



THE TREE BANK'S "NEXT 100 ACRES CAMPAIGN" PAYS OFF!

CAMPAIGN DONORS CREATE MORE CREDIT RESERVES, OUR SECOND "PARCELA AGROECOLÓGICA," HEALTHIER FARMS

Thanks to your very generous donations, we're well on our way to protecting another 100 acres of threatened tropical forest. Last year's "Next Hundred Acres Campaign" raised over \$10,300 for our Tree Bank Hispaniola program, which works to restore native forest and improve small-holder farm incomes on the Dominican side of the Dominican Republic / Haiti border. We're also very grateful to the Shared Earth Foundation, which generously increased its funding in response to our plea for extra help.

We've already put your gifts to work. We've enrolled seven new farms in our forest-credit program; we're preparing to improve and expand our Rising Forests Coffee groves; and we have started work on our second "parcela agroecológica," an intensive farming system developed to improve yields and permit forest restoration on our poorest farms. Here's the background:

Forest Credit: our credit reserves remain our most cost-effective and popular conservation tool. In exchange for enrolling forest in a conservation easement, farmers can take out low-interest loans in

amounts proportional to the size of their easements. Our seven new members have enrolled over 30 acres of forest, bringing total forest-credit easements to 92 acres. Gaspar Pérez Aquino, our Program Director, tells me that he vets every candidate for credit very carefully. "Members need to be able to repay the loans, and care about the environment, and come to our meetings." Careful vetting ensures that participants are committed to our cause for the long haul.

Rising Forests Coffee: by the time you read this, our new coffee harvest should be on its way to the United States. Last year was hard on our coffee farmers, with drought and pests decimating much of the harvest. (Don't worry, coffee subscribers! We won't have any trouble keeping everyone caffeinated.) But because of the difficulties, we need to help our farmers improve their coffee groves. Older, exhausted coffee trees will be replaced with young, vital ones. The plantings won't encroach on native forest understory, and we will also cut back invasive plants that are damaging both coffee and forest. We'll also plant more

Continued on page 4 ...

INSIDE

Our very generous 2012 donors
A glimpse into the field
Nursery upgrade: the epic continues
And on the final page,
a few seeds of Zen

Drawing and photo: Above, the bay-breasted cuckoo (Hyetornis ruficularis) is one of several endangered bird species that live in our Rising Forests Coffee groves. This species occurs only on the island of Hispaniola. Drawing by Katherine Isaacson. At right, in March, a group of students from Kent State University, in Ohio, spent part of their alternative spring break with us, picking up trash at the Roaches Run Waterfowl Sanctuary in Arlington County, Virginia. This is the fourth year that we have hosted Kent State volunteers, and as in previous years, they proved to be a force for nature!



IN GRATITUDE TO OUR MAJOR DONORS FOR 2012



Over \$5,000

The Shared Earth Foundation (\$17,000)
Two anonymous donors (\$16,000)
The Community Foundation for the
National Capital Region (\$13,934)
The National Fish and Wildlife Foundation
(\$12,140)
Cynthia Irmer & Bruce Engelbert (\$9,200)
The Prince Charitable Trusts (\$7,500)

\$1,000 - \$5,000

Bank of America Foundation
Chris & Lisa Bright
Elizabeth Burke & Thomas Drake
James Clark & Julia Porter

The Dudley & Gene Orr Fund of the
New Hampshire Charitable Foundation
Richard Haeuber & Amy Frey
Robert & Nora Jordan
Christian & Kris Lansing
Ashley Mattoon & David Leopold
Daniel Murrin
Patagonia
Christina Schreiner
Joshua Wenz
Two anonymous donors
(Tree Bank "Next 100 Acres" Match)
Another anonymous donor
An anonymous foundation

\$500 - \$999

William & Helen Ackerman
Jeanne Chung & Dennis Ha
Pamela Cubberly
Meghan & Gregory Noe Fellows
Peter Forbes
Susan Gitlin
Harrison Glasgow
Zeki Gunay
Deborah Klaus
In memory of Troy Anthony Davis
Kathryn & Peter Scudera
The Walmart Foundation
Gail & Bob Weigl
An anonymous donor



\$250 - \$499

Stanley Burgiel & Jeneen Piccurro
George & Theresa Chianese
Mary Kathleen & Stephen Crow
Nancy Hadley & Kerry Lyon
Caroline & Mark Haynes
Sylvia Daniels & Katherine Huston
Andrew Keegan &
Mary Elizabeth Oelkers-Keegan
Robert & Carolyn Mattoon
Sarah & William Mayhew
Charles Mills
Laura Mol
Rodney & Florence Olsen
Robert Pearson & Carolyn Grafton
Suzanne Pollard
In memory of Walker Pollard
Cindy Porter
Larry Reavis
Stephen Rickard
Ronald & Jennifer Rosenberg
James & Elaine Tholen
In honor of Jo Pelkey & Liz Poole
Thomas Ventre
Vincent Verweij
In memory of Lucien Voogd
An anonymous donor

We thank everyone who has given to the Sangha, in whatever form. We owe a special debt of gratitude to these people and organizations, who made major donations to our work last year. The Sangha has drawn great strength from their generosity and vision. May the spirit of their gifts continue to live within our work and practice.



\$100 - \$249

Susan & Daniel Abraham
 The Acorn Garden Club
 Judith Bexfield
 Steven & Janine Biver
 Deborah Bombard
 Alan Ford & Elaine Braccio
 James Burpo
 Jonathan & Alice Cannon
 Donna Chandler
 Margaret & Ralph Chatham
 Georgina Chin
 In honor of Daly & Georgina Chin
 Betsy Chittenden & Daniel Spinn
 In honor of Dave Chittenden & Jane Votca
 Ewen & Cynthia Cobban
 Susan Crawford
 Roman Danis & Deanne Forester
 Camille Danzi
 Elizabeth Doherty
 Karen DuVal
 In memory of Roberta Keys
 Stanley & Judith Feder
 Melissa & Robert Floyd
 Barbara Ann Freggens
 Jennifer Frum
 Walter & Ann Garvey
 Katharine Goepp & Corey Carpenter
 Joseph & Anne Gorney
 Julia Goss
 Nisha Govindani
 Anne & Chad Gruppe
 John & Patricia Ann Havasy
 Thomas Hayes
 In honor of Jane Hayes
 Kasha Helget

Sarah Hillegass
 Carol Hotton
 J. Hovey & Mary Ellen Kemp
 Elena Hughes
 Elizabeth Blair Jones
 Robert & Karen Knopes
 Stephen & Jay Lewis
 Peter Linn & Susan Osborn
 Joan Makurat
 Jody Marshall
 Elizabeth Ann Martin
 Jon D. McMaster
 Lee Meinicke & Joanne Potter
 Beatriz Meza-Valencia & Alexander Hershey
 Pamela Miller
 Donna Ann Murphy
 Marty Nielson
 In honor of Bishop
 Katherine Offutt
 Eileen O'Neill
 Marc Eric Ottersbach &
 Cornelia Bammesberger
 James Palmer & Mary Duplisea-Palmer
 Maureen Pardue
 Jenny & William Pate
 Doug Petersen

Andreas Pratz
 In honor of Marc Ottersbach
 Lenore Radloff
 Daleep & Anek Rathore
 Judith Richter
 Donald Robinson & Elizabeth Ketz-Robinson
 John Ruml
 Pat & Daljit Sawhney
 Terence Schmitt & Ana Walker
 Vladimir Shutov & Sarah Karush
 Jocelyn Sladen
 Carol & Bernard Sottili
 William & Deborah Swietlik
 Lynn Tveskov
 Christopher & Ilaine Upton
 Marianne Vakiener
 In honor of Katherine Isaacson
 Ann & Thomas Ventre
 In honor of Tommy Ventre
 Jim Waggener
 Phil & Rieko Wagoner
 William Watts & Costanza Galastri
 Mary Sylvia Webster
 Mark Willcher
 Michael Wilpers
 Nancy Zimmerman

Photos: At top left, in November, students from Lake Braddock Secondary School's environmental science program cleared horse nettle (*Solanum carolinense*), a weedy native plant, from our "Big Meadow" site at the Bureau of Land Management's Meadowood Recreation Area, in southeastern Fairfax County, Virginia. At bottom left, in February, Mikaila Milton, a National Park Service biologist, sowed some of our goldenrod (*Solidago* spp.) seed at Fort Dupont Park in Washington, DC. Above, along the Dominican Republic / Haiti border, high-value forest canopy towers over one of our Rising Forest Coffee groves.



... continued from the front page:

native forest canopy so that we can expand both the groves and the forest. Such efforts could eventually make Rising Forests a major force for forest conservation in our project region.

The Parcela Agroecológica: this system is a comprehensive overhaul of small parcels of farmland for the Tree Bank's poorest farmers — farmers who wouldn't benefit even from low-interest credit because their land is so exhausted. Through intensive management and more sustainable farming methods the soil is rejuvenated and should stay that way indefinitely. The restored parcela is so productive that farmers are able to retire other, less productive fields to create forest buffers and still see more income from increased crop yields.

It may sound simple, but the process takes months. Typically our sites are so degraded that even invasive weeds struggle to take hold. We begin by double-plowing the hard-packed clay and working in several truckloads of composted cow manure. This helps build a new reserve of soil nutrients. To control erosion, we create “live-terraces” of edible species with robust root systems. The entire field is then planted with about 15 different crops, all common in local agriculture. Polycropping protects farmers from crop failures (which tend to be species-specific in any given year), and allows for crop rotation to ensure the long-term viability of the soil. Finally, we make sure the farm has at least one cow to provide a source of additional manure. In exchange for the parcela, the farmer agrees to enter existing forest into a conservation easement or to plant a new forest buffer on his or her land.

We installed our first parcela last year, on the farm of Quiterio Aquino, and yields have been excellent despite a drought. It has been amazing to see, not just the change in the land, but the difference it has made to Quiterio and his family, who have built a small new house and bought a couple of pigs. The forest has benefitted as well since, in exchange for the parcela, Quiterio put a fragment of “old growth” ravine forest in a conservation easement. We are creating our second parcela on the farm of Bienvenido Recio. Since Bienvenido has already enrolled extensive amounts of forest into our program, we are building a conservation agreement that fits his circumstances.

Those are the fruits of the “Next Hundred Acres” campaign to date. As donors, you are making a huge difference in the lives of our farmers, and you are definitely reducing deforestation—there's no doubt about that. In our region, there is nothing that compares, even remotely, with what you are achieving. And along with our Dominican partners, I am extremely grateful to you all.

— Matt Bright, Tree Bank Coordinator

A BRIEF SITE SAMPLER FOR 2013

If you live in the DC area, we hope you'll join us in the field this year. It's still early in the season but we already have quite a menu:

At the Marie Butler Leven Preserve in McLean, we're continuing to clear invasives out of the Preserve's 17-acre forest. Our Weeding Divas are extending their brand of careful “botanical surgery” farther into the Preserve's ecologically sensitive gorge.

At the BLM's Meadowood Recreation Area, on the Mason Neck Peninsula, we expect to work on a 5-acre and a 17-acre site. In the spring and summer, we'll be doing mostly meadow restoration; in the fall, we hope to do some tree and shrub planting.

At our 12.5-acre site at the Occoquan Bay National Wildlife Refuge, Chris Bright is itching to get back out there with his scythe and tarps. (No doubt he'll be itching afterwards too.) We're also doing some planting there, and some additional invasives control.

At Rutherford park along Long Branch Stream, we're planning to return to our three-quarter-acre wet-meadow site.

We're already at work at the Roaches Run Waterfowl Sanctuary, a property of the National Park Service. (See the cover photo.) And we've started working on another Park Service site, at Daingerfield Island, about 2.5 miles south of Roaches Run; at Daingerfield, we are helping to restore a historically significant wetland.

Et cetera! For more information, click on “field schedule” in the main menu of our website, at earthsangha.org. See you in the field!

Photos: Above left, last August, Fausto Mateo, one of our Tree Bank farmers, used calipers to check the growth of a native Hispaniolan pine (*Pinus occidentalis*) in his forest reserve near the Dominican Republic / Haiti border. This species was listed by the IUCN as “near threatened” in 2000. It's almost certainly even “nearer threatened” now. Fausto's trees were grown from seed at our Tree Bank Nursery. Above right, in February, Arlington Regional Master Naturalists cleaned the seed of trailing lespedeza (*Lespedeza procumbens*), a native meadow plant of the Mid-Atlantic. The seed was collected from a northern Virginia meadow and was sown this spring at our DC-Area Wild Plant Nursery; the resulting plants will help restore the region's native meadows. At the top of page 5, at the Wild Plant Nursery in January, Eagle Scout candidate Ian Havasy organized a major shade-structure upgrade for our container yard. (See the page 5 story.)



WILD PLANT NURSERY: VERSION 2.0 AND COUNTING

Our Wild Plant Nursery, where we grow stock for ecological restoration, is undergoing an upgrade of all its various, previous upgrades.

The nursery's one-acre grounds, generously donated by the Fairfax County Park Authority, are now built out. But 12 years of construction and tinkering have taught us a lot, so we're planning many additional improvements. Here's what's happening this year.

Eagle Scout candidate Ian Havasy got us off to a great start in January when he and his crew replaced the flimsy plastic pipe in over 12,000 square feet of our shade structure with durable, reassuringly-professional-looking steel pipe. (Consult photo above to admire Ian's work.) The steel will lessen wind damage and help keep the shade cloth in place, thereby reducing seedling losses during heavy rains.

We're also rebuilding the "herb corral," raised-bed enclosure. We're replacing its dilapidated wood structure with more steel.

And we're improving the irrigation system. This year, we hope to install overhead irrigation in a substantial portion of the container yard (the part of the nursery where potted plants are grown). The overhead system should consume less water and reduce watering times. It should also require less maintenance, because it is less likely to be disturbed, and it will improve access to the stock.

We're improving the big concrete-block troughs that hold the pots. We're going to build frames to keep large numbers of long, narrow pots properly spaced and upright. We use these tall pots for most of our trees. Tall pots are very space-efficient, but hard to water. Keeping them upright will make it easier to irrigate them.

These upgrades will be a great help in managing our expanding inventory. Every year, it seems, we grow not just more plants, but more kinds of plants. By the end of 2012, Lisa and crew had brought another 30 species into our inventory, which now includes some 250 species. That's about a quarter of all naturally-occurring vascular plant species in this region. (Rough definition of vascular plants: green plants that aren't mosses.) And we're propagating all of those species from seed and spore collected, with permission, from local natural areas.

Better hardware, more and more plants—and there's one other major factor in making our nursery a conservation resource unique in this region: our incredible volunteers. If you aren't yet among them, we hope that this will be the year that you join us.

EARTH SANGHA

BUDDHIST VALUES IN ACTION

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.) [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 © copyright 2013, Earth Sangha.

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."



GREATER WASHINGTON



**From the Tree Bank's farmers
To you:**

Rising Forests Coffee.

Revive yourself.

Restore the forests.

earthsangha.org/coffee.html

Follow us on Twitter @RForestsCoffee



A Masterpiece of Botanical Literature

At a Virginia Native Plant Society meeting in March, Lisa Bright, the Sangha's Executive Director, received a complimentary copy of the just-released *Flora of Virginia*. Lisa got her copy in recognition of the Sangha's efforts to conserve Virginia's native flora. Like the flora it documents, the book is amazing—and a must-have for all local plant geeks. (More information: floraofvirginia.org.) The presentation was

made at the Fairfax County Park Authority's Green Spring Gardens Horticulture Center. At left, Lisa absconds with the volume, to the amusement of Alan Ford, President of the Potowmack Chapter of the VNPS. At right, Lisa presents local native-plant expert Cris Fleming (in blue) with a gift certificate from our Wild Plant Nursery, while VNPS Programs Director Diana Carter looks on.

Inventing Another Kind of Literature: An Excerpt from Lisa's New Blog, seedsofzen.org

In a recent post, Lisa adopts a seed's perspective on nature—that is, all nature, including our own. Here's how she begins:

I rummage for seeds in the forests and meadows and at the edge of rivers and streams during different times of the year. All seeds appear self-contained. From the heavy and meaty fruits of acorns and walnuts to the tiny dusty seed speckles of grasses or flowers, the genetic instructions to develop a whole living organism are contained in a single seed. Thus a seed can travel a considerable distance in time and place without losing its genetic instructions. Once a seed ripens, however, it prompts a network of activities.

As soon as a seed ripens on the tree, birds and other animals feed on the seed. Acorns, hickory nuts, and hazelnuts are favorites of grey squirrels. I was watching a great old shagbark hickory one day in mid-September when I saw a whole family of squirrels harvesting the nuts. Twigs were broken, and nuts were falling off the trees into the

water. Squirrels screeched loudly at each other, causing turtles sunning nearby to tumble into the water. The squirrels took the nuts and ran to a safe place to eat. Fall is a feasting time. It is also the time to prepare for the winter. Little chipmunks, like grey squirrels and crows, carry the nuts into their hiding places. They also bury the acorns in the ground to store for later use. More often, the nuts are never to be found again, and seedlings, if enough sunlight filters in, are sprouted in the spring, often far away from their mother tree.

Birds disperse the seeds in a wide circle. Birds peck on the pine cones as early as September before the pine cones begin to open. Then I know it's time to collect the cones. Ants and slugs drag the seeds around. So do box turtles. Winds blow the flower seeds into the air, and they disperse. Some trees like river birch, American elm, and black willow that grow along the edge of water tend to group themselves together. Their seeds are tiny and light and fall onto the stream beds. The seeds float and join the water scum and lodge themselves in the sandy banks. In a matter of a few weeks, they sprout. Rainstorms or snowstorms carry even the heavy seeds to lower ground. Many seeds, from vines and shrubs to canopy trees, travel through streams and rivers. . . .

Can you find yourself out there? Look a little further, at seedsofzen.org.



Photo: In February, members of the George Mason University chapter of Circle K International, a service and leadership-development club, had a field day on our 12.5-acre site at the Occoquan Bay National Wildlife Refuge, in Prince William County, Virginia. Circle K-ers attacked a range of woody meadow invasives, including the especially nasty alien tree, callery pear (*Pyrus calleryana*). Our thanks to Circle K for pushing the boundaries of "community service" to include not just human communities, but natural communities as well.