect of coffee profits will encourage more of these plantings. This photo was taken in June 2017. Below, species signs at the Tree Bank's main nursery. Photos were taken at various times by various people. Except for the coffee sprouts (far left), all of these species are native to our program area, and all are grown from seed collected from local forests. They are all fairly common except for "Caoba criolla" (far right), which is in really bad shape. This is the native mahogany. It was nearly extirpated from Hispaniola a few centuries ago, because of its beautiful timber. There is a saying that you can find more of this species in Spanish cathedrals than you can find in all of Hispaniola. We're not too sure about this — but the saying does suggest the rapacity of the logging. Even medium-sized specimens are now hard to find in the wild. We only know of a few.

SCALING UP

Our Wild Plant Nursery is designed to be a regional resource for plant conservation and restoration. Every year, we supply local-ecotype native plants — and advice on how to establish them — to a broad clientele that ranges from home gardeners to park managers. Our clients' projects are numerous, but they have usually been fairly small. This year, due in large measure to production from the Chantilly greenhouse that the Fairfax County Park Authority is allowing us to use, we were able to supply plants to several large projects. Here are two examples.

Working with the Fairfax County Department of Public Works and Environmental Services, we supplied several thousand plugs for local bioretention ponds at schools, libraries, and firehouses. No single pond is very large, but in the aggregate, these plantings should help reduce runoff into local streams and, ultimately, the Chesapeake Bay. We also supplied a couple hundred early succession tree species and herbaceous meadow plants to DPWES for the Alban Road maintenance facility, where the agency is working in partnership with Friends of Accotink Creek to develop higher-quality wildlife habitat.

The Park Authority also tapped us for plantings at Riverbend and Fitzhugh Parks, to the tune of nearly 1,000 shrubs and trees. The plantings will help restore a forest understory that has been largely eliminated by heavy deer browsing. (The new plants will be protected from deer browse.) A more stable forest understory will, in turn, allow the canopy to renew itself, by expanding the number of tree seedlings that grow past sapling size.

We're proud to have assisted this year with several other larger projects as well — at Dyke Marsh, for example, at Arlington's Bluemont Park, and at Isaac Crossman and Cavalier Trail Parks in Falls Church. We still love our small projects, but we're also looking forward to more big plantings in the years ahead.

— Matt Bright, Conservation Manager

Photo: In November, young volunteers from Horton's Kids, an educational nonprofit in DC, helped organize plug trays at our Wild Plant Nursery. Photo courtesy of Carmen Play, Horton's Kids.

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 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) 764-4830.

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.

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."