



## BUILDING FOREST CREDIT

If you're interested in our Tree Bank Hispaniola, we could really use your help growing the program's Forest Credit project. (The Tree Bank works along the Dominican / Haitian border to improve small-holder farms and conserve forest. Learn more on our website.)

Forest Credit is the most cost-effective way that we have found to conserve forest in a landscape managed by poor small-holders — a common scenario in the rural tropics. The project works by providing low-cost lines of credit to farmers who agree to place some of their forest in a conservation easement. Forest Credit applicants must be creditworthy and must possess forest worth conserving. Once in the program, they can borrow the equivalent of about \$155 for every acre of land in easement, once a year, provided that they have a credible repayment plan.

In effect, Forest Credit allows farmers to make money from their forest without cutting it down. Forest Credit is in great demand because it provides a service almost wholly lacking in our project region, and in the rural developing world in general: low-cost credit. (The cost of a typical 9-month, \$445 loan would be about \$22.)

We started Forest Credit in 2011 and have thus far made 130 loans. Our record isn't perfect. At present, we have three truant loans, but we think that these people will eventually pay up, since there is considerable community pressure to do so. On the whole, the program is working well: Forest Credit is currently protecting about 175 acres of mostly high-quality forest and this year, 32 families took out loans.

When we set up the program, we decided to err on the side of generosity, instead of trying to create a theoretically self-sustaining system that worked only with a group of very poor people, who can produce little, in a country prone to inflation. But because the package is so generous, we need to top up the fund occasionally, and of course we want to expand it, to reach more farmers.

We know many farmers who could make good use of our credit, and who possess valuable forest. So this is where you come in! Help us help more farmers, and keep more forest on the land.

**Photo:** In November, some 30 volunteers worked the Long Branch Stream floodplain in Rutherford Park, in Fairfax County, Virginia. They put in over 200 native, local-ecotype grasses, goldenrods, asters, and other herbaceous plants, all grown at our Wild Plant Nursery.

## MORE DATA, MORE CONSERVATION

In 2016, we plan to add a new dimension to our DC-area conservation work. We will begin mapping plant communities in some of this region's best remaining natural areas. Once the data is in good shape, it will be made available to our partner public agencies, schools, nonprofits, and the public in general. By expanding the data available to conservation, we hope to expand conservation itself.

As most readers of the *Acorn* probably already know, we operate an ecological restoration program for the DC area. We propagate native plants directly from the wild, and we work on public lands to control invasive alien plants and restore native plant communities. Our Wild Plant Nursery is now home to more than 300 species, all of them grown from seed that we ourselves collect, with permission, from local natural areas. This collection effort — the most extensive of its kind in this region — has given us a very detailed understanding of which species are growing where. The new project will extend this understanding, and share it with the conservation community at large.

The product itself will be an ArcGIS mapping database. It will include location data for target species, as well as field observations,

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## WRAP UP YOUR YEAR WITH CONSERVATION!

Help us extend the Tree Bank's Forest Credit to more forests and more families. (Write "Forest Credit" on the memo line of your check or in the Paypal message field.)

Or help us create an information resource for plant-community conservation in the DC area. (Write "DC Area" on the memo line of your check or in the Paypal message field.)

## THEY'LL MATCH YOU!

Two very generous anonymous donors have pledged to match the first \$50 of every donation that the Sangha receives! We hope that you'll do your part to drain their bank accounts in our favor. The match is in effect through January 15. But don't forget: to claim a 2015 tax deduction for your donation, you must donate before the year-end! For more donation information, see the back page, the enclosed card, or our website at [earthsangha.org](http://earthsangha.org).



**Photo:** Tropical deforestation remains an enormous environmental problem. Here's a typical scenario in our Tree Bank project region. That mountain ridge is dominated by native Hispaniolan Pine (*Pinus occidentalis*), a valuable timber species, now officially endangered. You can see a clear-cut patch on the right. Mid-slope are formerly forested areas converted to low-value pasture or cropland. These areas are occasionally burned to clear them and to release the nutrient in the brush that grows up over them. Typical crops here would be beans or root crops, but the yield might be too low to justify the cost of the necessary fertilizer. In the gully in center frame and at the bottom, you can see part of a broadleaf forest fragment. Such fragments are very vulnerable, not for their timber but for the soil beneath them. These are the forests that Forest Credit is designed to protect. This photo was taken in January 2015.

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and it will be updated periodically. We are already building this database. (See the previous *Acorn* for our efforts to date.) In 2016, we will point the effort at several of our “most natural” natural areas. We'll work in consultation with the local agency officials and other experts who already help guide our seed collection.

Eventually, the project will create a data library on our best local parks. Such a library could improve conservation — not only in those parks, but also on other, more degraded sites, by providing a clearer picture of what the degraded sites should look like. The library could be searched for an appropriate “type site” that could guide restoration on a degraded site. The library will have educational potential as well — both for individual naturalists and for classroom curricula.

That's the long view! Obviously, it's going to take a while to get there. Our goal for 2016 is just a pilot effort: we plan to select two important natural areas in northern Virginia and attempt to inventory them, in consultation with our expert colleagues.

Even the pilot phase of this project is going to cost — and that's why we'll need your help. Our biggest expense will be staff time. Over the course of 2016, we hope to devote about two months of one person's staff time to the project. That will cost about \$7,000. Given the potential return, we think that will be money well spent. We hope you'll agree, and that you'll help us reach that goal.

## WILDLY INCLINED

Seed-gathering in the wild has been my favorite activity, if not my obsession, over the past decade or so. As soon as I realize that I've got a few hours to spare, I've got to get out there! Despite its creeping suburbanization, the DC region still offers lots of possibilities for discovering wild plants. And the harder a place is to get into, the bigger the thrill once I manage it. If, like me, you're “wildly inclined,” you'll know what I'm talking about.

For example: I walk into a power-line meadow and find that everyone in it seems to be getting on well with the business of living. I see lots of old friends: deertongue grass, boneset, goldenrods, and maybe a chinquapin or two where the meadow meets the forest. (Chinquapin is a big shrub, a cousin of the American chestnut.) The place seems to be in good shape — not much disturbance, not too many invasives. And when I begin to look more carefully, I can see how my friends have organized themselves according to what each species likes — shade or sun, upland soil or moist lowland.

Each of these communities is like its own little world. If you keep visiting, it will teach you about itself. Sometimes I visit woodlands around Manassas, where I can see lots of oaks — white, black, scarlet, and chestnut — and lots of hickories too — mockernut, pignut, and false shagbark. I know that if I go into such a place, I'll probably find flowering dogwood here and there in the understory, beneath the big trees. On the forest floor, there will be patches of lowbush blueberry. If it's fall I might poke around the oaks to see some of my favorite late-season herbs, like silverado or common dittany; in the spring I'll have hopes of finding wild pink, or plaintain-leaved pussytoes. I won't need a soil analysis to know that I'm in Acidic Oak-Hickory Forest.

I'm obsessed with seed — I admit it! — but once I'm out in the field, the experience that most fascinates me is not so much the individual plants, but exploring these wonderful natural communities. I love seeing how well they arrange themselves, and how well balanced they seem to be with the other aspects of nature. I bring back seed to grow plants for restoration, but what I really want to propagate, and what we all should want to preserve, are the plant communities that hold our landscape together.

— Lisa Bright, Executive Director



## THIS YEAR AT THE MARIE BUTLER LEVEN PRESERVE

Our big push at the Sangha this year has been a “back to basics” approach. We’ve identified our most effective activities, and we’ve made them better. In the last *Acorn*, I explained how we are bringing our seed collection into the 21<sup>st</sup> century with ArcGIS technology. At the Wild Plant Nursery, we have rebounded from a brutal winter and are now expanding our propagation capacity both at the nursery itself, and at a Fairfax County Park Authority greenhouse. (See the back page.) And in the Dominican Republic, we’re doubling down on our Forest Credit system, a cost-effective and popular way to protect threatened forest fragments.

Another focus activity this year has been our work at the Marie Butler Leven Preserve, a 20-acre park tucked away in the McLean section of Fairfax County. With the help of our Conservation Team Leaders, we have made our biggest push in years to knock back invasive alien plants at the Preserve, and to stabilize or restore native cover. Over 300 volunteers contributed their efforts across about 50 events. That’s roughly triple the number of volunteers we hosted here last year.

These events weren’t just about yanking out the usual invasive crud, although we did plenty of that! Among our other activities this year: working with Eagle Scout candidate Greg Hardison, from Scout Troop 1128, to replant the native pollinator garden; renovating our raised beds with students from Stone Ridge Social Action (see the photo above); and tending to our small stand of American chestnut (*Castanea dentata*) and butternut (*Juglans cinerea*).

While it may not yet be obvious to the casual observer, our work has begun to pay off across this small landscape. What was once an overgrown lawn of fescue and exotic buttercups is becoming a lush meadow that is home to many native forbs and grasses. Visitors to our Facebook page may have seen a photo of an artist working on a painting of the meadow last summer. In the woods, we are pushing the invasives out of the little magnolia seepage. Expect to see more native trillium this coming spring! And the vernal pond has been planted with emergent vegetation that should support diverse insect and amphibian life.

I hope this description doesn’t sound self-congratulatory. On the contrary, the people who should be congratulated are all of you — the

people who donated and volunteered their time and effort. I’m especially grateful to our Team Leaders, who helped the other volunteers, and who did so much of the work themselves — weeding, chopping, yanking, and stacking up all of the resulting slash.

I don’t have space to mention everyone to whom we feel indebted, but I do want to offer my special appreciation to Jim Clark and Evelio Rubiella for their unyielding persistence in removing invasive shrubs and vines. Their work-areas are very different now from the way they were just a year ago. I also want to thank Daly and Georgina Chin for all their hard work. The last time I saw Georgina at the Preserve she was nursing an injured hand — while insisting that she “can still pull vines with the other!” And I’m grateful to Alan Ford who, between his many other commitments, still found time to rip out English ivy infestations. I wish I could thank everyone who came out. One other thing to note: there’s still plenty of work to do out there, so keep some space for the Preserve in your 2016 calendar!

I’ll close with a brief roundup of this year’s invasives-control work, in terms of aggregate area covered:

- Suppression of forest canopy invasives: about 5.7 acres.
- Control of forest understory invasives: about 3.5 acres.
- Hand-pulling of invasives in forest groundlayer: about 1 acre.
- Herbicide treatment of forest groundlayer invasives: about 2.25 acres. (This was a donation to the project from the Fairfax County Park Authority.)
- Invasives control along forest edges: about 1,100 feet.

Control is substantial over most of these areas but not complete.

My forecast for 2016: more invasives control, and maybe a little more planting. If you live in the DC area, I hope to see you out there sometime soon!

— Matt Bright, Conservation Coordinator

**Photo:** In October, about 40 10<sup>th</sup>-grade students from the Stone Ridge School of the Sacred Heart helped Matt Bright and Katherine Isaacson clear invasive slash from the Marie Butler Leven Preserve, in Fairfax County, Virginia. That’s Matt with the red hat. Katherine, far right, is the Sangha’s Development and Outreach Coordinator.



## UNDER GLASS!

**T**he Fairfax County Park Authority has invited us indoors! We have been granted exclusive use of the greenhouse at the Park Authority's Flatlick Maintenance Facility in Chantilly, Virginia.

This is a big step forward for our conservation partnership with the Park Authority. The greenhouse will substantially extend the work that we are doing at our Wild Plant Nursery, located in the Park Authority's Franconia Park, in Springfield. Our nursery is producing over 300 species of native plants, all propagated from local, wild seed, for use in ecological restoration projects.

The greenhouse will improve the nursery program by providing a controlled, indoor space where we can germinate large stands of seedlings out of the weather and away from field pests. The greenhouse will be especially helpful for sprouting herbaceous (non-woody) species in late winter and early spring. Boosting spring production of these species will make our program more useful for a range of restoration activities — for instance, meadow plantings, and invasives-control projects focused on the forest floor.

The greenhouse is an impressive, double-gabled, glass-and-steel structure. It measures about 70 feet by 40 feet and is equipped with an irrigation system, gas heating, and a “swamp cooler” (a device that cools by evaporating water). The greenhouse was built to grow bedding plants and other ornamentals for Park Authority properties, but in recent years, after ornamental production was shut down in response to budget cuts, it has been used only for storage.

No other jurisdiction in the greater Washington region has a partnership comparable to the one that we and the Park Authority have built together. In terms of ecological sophistication, comprehensiveness, and volunteer muscle, that partnership is unique in this region, and the greenhouse will strengthen it further.

We are very grateful to the Park Authority for allowing us into the greenhouse — and we promise to turn it into a powerful tool for conservation.

**Photo:** The interior of the Fairfax County Park Authority greenhouse, in Chantilly, Virginia, in April 2014, when we first visited it. At the time, the greenhouse was being used for storage. This winter, we will begin preparing this space for native plant propagation.

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](mailto:info@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.

**The Acorn:** Our newsletter is produced with “print on demand” technology, which consumes far less energy and materials than does conventional printing. This paper is 100% post-consumer waste recycled, process chlorine-free, and manufactured entirely with wind-generated electricity. This issue © 2015 by the Earth Sangha. All rights reserved.

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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.”



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