



**DC AREA: SCHOOLYARD KITS**

Our DC-Area Schoolyard Greening program is getting a major upgrade. We have been helping schools in northern Virginia and DC to create native-plant gardens on their grounds since 2005. Our effort reaches 20 to 30 primary, middle, and secondary schools each year.

Now, thanks to a generous grant from the Botanical Artists for Education and the Environment, and with the help of many local teachers and school administrators, we’re making the program more systematic, more ecologically meaningful, and, we hope, more useful — to both classrooms and landscapes.

The upgrade is based on a schoolyard kit concept. The idea is to create “off-the-shelf” sets of plants and garden instructions. Teachers can then choose a kit and use it as is, or adapt it to their particular circumstances.

We’re planning four such kits, each with its own native-plant species list. Each list will mimic, roughly, the species composition of a wild plant community that is important in our region and that lends itself to schoolyard imitation. Our four communities are: medium-moisture meadow, wet meadow, riparian community, and forest edge.

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**TREE BANK: 1 BOTANIST + 6 BIRDERS**

The farmers in our Tree Bank Hispaniola program will soon be collaborating with a botanist and a group of ornithologists. (The Tree Bank works along a section of the Dominican Republic / Haiti border, on the Dominican side, to improve the incomes of small-holder farmers and conserve forest on their lands.)

One of the problems that we have faced in developing the Tree Bank is a lack of expert advice tailored specifically to our project region. We need that kind of guidance to improve our native-tree propagation, understand our effects on wildlife, make the species composition of our plantings more natural, and so on.

Finally — after a decade of rough work — that guidance has begun to arrive. Last month, we recruited a Dominican botanist to advise us on our tree-species inventory. Brígido Peguero works on plant taxonomy and exploration for the Jardín Botánico Nacional in Santo Domingo, the DR’s capital city. Brígido has produced for us a sort of botanical overview of our project region, and a long list of the relevant native-tree species. We’re going to “customize” these documents for our community, our nurseries, and our field sites.

Closer to home, Lenny Bankester, a member of the Sangha and Vice President of the Virginia Society of Ornithology, has put together a partnership between the Sangha and the VSO to collect bird population data on Tree Bank field sites. In December, Matt and I will escort six VSO birders, including Lenny, down to our project region, and we hope to host an annual birding expedition with VSO from now on. Over time, the resulting data should help us improve bird habitat. We also want the project to have an educational aspect: we’re looking for ways to include local students in birding activities.

Hispaniola is home to a very high number of both plant and bird species. Many of those species are threatened by agriculture, a situation that is typical of tropical forest regions. By adding locally-focused science to the hands-on knowledge of our farmers, we hope to grow the Tree Bank into a model of farm-based conservation for the developing world.

— Chris Bright, President



**Photos:** Above, tick-seed sunflower (*Bidens aristosa*) blooms in our meadow at the Marie Butler Leven Preserve in September. At left, BAAE board members Mary Page Hickey (left) and Karen Ringstrand present Chris Bright with a \$10,000 grant check at our Wild Plant Nursery in October. The grant is for our schoolyard kit project.



## MARIE BUTLER LEVEN: CONSERVATION COMES HOME

**W**e are adding some important infrastructure to our northern Virginia conservation effort: we are working with the Fairfax County Park Authority on an upgrade of the house at the Marie Butler Leven Preserve, in McLean.

The house, likely built in the 1940s, was home to Maurice Leven and his wife, Marie Butler Leven. Nearly all of the 20 acres that make up the Preserve today were the house grounds. Maurice was an economist, but took a keen interest in local conservation and wanted the heavily farmed property returned to a more natural state. He survived Marie, and eventually deeded the property over to the Park Authority, which received it in 1964. Preservation of the property was a key factor in preventing Kirby Road, which borders the Preserve to the west and north, from being converted into a major highway.

We have been working at the Preserve since 2004, to help realize the vision for the property that Maurice stated in his will, and that the County incorporated into the Preserve's master plan: the creation of an arboretum.

The house project opens up a new front in our effort to preserve the Preserve! We're going to bring the interior up to date, and improve key features of the exterior as well. We think that the project will cost about \$385,000. All of the funding will come from private sources.

Our contractor for the project is Bowers Design/Build, a McLean-based firm. The schedule calls for completion next spring.

The project will expand our work at the Preserve by allowing us to establish a well-equipped residential presence. The house will be occupied by two staff members: Matt Bright, our Conservation Manager, and Katherine Isaacson, our Development and Outreach Coordinator. (Katherine and Matt were married in September.)

The staff presence will benefit the house itself, by facilitating maintenance. Numerous conservation activities will benefit as well, among them: controlling invasive alien plants, reestablishing the Preserve's native woodland and meadow communities, adapting the grounds to serve as an outdoor learning facility, developing clearer models for the use of volunteer labor in ecological restoration, and the creation of a digital herbarium focused specifically on the Preserve. (An herbarium is a scientific collection of plant samples.)

We are grateful to everyone who is helping with this project, but we owe a special debt of gratitude to three people. The thoughtful guidance of Dranesville District Supervisor John Foust proved crucial in negotiating the various administrative hurdles that unusual projects generally face. David Bowden, the Park Authority's Planning and Development Division Director, manages to combine a thorough understanding of relevant County procedures with a well-developed capacity to listen. And finally, we are especially grateful to Sophie Lynn. Sophie was formerly with the National Trust for Historic Preservation as the Project Manager for President Lincoln's Cottage, a National Monument in Washington, DC. She is our volunteer Capital Project Manager for the Native Arboretum. But the title doesn't do her justice. This project was Sophie's idea — and without her, we couldn't possibly have undertaken it.

**Want to help with the house?** Your donation will make a big difference! Contact Sophie at [slynn@earthsangha.org](mailto:slynn@earthsangha.org) or (703) 835-4327, or contact our office at [info@earthsangha.org](mailto:info@earthsangha.org) or (703) 764-4830.



**Photos:** Above, the Leven House awaits its upgrade in October. At left, work on the Preserve grounds continues: local member-families of the public service organization Sewa International spent a day in September at the Preserve, weeding and replanting a section of forest floor.



## COULD BE A MEADOW. HOW DO YOU GET IN THERE?

**N**ative meadow restoration is one of those topics on which no one, expert or amateur, seems to agree with anyone else. I'm only a neophyte myself, but since the Sangha works in lots of meadows, or would-be meadows, Chris "invited" me to write this essay. So at the risk of being banished from Virginia Native Plant Society grass walks, I have five suggestions for anyone considering a meadow project.

**1. Always start with a good, long look at your site.** If you let it, your site will tell you a lot about how to proceed. Start with the basic, abiotic factors. How much sunlight and moisture is there? What's the soil like? Next, get familiar with the vegetation. Is there already a well-established native-plant community? (If so, there's probably no need to plant.) What about invasive alien plants — what species are present and how dense are the infestations? Then think about the human uses. Are there aesthetic or safety considerations? For example, at our project for Sunrise Valley Elementary School in Reston, we had to consider vehicle lines-of-site, and areas that would occasionally be used for parking or vehicle access.

**2. Think community!** Site conditions should give you some idea of the possibilities. But as you develop your species list, avoid the temptation to create a planting in the same way that you might create a mixtape of assorted "best hits." Instead, try to mimic a natural plant community. A well-selected list should resemble the species composition of an actual meadow, growing on a site that is roughly similar to your own. Such a planting is much more likely to survive, and to provide meaningful ecological value.

**3. Make native meadow grasses your priority.** A meadow without grasses is like a forest without trees. Grasses create habitat for forbs (broadleaf herbaceous plants) and many meadow animals. The larger grasses provide shade, mediate moisture and temperature, and develop

immense root systems important for the movement of water and nutrients. Grasses should be the foundation of your meadow planting.

Which species? Most meadows in our region host stands of little bluestem (*Schizachyrium scoparium*), broomsedge (*Andropogon virginicus*), and Indiangrass (*Sorghastrum nutans*). Wet meadows usually have beaked panicgrass (*Coleataenia anceps*) and southeastern wildrye (*Elymus glabriflorus*). Yet others favor lower-growing grasses, for example, *Dichantheium*s, purple lovegrass (*Eragrostis spectabilis*), three-awns (*Aristida* spp.). At any rate, and much to the chagrin of some over-eager gardeners, I have to report that there are no meadows dominated by butterflyweed and *Liatris*!

**4. Decide how you're going to handle the invasives.** In our region, invasive alien vegetation, both grasses and forbs, can quickly dominate a site and suppress native vegetation if left unchecked. Invasives are probably already present on your site to some degree; often soil disturbance will release them from the soil seed bank. There are various control methods, for example, hand-pulling, solarization, or herbicides. Your choice will likely depend on your site, the scale of the project, your budget, your time, and, of course, which invasives you're managing. As you work, you'll get a sense for what techniques fit your site. For example, if you're dealing with a mix of native grasses and invasive alien grasses — a common scenario — you could try a mowing regimen that hits the maturing cool-season invasives in June, before the warm-season natives have gained height. (We're thinking of using this technique at Fairfax County's Government Center Meadow-Pollinator Garden.)

**5. Finally, be patient.** People know that it takes years to grow a stand of trees, but since most meadow vegetation is herbaceous, they often assume that meadows can be created in a single season. Not so. Meadows take time. All sorts of changes have to occur in a planting for it to stabilize and mature, and probably the most important of these occur underground.

While you're waiting — or better yet, before you start — feel free to contact us. I would be happy to discuss your project, and at the very least, I can promise you moral support!

— Matt Bright, Conservation Manager

**Photo:** It's really green! Is it also really natural? In June, Katherine, our Development and Outreach Coordinator, checked out a meadow planting at Americana Park in Fairfax County, Virginia. The planting was a collaboration between Fairfax County, Friends of Accotink Creek, and the Sangha. We supplied the plants. The sites were planted in the spring of 2015 and is off to a good start.



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Plants for the kits will be produced at our northern Virginia Wild Plant Nursery, where we are growing over 300 native-plant species, all from locally collected wild seed, or spores in the case of ferns. (Of course the nursery will continue to produce stock for other kinds of school landscaping as well — we won't limit ourselves to kits!)

In addition to the plants themselves, the kits will include a manual that will explain, in a simple, step-by-step format, how to create the gardens for which the kits are intended. Of course, staff guidance will also be available. We won't supply landscaping materials, but the manual will explain what is needed.

The kits will probably be designed to create gardens ranging in size from 30 to 120 square feet and will likely cost from \$75 to \$300. (Of course, kits can be extended to cover larger areas.) We expect to be flexible with the pricing, as we are with our plant supply in general, because we want to help schools serving disadvantaged communities. Such schools generally have a harder time funding extra-curricular programs.

We are also planning to gather data on how well the plantings do. Such information could help improve the kits in subsequent years. It may also be useful to environmental science classes and we would be happy to share it with them.

Because the kit gardens will mimic actual, wild plant communities, they should be much more useful for environmental education than the random assemblages of native plants that one typically finds in schoolyard "pollinator gardens."

We hope that the gardens will function as a kind of window into our natural landscape. Through the gardens, students could begin to discover the wild communities that surround them but that, as we know from years of working with student volunteers, are largely invisible to them.

For more information, contact Emma Lanning, the Sangha's Environmental Education Coordinator, at [elanning@earthsangha.org](mailto:elanning@earthsangha.org), or (703) 764-4830.

**Photo:** In May, Maria Elauteria Recio ("Yolanda") showed us around her Tree Bank forest-restoration site. Yolanda is one of our partner farmers.

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 | \[earthsangha.org\]\(http://earthsangha.org\)](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.

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