The Newsletter of the Earth Sangha

THE ACORN

December 2008

Notes on the Year Gone By. A Vision of the Year to Come.

From Turf to Mid-Atlantic Forest

Our thanks to the 250 or so volunteers who participated in the Fairfax County stream-buffer plantings this fall! Buffer volunteers installed 1,270 native trees and shrubs, representing 37 species, on six sites amounting to about 2.5 acres. Four of these plantings were on previously planted sites. (Life on our sites can be rough—even for trees—so additional plantings help.) The other two plantings were on new areas, one of which is shown above. Nearly all the plants were propagated at our Wild Plant Nursery (see page 2).

Stream buffers are strips of vegetation along streams. Under natural conditions, mid-Atlantic streams are heavily buffered, but suburban streams often are not. That's a problem because the suburban landscape doesn't absorb water very well—too much of the land is paved. So instead of infiltrating into the soil, heavy rain rushes into streams as run-off, scouring out channels, washing in pollutants, and generally making a mess of stream ecology. By restoring buffer, we can reduce and filter run-off—a crucial step in healing our streams.

The buffers in the Fairfax County program include a diverse array of native trees, shrubs, and even some herbaceous plants. In addition to their buffering function, the plantings are creating more habitat for terrestrial wildlife.

On line: To learn more about the stream-buffer program, go to www.earthsangha.org/dca/sb.html. For more on the Tree Bank, see www.earthsangha.org/tb/tbmsn.html.

Photos: Banner: Pebbles on the bottom of Long Branch Stream, in northern Virginia's Fairfax County. Above: At one of our fall stream-buffer plantings, also in Fairfax County, Lake Braddock High School students returned a patch of unproductive, climate-changing turf to native forest. (Turf harms the climate because of emissions from lawn mowers, which burn gas very inefficiently.) Right: A different kind of degraded grassland, on the Caribbean island of Hispaniola. Last December, Gasper Pérez Aquino, our Tree Bank Nursery Manager, and Cosme Damian Quezada (in foreground) surveyed pasture on Cosme's farm. We are restoring this site to native tropical forest.

From Pasture to Tropical Forest

On the Caribbean island of Hispaniola, along the Dominican Republic – Haiti border, the second annual Tree Bank planting season is under way, and member farmers are now planting thousands of native tree seedlings on their lands. The Tree Bank is based in Los Cerezos, a Dominican community in the north. The Bank is a community forestry project designed to fight deforestation and improve the incomes of the region's impoverished people.

Gaspar Pérez Aquino, our Tree Bank Nursery Manager, reports that the current focus is adding diversity to the plantings done during the previous season (through March 2007). These plantings cover only about six acres in all, but their significance is far greater than their size.

That's because the Tree Bank is a pioneering effort—and it's pushing against frontiers that are not just ecological but cultural. It is critical that our plantings succeed, and that they be *seen* to succeed. The people in our project area are very friendly, but they are also very skeptical—and given the chronic poverty in which their region is mired, they have reason to be. We need to show them that forest restoration can be worth the effort. (We do this, in part, by paying our farmers an annual fee for planting native trees on their land; the fee will increase as the trees grow. Without that fee, our farmers could not afford to take land out of conventional crop production.)

But ours is not a dot-com, overnight-success kind of situation: our progress is necessarily gradual. For one thing, the Tree Bank nursery is still fairly small—it was founded in 2006—so we cannot create complete forest plantings all at one go. Instead, we have to plant out one or two species per planting season, in the expectation of returning with additional species later. That's what we are doing now. Eventually, we will be able to do more complex plantings in a single season, once our nursery is larger. (See page 3.)

Gaspar reports lots of rain delays, but the little trees are going in. During the last season, we planted about 3,000 native tree seedlings; we hope to plant at least as many more during the current season.

EARTH SANGHA

BUDDHIST VALUES IN ACTION

The Earth Sangha is a 501(c)(3) nonprofit charity dedicated to environmental action as an expression of the Buddhist way of life.

Want to find out more about us?

Background and program information is available on our web site: www.earthsangha.org.

Want to donate or join the Sangha?

You can support our work by becoming a member. Membership starts at $35 per year. Your donation is tax-deductible.
Our mailing address is:
Earth Sangha
10123 Commonwealth Blvd.
Fairfax, VA 22032-2707.

Want to volunteer or meditate with us?

We work with volunteers at our nursery and our field sites in northern Virginia and DC. We hold regular sittings in Old Town, Alexandria, at 211 King Street, third floor, Tuesday and Wednesday evenings, 7:00-9:00. For more information on either volunteering or sitting, call Lisa Bright at (703) 764-4830.

The Acorn

The *Acorn,* an occasional publication of the Earth Sangha, is created 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.

Ambassadors of the Vegetable Kingdom

Seedbox, purple milkweed, zigzag goldenrod, maleberry, hophornbeam: what do these plants have in common, apart from their peculiar names? Three things, for starters. 1: They are all native to the greater Washington area. 2: They are all almost certainly in decline in this region (no, we can't prove it but that's a pretty safe bet, given what is happening to their habitats). And 3: They, along with 150 or so other native species, are being propagated from the wild, at the Sangha's Wild Plant Nursery, for local ecological restoration projects.

By virtue of that last point, there's one other common factor: all these plants have friends—that is, human beings who care about them, and who care *for* them. Our plants are very popular. Every year now, several hundred people volunteer at our nursery, sowing seed, watering, transplanting, weeding, mulching, and mulching again. (Some nearby corner of the universe absorbs a great deal of mulch.) Most of these people are casual volunteers, but a few are in the full bloom of plant geekhood. Some are children, some adults. Some are fair-weather workers; others are Extreme Propagators, who flourish in the cold and damp. The result is an extremely varied fellowship, all coalescing around its equally varied vegetable charges.

And that is a great boon to conservation. Friendship may not guarantee survival, but it can certainly help, and diversity in friendship probably helps even more. Indeed, the growth of the nursery itself testifies to that.

During 2008, for example, some of our more mechanically-minded volunteers worked with our Nursery Manager, Philip Latasa, to build a set of huge concrete-block troughs fitted with pond-liner, so that we could manage our water more efficiently and, for the first time, grow many wetland species.

Beyond the troughs, our more politically gifted colleagues—Valerie Nye, Elizabeth Burke, Melissa Floyd, and others of similar social aptitude—organized our first-ever Nursery Open House, kept our myriad student helpers productively engaged, and guided our volunteers from St. John's Community Services. (St. John's is a nonprofit that creates social opportunities for disabled people.)

And beyond even the politics, if you can imagine such a realm, our botanically-inclined volunteers worked with Lisa Bright, our Executive Director, to collect mountains of seed from local forests, meadows, and wetlands. (Of course, we collect only with the permission of the landowners.)

The results of these various efforts: during 2008, our nursery's production capacity grew from about 10,000 containers to about 18,000. We distributed more than 5,000 plants, representing at least 50 species, to more than 15 natural areas and schoolyards within the greater DC area. And thanks to our intrepid seed scouts, the number of species that we are propagating from local, wild populations is continuing to grow.

We're hoping that 2009 will see continued expansion of our nursery work on all fronts. It had better: we face enormous challenges in our effort to help stabilize the native plant communities of this region, and the native animal wildlife that depends on those plants. But in large measure, additional progress will depend on you. If you haven't already befriended our plants, please consider introducing yourself!

On line: A full account of our Wild Plant Nursery, complete with a plant list and a set of slide shows, is available at www.earthsangha.org/dca/wpn.html.

Photo: In November, Lisa (in green jacket) and volunteers prepared field-grown herbaceous plants for winter in one of the raised-bed enclosures at the Wild Plant Nursery.

Our Tree Bank Nursery Is Expanding

Our Tree Bank nursery is undergoing a major renovation—the first since its founding in 2006. The nursery was designed and built by local farmers. It is a marvel of low-tech engineering: it is turning out thousands of tree seedlings for local farms on a shoestring budget. But it has suffered a lot of wear and tear—and we need to scale it up, to help more farmers and restore more forest. As a first step, we're replacing all the shade cloth. Two years of tropical storms have repeatedly battered our current shade cloth to pieces, and there is a limit to the number of times that it can all be stitched back together. We're also planning to install a cistern to guarantee our dry-season water supply, since our water pipe runs along a narrow dirt road and is crushed from time to time by errant traffic. And we're hoping to buy a used pick-up truck. We need the truck to transport materials into the nursery—and tree seedlings out of it. Our present system of paying for every delivery, both in-coming and out-going, is expensive and greatly limits our planting effort. The upgrade should roughly double the nursery's production capacity. You can help! Visit www.earthsangha.org/tb/tbptnr.html.

The Sangha Launches a Major Restoration Project on Mason Neck

The Sangha has started work on the largest planting that we have ever undertaken in the DC region: a forest-restoration and stormwater management project at the Meadowood Recreation Area. A property of the Bureau of Land Management (a federal agency in the Department of the Interior), Meadowood consists of 800 acres of forest and horse pasture on Mason Neck, a peninsula that juts into the Potomac at the southeastern corner of Fairfax County.

Mason Neck is a great place to learn about the nature of the mid-Atlantic coastal plain. Most of Mason Neck is protected for conservation: in addition to Meadowood, there are two big parks, a National Wildlife Refuge, and the substantial grounds of the Gunston Hall Plantation. Meadowood is Mason Neck's newest protected area; it was designated in 2001.

But even in this more-or-less natural setting, the usual suburban side-effects are readily apparent. Some of Meadowood's pasture is eroding; high run-off levels have destabilized streams, and invasive alien plants infest both field and forest.

Our project addresses some of these challenges on about four acres that the BLM just released from pasturage. We're working with BLM staff to design a native planting for the entire area, as well as stormwater catchments made of stone, plants, and soil. To get the work done, we've recruited one of our most able collaborators: the Lake Braddock High School environmental science program. Lake Braddock students helped us plant an adjoining three-quarters of an acre at Meadowood last May—a pilot version of the present project. (See the photos below.)

Our project will yield several benefits. It will help Fairfax County reach its ambitious tree canopy goals (see www.fairfaxcounty.gov/news/2007/229.htm). It will also sequester carbon, create more wildlife habitat, help stabilize local streams, and increase environmental education opportunities at Meadowood. And once this four-acre planting has begun to take shape, we'll expand the project to other parts of Meadowood. If you would like to help, please get in touch! (See the opposite page for our contact information.)

On line: For more on the Tree Bank nursery, go to www.earthsangha.org/tb/tbhw.html. We will publish a web page on the Meadowood project once we've broken ground on the new site. (Watch the Updates announcements on our home page, www.earthsangha.org.)

Photos: Above, Hispaniolan pine (*Pinus occidentalis*), listed by the IUCN as a "near threatened" species, in production at our Tree Bank Nursery. Below left: On Mason Neck, our initial Meadowood planting site in March 2008, before we started work. Below right: The same area in November, showing the results of native grass-seeding by BLM staff and our first planting, in May, now well established. What a difference six months can make!

Propagating a Partnership at Huntley Meadows

If you want proof that "nature" and "suburban Virginia" and are not wholly incompatible concepts, then you should visit Huntley Meadows. This 1,425-acre park contains one of the largest remaining nontidal wetlands in the Washington region, but it lies just half a mile from Route 1, south of Alexandria. Not familiar with Route 1? Let's just say that it is not North America's answer to the Lake District.

But that is the point. The land that became Huntley Meadows was logged in colonial times and has since accommodated corn and wheat, dairy farms, a highway test track, and an antiaircraft defense site, among other things. You'd never know that now. Huntley Meadows is now home to extensive tracts of forest and marsh, some rare plants, and is visited by over 200 species of birds.

But of course Huntley is not immune to the ills of suburbia. Run-off from nearby development has silted up parts of the marsh, hastening a potential metamorphosis into wet meadow. (The marsh is largely the work of beavers; beaver ponds often become wet meadows eventually.) In a landscape less fragmented than our own, the wet meadow option might have seemed a reasonable outcome—but Huntley's marsh is the only large nontidal marsh remaining in Fairfax County, so the County opted to preserve the Huntley marsh as, well, marsh.

That will require, among other things, the removal of some silt, and a low dam of the marsh outlet, to manage the water level. The work should begin in 2009. As part of the restoration effort, park staff have asked the Sangha to propagate some of the Huntley's native plants for revegetating disturbed areas. By propagating directly from the park, we are helping to preserve the genetics of Huntley's rich flora. We have already started collecting seed from Huntley—and we are very pleased to be collaborating with both the park's managers and its plants!

On line: Read more about the Native Arboretum at www.earth-sangha.org/dca/na/html. Check out the Huntley Meadows page on Fairfax County's web site, at www.fairfaxcounty.gov/parks/huntley. And for updates on Sangha activities not covered in this newsletter, look at our news page: www.earthsangha.org/news.html.

Photos: Above, regenerating woodland in the Restored Habitat Area, part of our Native Arboretum project. Right: Lisa Bright, the Sangha's Executive Director, and Kevin Munroe, Manager of Huntley Meadows, bring an air of lugubrious gravity to the tasks of conservation. (Well, perhaps not.) Lisa and Kevin are standing on Huntley's wetland boardwalk, which allows visitors to tour the marsh without jeopardy to wildlife—or footgear.

A Busy Year at the Native Arboretum

We had a very good year at our Native Arboretum project, at the 20-acre Marie Butler Leven Preserve in the McLean section of Fairfax County. We made substantial progress against the invasive alien plants that are infesting the Preserve's forest. We doubled the size of the invasives-free Restored Habitat Area to about an acre (see the photo above), and we managed partial control in various other parts of the park, amounting to another acre. We also created several plantings, and in collaboration with the Fairfax County Park Authority and the Northern Virginia Soil and Water Conservation District, we helped remodel the Preserve's rain garden.

Our progress in 2008 is a tribute to our collaborators: the Park Authority's Invasive Management Area interns; our own invasives-control intern, Joe Hayes; the Sangha's diverse tribe of volunteers; and volunteers from EPA, Georgetown University, and Dominion Power.

In 2009, invasives control will remain our top priority for the Preserve. We're preparing to extend the Restored Habitat Area all the way to the Preserve's gorge—the wettest part of the Preserve, the most topographically complex, and the richest in terms of its native flora. This will be an adventure. Join us! See the "On line" reference below.