

# Conservation Watch

A Publication of the Garden Club of America

Volume XVIII, Issue 5

Fall, 2009

## Conservation and the 2013 Centennial Tree Project

When the Garden Club of America Horticulture Committee announced their plans for the **2013 Centennial Tree Project** last year, the GCA's Conservation Committee sat up and paid attention. Here was a project, involving every club in the country, which could perfectly combine the goals of horticulture and conservation. The project highlights the fact that studying and understanding horticulture is one of the many ways that we can come to understand and advocate for conservation. Many of us begin our enjoyment of gardening and the GCA through horticulture - growing, propagating, training, and showing plants in flower shows. As our understanding of plants expands, we begin to delve into the complex ecosystems that support our garden plants and even our houseplants. Understanding the ecosystem where a plant originated gives us crucial knowledge for growing it under cultivation.

As the 199 GCA clubs look for Centennial Tree projects, we hope that they will consider the importance of *native* trees. As Douglas W. Tallamy states in the preface to his fascinating book *Bringing Nature Home*, "All plants are not created equal, particularly in their ability to support wildlife. Most of our native plant-eaters are not able to eat alien plants and we are replacing native plants with alien species at an alarming rate."



To pick an acorn up off the street, bring it home, set it on a container filled with pebbles and water and watch it sprout is one of the minor miracles that we can all share with our children and grandchildren. If you can then protect that sprouted oak from mice and squirrels for a year or so, all of a sudden you are growing an oak tree. I have done it many times and it is always a thrill. I have an oak tree that is now about 20' tall and I am as proud of it as I can be. There is nothing that connects you to a tree so much as growing it from seed. I hope that many clubs will consider propagating natives for their tree projects and in the process learn a great deal about horticulture and conservation - two of the most important aspects of GCA.

Susie Wilmerding, Garden Club of Philadelphia (PA) - Zone V  
Chairman, GCA Conservation Committee 2009-2011

### Centennial Tree Projects Across America

Here are some club projects for the GCA Centennial from all over our country.



Des Moines Founders G.C.  
members hard at work.

The **Des Moines Founders Garden Club** is helping to promote the return of Iowa's beloved American elm. The club is working toward the integration of disease-resistant trees back into the urban landscape through researching, growing, and evaluating several new species of elms, once part of the Iowa landscape. Six different varieties will be planted over five years in six of their city parks.

On Long Island, New York, four GCA clubs – **Three Harbors, North Country, North Suffolk, and South Side Garden Clubs** – joined forces to present a program for the public on working forests. The speaker was Dr. David Foster, Director of the Harvard Forest, along with a panel of his colleagues. His presentation was “Trees for Life – Trees for the Life of Long Island,” sharing his forest research and discussing forest management implications for the future.

**The Little Garden Club of Rye** (NY) is conducting a “Big Seed Hunt” in their area. Members are charged to find and bring 5 large seeds from trees in their area to garden club meetings. They need to identify what species the seeds are. Members have been given instructions on how to find the tree seeds and how to identify them. Prizes will be awarded. The purpose of the project is to increase member's knowledge, awareness and appreciation of trees.

All eleven clubs in Zone X are hard at work on Centennial projects. Here are a few of interest.

**The Akron Garden Club** (OH) is providing funds to help landscape a small, under-construction downtown park along the Ohio and Erie Canal Towpath. Native pawpaw trees, yielding the state fruit, will be planted there by the club. The club will also collect seeds in the fall to propagate and then give out the seedlings at the grand opening. Pawpaw (*Asimina triloba*) seeds will also go to the Zone X meeting for the seed exchange. A four-year plan by the **Garden Club of Michigan** involves planting “Winter King” Hawthornes at various sites along an abandoned railway bed in downtown Detroit. They also plan to produce an educational DVD of trees of their area taken by a renowned photographer to help mark their club's centennial in 2011. And the **Country Garden Club** (OH) will add trees near the entrances to downtown Perrysburg, near Toledo. Prairie Fire Crabapple, Imperial Locust, and Blue Spruce, plants for “near highway use,” will be used.

For its project, the **Santa Fe Garden Club** (NM) is focusing on a variety of water-wise trees that thrive in their high desert conditions (intense sun at 7,000 feet, low humidity, desiccating winds, cold winters and just 12” – 14” of rainfall a year). They plan for these trees to be part of the new Santa Fe Botanical Garden and are working with the garden's designer to create a space incorporating a selection of drought-tolerant trees with accompanying signage.

In New York, the **Rusticus Garden Club** has selected the *Malus Rosaceae* or domesticated orchard apple tree for special emphasis. Members will be researching which apple trees are grown in orchards in their areas and learning about their origins. Members' goal is to either graft scions to under stock, or grow several varieties from seed and return them to their original sites, if possible.

Studying and growing the Black Oak will be the GCA tree project for **The Garden Club of Philadelphia** (PA). Members will be reading *Oak: The Frame of Civilization* by William Bryant Logan as part of their preparation for the project.

In Zone I, several clubs have projects underway. **Beacon Hill GC** is working with the Esplanade Association on propagation and planting of new White Willow trees along the Charles River in Boston

in anticipation of the Esplanade's centennial celebration in 2010. **Piscataqua GC** has raised funds to plant a native tree suitable for children's climbing in the family area of Strawberry Bank Museum. **North Shore GC** is gathering and germinating magnolia seeds. **Fox Hill GC** is in the planning stages of creating a guide for local developers to choose native plants and trees in their landscaping projects. And, members are researching native trees of their area.

In Atlanta, Georgia, for a Centennial project, the **Cherokee** and **Peachtree Garden Clubs** will work together to plant new trees at Historic Oakland Cemetery. These will replace some of the 150 trees lost in a tornado in 2008. This project should last two years, providing a superb way for the two clubs to work together to enhance a site of historic significance, while highlighting GCA's Centennial effort.

We hope this gives you some good ideas for your club. What a great variety of projects! What is your club's project? We'd like to hear all about it.

Editor



Destruction at Historic Oakland Cemetery.

### **Would You Ever Eat a *Fishberry*?**



For millions of years, sex has been wild, open and free – well, at least within the plant kingdom. During the last 10,000 years, man became the matchmaker using hybridization to breed diversity, strength and productivity into his crops. Then, in the last 40 years, scientists took the sex out of plant reproduction with genetic engineering (GE), and the progeny are now called genetically modified organisms (GMO). Seventy percent of the food Americans consume - from milk and cookies to cheese and wine, sodas, soups and nuts - contain GMO ingredients. Shouldn't we know what we're eating?

Here's how GE works. Genetically modified (GM) plants, or transgenic crops are made when genetic material from one or multiple species is inserted into the DNA of a host plant. Besides plant genes, GE combines DNA from a variety of sources: bacteria, viruses, fish, insects, and animals, even humans. Strange but true combinations created by scientists have included *floundatoes* (flounder and tomato) and *fishberries* (arctic char and strawberries).

The benefits of GE can be wide-ranging. Scientists hope that engineered plants will address famine, improve nutritional value in food, mitigate environmental stresses such as cold or drought, create

biofuels, save crops from disease, produce feed for livestock with built-in antibiotics and supplements, and produce medicinal panaceas. Genetic combinations and their uses are only limited by the imagination.

GE has exploded in recent years. In 1995 there were no GMO crops planted in the U.S; last year, there were 170 million acres, more than half of the 309 million acres planted worldwide. Currently, the most profitable and common commercially grown GC crops are corn, cotton, and soybeans. In 2009, 85 percent of corn, 87 percent of soybeans, and 93 percent of cotton in the U.S. were genetically modified for insect resistance, herbicide resistance, or both. Why this sudden explosion? The answer is threefold: time, ownership and money.

- Time: Traditional hybridization may take multiple generations to produce what GE can do in a few years, bringing GM crops from the lab to the dinner table in a fraction of the time.
- Ownership: Since a landmark ruling by the Supreme Court in 1980, GMO's are patentable (*Diamond v Chakrabarty*). This opened the floodgates to patents on all life forms, including plants, seeds, pollen and resultant progeny. Ironically, the plant stock used in GM technology and created by nature and thousands of years of farming, are not patentable.
- Money: The sale of GM seed, and the chemicals used in growing them, has become a multi-billion dollar business for biotech companies. Its growth has been world-wide.

Although GMO's seem to be widely accepted, there may be cause for serious concern about the consequences of their spread and consumption. Red flags raised by many scientific studies call for further investigation about food safety; loss of biodiversity; effects on soil, air and water; harm to wildlife; introduction of allergens and antibiotic resistance into the food supply; and increased chemical use.

Pollen drift from open-air GMO fields provides an example of how GMO's can affect the environment.

- Cross-pollination of wild plants by GMO's has been documented in a number of locations. Invasive weeds as well as native species have been permanently altered with GMO's and the consequences are still unfolding.
- Multiple studies have shown ingestion of GMO's to be harmful and toxic to beneficial bees, birds, insects and other wildlife.
- Farmers of non-GMO crops have suffered genetic contamination of their conventional and organic crops when pollen from GMO crops drifts into their fields, even from miles away. This has resulted in hundreds of lawsuits, in which the biotech company sues the farmer for patent infringement, and the farmer must pay the damages (e.g. – *Monsanto v. Schmeiser*).

Three federal agencies, the FDA, USDA and EPA, are responsible for ensuring the safety of GM food, feed and pharmaceuticals. To date, none of them has done any long-term human health or environmental impact studies of GE crops. Nor have any mandatory regulations specific to GE food been established. Biotech companies are self-regulated and are not required to disclose the location or content of their crops, protect the environment from genetic exposure or prove the safety of their product. GMO food producers and manufacturers argue that no studies prove GM foods have harmful effects on human health after 15 years on supermarket shelves. However, the FDA has never done the precautionary studies that would prove health or harm from GMO's.

I love nature and plants, and I definitely love to eat good food, but I worry about the lack of oversight regarding GMO's. My family and I consume GMO products every day, but we have no way of identifying their source. Food labels disclose the amounts of fat, salt and sugar in a product – but not GMO content. The majority of polled Americans want labels to identify genetically modified foods to make an informed CHOICE. Don't you?

Many countries already require GMO labeling, including the EU, China, Japan, Australia, and New Zealand. If you feel choice is important, contact your Congressmen and ask them to join Congressman Dennis Kucinich (D – Ohio, 10<sup>th</sup> District) in his efforts to pass GMO legislation, including the GE Food Right to Know Act, GE Food Safety Act, and GE Farmer Protection Act. Contact the Congressman at <http://kucinich.house.gov/Issues/Issue/?IssueID=1459>.

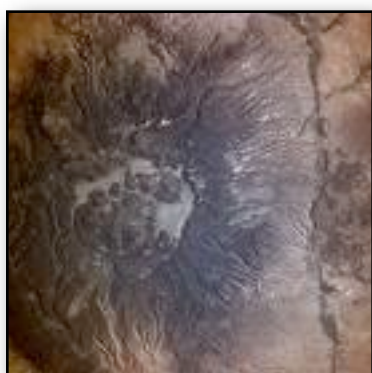
Heidi Ho Conjugacion, G.C. of Honolulu (HI)  
Zone XII GCA Conservation/NAL Representative

Bibliography:

1. *Genetic Engineering, Food, and Our Environment*, Luke Anderson.
2. GM Corn Contaminates Distant Native Plants, *Scientific American*, Nov. 2001.
3. USDA, National Agricultural Statistical Service.
4. Harvesting Data from Genetically Engineered Crops, *Science Magazine*, April 2008.
5. Transgene Escape Monitoring, Population Genetics and the Law, *Bioscienc Magazine*, January 2008.
6. Transgenic Pollen Harms Monarch Larvae, *Nature*, May 1999.
7. *The Future of Food*, Deborah Koons Garcia (DVD).
8. Center for Food Safety, <http://truefoodnow.org/>
9. Monsanto, <http://www.monsanto.com/>
10. Diamond v. Chakrabaty -
11. [http://caselaw.lp.findlaw.com/scripts/getcase.pl?\\_court=us&vol=447&invol=303](http://caselaw.lp.findlaw.com/scripts/getcase.pl?_court=us&vol=447&invol=303)
12. Monsanto Canada Inc. v. Schmeiser [http://en.wikipedia.org/wiki/Monsanto\\_Canada\\_Inc.\\_v.\\_Schmeiser](http://en.wikipedia.org/wiki/Monsanto_Canada_Inc._v._Schmeiser)

## The World's Most Perfect Caldera

In 2000, President Clinton signed into law the Valles Caldera Preservation Act transferring an 89,000-acre ranch in northern New Mexico to the federal government to be managed for public use. The Valles Caldera had been the subject of public interest for many decades because it is a land of superlatives. In its beauty, ecologic and geographic significance, scientific interest, cultural importance, and its sheer magnificence, it is a landscape of the first order. Violent volcanic activity, and the subsequent formation of a giant caldera, or collapsed volcanic field, occurred in the Jemez Mountains 1.22 million years ago. Later smaller eruptions and the erosion of water shaped the landscape of the area further. The volcanoes today lie dormant, but not extinct.



The Valles Caldera from space.

The site is home to what some scientists call the world's most perfect caldera. The massive collapsed volcano in the Valles Caldera was among the objects most photographed by U.S. astronauts. Movie and TV companies produced films there over the years. From the air or from the caldera's perimeter, it appears as a giant green-carpeted bowl. At the bottom of the bowl is unbroken grassland with a river meandering through its many valles, or open valleys. Beyond the grasslands, forested mountainsides surround the caldera. The area is home to the mountain lion, black bear, a huge herd of elk, mule deer, bobcat, coyote, badger, prairie dog, wild turkey, blue grouse, golden eagle, and more than a hundred species of birds. Douglas fir and ponderosa pine grow there to stunning size.

The history of humans on the Preserve is also colorful, starting with its being inhabited by the Jemez tribe of Native Americans. Then came a long period of private ownership with sheep and cattle ranching that resulted from a land grant made by Mexico when New Mexico was part of that country. Subsequent owners, the Baca family, petitioned the U.S. government for the land following the Mexican-



American War. Leases were obtained for timbering the old growth forests. Minerals were quarried in the caldera. By the 1990's, the owners wanted to sell and it was unclear what the future would be for the caldera. The threat of development loomed.

In 1998 the Santa Fe Garden Club became active in the effort to persuade the U.S. Government to purchase the Baca Ranch, believing this beautiful property should be preserved for future generations of Americans. A lengthy effort, with the involvement of the National Affairs and Legislation Committee of The Garden Club of America, began. This resulted in Congressmen from all over the country receiving calls to "Save the Baca Ranch," and culminated in the purchase of the property, largely through the efforts of former New Mexico Senator Pete Domenici. Then came the creation of the national preserve. The purchase price for the land of \$101 million for the 89,000 acres could be compared to purchasing Shangri-La on a shoestring.



Looking twelve miles across the caldera.

The Valles Caldera National Preserve is a unique experiment in the United States because of its one-of-a-kind form of land management. It lies within the Santa Fe National Forest. It is run by a Trust, a group of individuals appointed by the President of the United States, and is under the U.S. Forest Service, not the National Park Service. The use and stewardship of the Preserve is complex: allowing appropriate public access, managing domestic livestock grazing, recreational fishing and hunting, managing the renewable resources of the land in perpetuity, and running the preserve as a working ranch. And, to further complicate the Trust's task, it must by law strive to be financially self-sufficient. As a result, there are few areas of open space in our country where the stakes for the future are higher.

In late August of 2009 members and friends of the Santa Fe Garden Club spent a week-end within the caldera itself, learning about their nearby treasure by spending time with the Preserve's Executive Director Gary Bratcher and the Science Director Bob Parmenter. A caravan of our SUV's made a series of stops throughout the Preserve, as the group explored the crater interior. We learned firsthand about the history, geology, and ecology of this area. From old growth Ponderosa pine forests to wildflower displays to a lunch spot near 10,000 feet in elevation, the wonders of the Caldera were rampant.

We viewed weather stations and scientific experiment areas that foretell the effects of climate change. We learned about fish and fishing in the Preserve, about the enormous elk herds and the hunts for



The garden club group in an old growth forest.

them, about fire suppression and proper forest management. We viewed Obsidian Valley – a valley filled with volcanic glass formed by the rapid cooling of lava. Following an evening cook-out and before overnighing in the preserve lodge, Paul Tosa, former Governor of the Jemez Pueblo, acted as our storyteller. While approximately 15,000 citizens visit the Valles Caldera yearly now, the in-depth garden club visit afforded us the pleasure of experiencing the caldera in a way few visitors do.

It is unlikely that the Preserve will be financially self-sufficient by 2015 when the federal Statute, requires

it to be. (Currently about 20% of the preserve’s budget is met by activities there.) Both New Mexico Senators, Bingaman and Udall, have officially requested that the National Park Service undertake a study of the Preserve to assess its potential for inclusion in the National Park System as a national preserve. Another alternative to dependency on federal “earmarks” for the Preserve, is to remove the financial self-sufficiency mandate in the current law and continue to utilize taxes to fund its \$3.5 million annual budget. Offering activities and events to the public at “fair market” prices could also offset costs. No doubt the members of the Santa Fe Garden Club and the citizens of New Mexico will have to continue to be vigilant if we are to protect this national treasure and the public’s access to it.

*Elva Busch, Santa Fe (NM) G.C. – Zone XII  
GCA Conservation Watch Editor*

[Sources:

Cart, Julie, “Nature at its Rarest Form Can Be Found at Baca Ranch,” *Los Angeles Times*, May 19, 2000.

DeBuys, William and Usner, Don J., *Valles Caldera: A Vision for New Mexico’s National Preserve*. Museum of New Mexico Press, 2006.

*La Ventana en los Valles*, News of the Valles Caldera National Preserve from the Valles Caldera Trust, Fall, 2009.]

## **Climate Change – Safeguarding America’s Wildlife**

A brand new publication from the National Parks Conservation Association (NPCA) called “*Climate Change & National Parks Wildlife: A Survival Guide for a Warming World*,” was released in August, 2009. This beautiful booklet gives a compelling look at the current and projected effects of climate change on wildlife in our country’s national parks. Tom Kiernan, President of NPCA, states, “The effects of climate change have been visible for years in our national park. Glaciers are disappearing faster than scientists had predicted even a few years ago. Native trees and animals are losing ground because changing

temperature and weather patterns are making the availability of food, water, and shelter less certain. Fish and wildlife are being driven from their national park homes by changes that are unfolding faster than the animals' ability to adapt.”

The publication lists five steps to safeguard America’s wildlife, and ourselves, from climate change.

1. Stop contributing to climate change by switching to less polluting sources of energy.
2. Reduce and eliminate existing harms that make wildlife more vulnerable to climate change.
3. Give wildlife freedom to run which would involve coordination with private landowners.
4. Adopt “climate smart” management practices.
5. National Parks lead by example by helping visitors understand climate change already occurring.

The booklet goes through animal by animal what effects climate change is having on their lives – oysters in the Chesapeake, the loon of the Great Lakes, Rocky Mountain grizzly bears, the Pacific Northwest salmon, coral reefs off the coast of Florida, and on and on. Eleven different animals in distress are used as examples of the effects on our wildlife in the national parks.

One such story is that of the fate of the grizzly bear. In the Rocky Mountains there is a serious infestation of the pine bark beetle. Elimination of the pine trees will present a loss of habitat for the grizzly. While a reversal of global warming will be a slow process, land management will be a partial solution. Suggestions such as creating forests of different age-group trees, thinning forests to reduce the competition for nutrients and encouraging a diversity of tree species may help in the short term. Controversial spraying of pesticides and pheromones are being used in some national parks and forests. The cost of such methods, however, is not affordable for large-scale infestations.



How can you get a copy of this informative publication? The entire publication can be viewed online at [www.npca.org](http://www.npca.org). Click onto “news” and “publications – our reports.” For a hard copy of the beautiful publication, call Christa Cherava of NPCA at 202-454-3339. Be sure to mention Garden Club of America. You will want this publication for your club and for your conservation committee. We must act now to secure America’s national legacy before it is lost to our children and grandchildren. The National Park System can play a central role in restoring and preserving healthy ecosystems necessary for wildlife – and indeed ourselves – to thrive.

*Marsha Merrell, James River G.C. (VA) – Zone VII  
GCA Conservation Committee – Vice-Chair, National Parks/Public Lands*

**What’s happening in the parks is symptomatic of changes unfolding across the larger landscapes to which they are inseparably connected, the same landscapes that contain our communities. Changes that harm wildlife—depriving them of food, water, or shelter—will ultimately harm us.**

**-- Thomas C. Kiernan, President of NPCA**



## The Truth About Bottled Water

On the recent GCA Conservation field trip to Oregon, attendees were advised in advance to bring their own water bottle or to use one provided by the trip planners. Water was provided to refill the bottles. **There was no bottled water available** for the many excursions the group took. Here's what that decision was based on.

Head to any grocery store and you're guaranteed to find an aisle full of bottled water. Some claim it tastes better than their tap water, while others buy it for convenience while staying hydrated when on the go. Whatever the reason, the truth is – bottled water may come from several sources. It can originate from a public water source or naturally from the earth. Fortunately, the U.S. Food and Drug Administration (FDA) has strict labeling rules for bottled water. But it's up to the consumer to learn the differences among various terms and what they mean.

There are three types of bottled water:

**Purified Water** – essentially tap water that has been purified through a distillation, deionization, or reverse osmosis process. Purified water may also be referred to as demineralized water.

**Spring Water** – water that flows naturally from the earth and is collected directly from its natural source.

**Mineral Water** – spring water that contains dissolved minerals and other trace elements (at least 250 parts per million) that come directly from the source.

### Bottle Versus Tap

In general, safety standards for bottled water and tap water are the same with a few exceptions. For example, because tap water may become contaminated with lead as it travels through pipes, the government limits the amount of lead in tap water to 15 parts per billion, whereas the limit is set below 5 parts per billion for bottled water. Another major difference is that tap water is often fluoridated, but most bottled waters do not contain fluoride or chlorine.



### The Bottom Line

Water is essential no matter how you drink it. Most people can safely, and inexpensively, drink water straight from the tap. If you want to improve the taste of tap water, you can purchase a water-filtration pitcher, which reduces the amount of fluoride and chlorine in the tap water.

And if you're looking for a convenient way to stay hydrated and protect the earth, give up the disposable plastic containers and treat yourself to a reusable water bottle made of polycarbonate or aluminum, which are both environmentally friendly.

The GCA group was fortunate that Portland, Oregon, the Mt. Hood area, and the coast of Oregon where the group toured, all have very good filtration systems and some of the best drinking water in the country. For your club and zone activities, shy away from using plastic bottled water and encourage the

use of reusable water containers. You are setting a wonderful example for those you will encounter in your travels and activities.

*Patricia Wall, Portland (OR) G.C. - Zone XII and Diana Neely, Seattle (WA) G.C. - Zone XII  
GCA Oregon Conservation Trip Coordinators 2009*

[Source: South Beach Diet website: [http://www.southbeachdiet.com/sbd/publicsite/dailydish/dd\\_20080228.aspx](http://www.southbeachdiet.com/sbd/publicsite/dailydish/dd_20080228.aspx)]

## Partners for Plants

*The Short Hills Garden Club Reestablishes Native Plants in the South Mountain Reservation,  
Essex County, New Jersey*



Kathy Salisbury, Essex Co. horticulturalist, Maureen Ogden, and Sandy Murphy removing invasive plants.

The Short Hills (NJ) Garden Club Conservation Committee began a small Partners for Plants project in a big space - the South Mountain Reservation, a 2047 acre area conceived in 1895 by the Essex County Park Commission. Designed by the Olmstead Brothers, this was the first county park system in the United States. The half acre plot is within a fourteen-acre deer enclosure.\* It is near a bona fide Revolutionary War historic site, a lookout used by General Washington to observe the British.

Years of budget cuts and an overabundance of deer and invasive plants have left the reservation in serious disrepair. County park workers, along with a “friends” group, the South Mountain Conservancy, and the garden club have implemented an ongoing deer management plan, and an extremely ambitious forest regeneration master plan is underway. They are reintroducing native plants, bushes and trees on a vast scale. Due to the very tight budget, many threatened, endangered, and rare plants could not be included. Kathy Salisbury, Essex County horticulturalist, inspired the group to track down several historically significant, hard-to-find commercially grown plants. The Garden Club of the Oranges (NJ) joined the Short Hills members in the spring of 2009 to plant *Trillium grandiflorum* (Great White Trillium), *Hypoxis hirsuta* (Common Goldstar) and *Rhododendron viscosum* (Swamp Azalea). This project is ongoing.

[\* enclosure - An area of land enclosed by a barrier, such as a fence, to protect vegetation and prevent grazing by animals.]

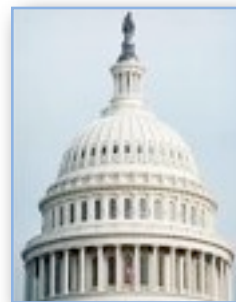
*Susan Osborne, Carmel by the Sea G.C. (CA) – Zone XII  
GCA Conservation Committee, Co-Chair – Partners for Plants*

## Update on Six Bills GCA's Committees Are Watching

The GCA National Affairs and Legislation Committee and the Conservation Committee monitor legislation that could have a strong impact on our environment. Details are posted on the National Affairs and Legislation portion of the GCA web site in two formats, the *Legislative Update* and the *Current Status Report*. **Both can be accessed by any GCA member at:**

[http://www.gcamerica.org/membersonly/committees\\_css/nal.php3](http://www.gcamerica.org/membersonly/committees_css/nal.php3).

Here's a brief update:



### **Climate change**

The most significant bill by far is the enormous climate change measure. The product of half a dozen committees in each chamber, this legislation would limit greenhouse gas emissions, promote energy conservation and renewable power, establish a national climate service, and undertake adaptation measures to prevent extinction of plants that cannot adjust to rapidly changing habitats. The House narrowly passed H.R. 2454 last summer. Two key committees in the Senate have reported their portions of the Senate bill; four other Senate committees must act before the measure is ready for the floor. For more on the Senate bill, read Update #6.

### **Air pollution**

Federal courts threw out previous federal regulations to limit smokestack emissions of soot (SO<sub>x</sub>), smog (NO<sub>x</sub>) and mercury (Hg) and set a November, 2011 deadline for putting new rules in place. New air pollution limits might be added to the Senate's climate bill. In the meanwhile, EPA is preparing to come up with its own coordinated regulatory approach.

### **Water pollution**

Supreme Court decisions in 2006 snarled the enforcement of regulations under the Clean Water Act that dealt with protecting wetlands. Well-financed opposition from farmers, ranchers, forest products industry, realtors, developers and others have prevented Congress from acting to clarify wetlands protection - the Clean Water Authority Restoration Act, S. 787, has made little progress.

### **Mountain top mining**

Federal regulations under the Clean Water Act permit dumping strip-mining waste in mountain streams — more than 1200 miles of streams have already been buried. H.R. 1310 and S. 696, both with broad bi-partisan backing, would tighten up the rules on so-called "valley fill." The coal industry vehemently opposes stricter protections of mountain streams and blasted EPA for vetoing a proposed West Virginia mine that would bury more than 7 miles of headwater streams.

### **Conservation easement tax deduction**

The current federal income tax deduction for contributions of conservation easements on property will expire on December 31. H.R. 1831 and S. 812 would reinstate this deduction and make a permanent part of the tax code. 257 legislators from both parties have cosponsored the House bill.

### **Offshore drilling**

Long-standing prohibitions on offshore drilling for oil and gas unraveled in 2008 in the face of shifting public opinion and a weakened opposition from coastal states. Numerous bills in the House and Senate and Interior Department plans would address the expansion of offshore drilling. Some approaches would include more environmental safeguards than others.

*Martha Phillips, Litchfield G.C. (CT) – Zone II  
GCA NAL Committee – Vice-Chair, Legislative Update*

## What It's Like When Your "Zone" Is Also Your State

Zone IV of the Garden Club of America is the State of New Jersey, the 5<sup>th</sup> smallest state at 7,787 square miles. Within Zone IV, the GCA has twelve clubs. Being a small zone, of course, shapes the way we work.

Fortunately, it is relatively easy for us to get together so we have a Zone Conservation meeting once or twice a year. We try to hold these meetings at places with conservation interest. Recent sites have included a visit to Duke Farms, the former estate of Doris Duke now devoted to environmental education and D&R Greenway Land Trust, the first land trust in New Jersey to start a native plant nursery offering plants responsibly propagated from its preserves. Two years ago under the zone leadership of Penny Thomas, we were able to draw garden club members from across the state to Princeton University for a ground-breaking conference on climate change, "*Hotter Times Ahead.*"



Zone IV conservation group at the D&R Greenway Native Plant Nursery.

We share a common planting zone as well, and had a fascinating talk this year from a group that is organizing a rapid response team to identify new invasive plants arriving in our state. The goal is to eradicate them before they can take hold.



As residents of New Jersey we are governed by a common energy plan developed by the state. Last year we met with the Governor's advisor on energy policy and came away much better educated and impressed with New Jersey's plans to reduce green house gas emissions and energy usage.

New Jersey will probably be the first state to be completely "built out"; that is, all available land will have been either preserved or developed. Thanks to visionary leaders like GCA and New Jersey's own Maureen Ogden, New Jersey has dedicated public funds to land preservation for many years. Public money for this has currently been depleted, so the clubs in our zone worked to educate members to vote **Yes** in the recent New Jersey election to restore funding for land preservation for another two years – thereby preserving another 70,000+ acres at a cost of less than \$10 per household per year. And, the good news is that the ballot issue passed!

The best things about our Zone, of course, are the conservation representatives from each club. We laughed so hard at our dinner in Washington D.C. last year while talking about the many things we have in common: high property taxes, deer invading our gardens, and rampant multiflora rose.

Of course, we also share the same Senators. It is a great feeling when our group of more than 20 women fills the conference rooms of Senators Lautenberg and Menendez with not much room to spare. We look forward to being there together again next year to represent the members of our clubs in promoting conservation causes within the most densely populated state in the nation. We are indeed fortunate that our zone is also our one state.

*Sophie Glover, G.C. of Princeton (NJ)  
GCA Zone IV Conservation/NAL Representative*

## **Club News**

### **Another Award Winning Conservation Exhibit!**

Most GCA flower shows today are now including Conservation Exhibits as part of their schedule. The Nantucket Garden Club (Zone I) staged its Green Thumb Flower Show from July 10-12, 2009. Included in the annual community show this year was a Marion Thompson Fuller Brown Award exhibit highlighting the island's Small Friends new school. This is the first building on the island to receive the "Gold" LEED certification for new construction. LEED stands for Leadership in Energy and Environmental Design certification verifying that the project meets the highest green building and performance measures.

The new school will have lower energy operating costs, will send less waste to landfills, conserves both energy and water, and will provide healthier air through advanced ventilation systems. The school is located on both a bike path and a public bus route and has preferred parking for hybrid automobiles and car poolers. The renewable materials used in its construction include linoleum made from flax seeds and paneling made from sunflower husks.



One panel from the exhibit.

The building is “dark sky” compliant, reducing the ambient light projected into the sky at night. And more than half of the school’s property is left as open space. Students have access to an outdoor classroom, a nature trail, and a marsh for science studies. The Nantucket G.C. also contributed, through their grants program, a beautiful cherry tree for the school’s landscape. This school is a wonderful addition to the “Faraway Island!”

*Barbara Jones, Conservation Chair  
Nantucket (MA) G.C. – Zone I*

[For additional ideas for flower show conservation exhibits, see the Spring, 2009 issue of *Conservation Watch* (pgs. 13-15) available on the GCA website.]

## **Rain Gardeners**

Rain gardens have become a popular way of dealing with storm water runoff in an aesthetic and eco-friendly way, encouraging wildlife and biodiversity, while cutting down on the runoff and pollution reaching our streams. The site for the garden is usually located downhill from a downspout or other source of runoff, and care should be taken to assure the site is angled such that it catches the water and lets it drain gradually rather than flooding the area and drowning the plants. Deep-rooted natives planted in the gardens improve water quality and provide a way to optimize rainfall, which, instead of running off, infiltrates the ground in a few days and then enters the groundwater system. Native plants, indigenous to the area, and tolerant of local soil conditions can be chosen for their sturdy root systems, preventing erosion and helping filter the rainwater.

The Conservation Committee of the Gardeners Garden Club (in the Philadelphia area) partnered with Willistown Conservation Trust to design and install a demonstration rain garden at the Trust headquarters in Newtown Square, PA. This project is in keeping with the Trust’s mission of preservation of the local watershed and its desire to educate and instill a strong land ethic within the community. The site identified by the Trust staff for aesthetics and accessibility provided a unique challenge to design a rain garden, as it was not too far downhill from the building and was adjacent to a rain barrel, which somewhat impeded the flow of rain water from



Preparing the garden for a long winter’s nap.

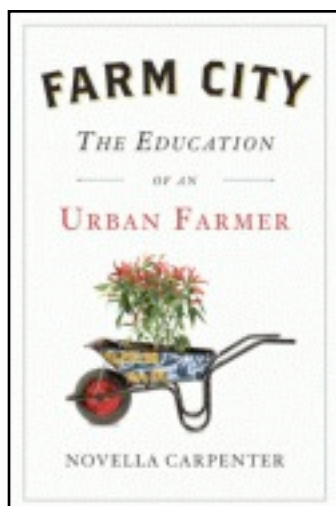
the roof. Members of the group came up with a unique solution - placing PVC pipe underground leading from both the rain barrel overflow hose and a downspout to the garden.

The garden was dug out in a sloping bowl shape in the late summer, lined with compost and topsoil from the Trust's farm. An edge was created with the plentiful rocks found during excavation. It was then flooded to see if it held water, and adjustments were made to the grade and edging to prevent the water from overflowing. The Gardeners planted a variety of wildflowers chosen to provide both summer and winter interest, including senna (with its interesting seedpods), hypericum, obedient plant, sumac, turtlehead, lobelia and more, with irises placed in the stone edging. Some of the season's most torrential rains followed a few days after the garden was planted, and everyone was relieved to see that the rain garden worked and the plants were still standing! The garden has been weeded and mulched for the winter and will provide a unique education about the concept of rain gardens to those who visit the Trust in future years.

Barbara Geltosky, *The Gardeners (PA)*  
GCA Zone V Conservation/NAL Representative

## Media Reviews

### **Farm City: The Education of an Urban Farmer** by Novella Carpenter



Most people assume that a condition of being a farmer is living near lots of open space. Novella Carpenter's book provides a humorous and quirky look at what can happen when agriculture meets urban decay. In what may be an allusion to the first sentence of *Out of Africa* ("I had a farm in Africa...") this book begins, "I have a farm on a dead-end street in the ghetto."

The story follows the author through her quest to raise her own food – in the middle of a very poor section of the city of Oakland, California. She raises, slaughters and prepares, in succession, chickens and ducks, rabbits and, finally, pigs. Her neighborhood is full of colorful characters, often of borderline sanity. Her "farm" serves as therapy and a place of community for many of them.

In one of my favorite sections of the books while "dumpster diving," - e.g. foraging for food for her insatiable pigs, she meets one of Oakland's best chefs outside his restaurant. An unlikely friendship ensues and he teaches her the art of making salami and pancetta. Giving a whole new take on the idea of "locavore," this book is thought provoking and very funny, and another reminder of the good things that happen when we reconnect with the knowledge of where our food comes from.

Sophie Glovier, *G.C. of Princeton (NJ)* - Zone IV  
GCA Conservation/NAL Zone IV Representative

### **Last Chance: Preserving Life on Earth** by Larry Schweiger

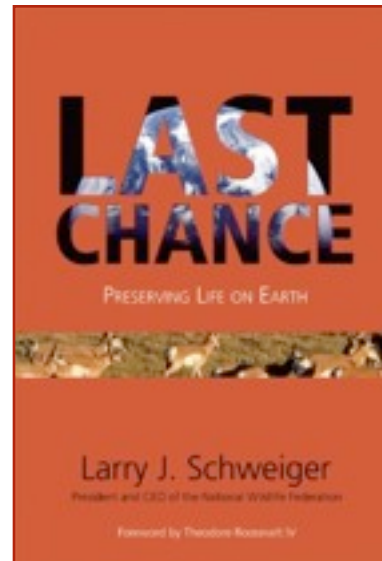
Those of us, who care about the health of the planet and the quality of life for our children and grandchildren, owe Larry Schweiger a deep debt of gratitude. *Last Chance* is a comprehensive, clear, concise, 200-page jewel of a book. Readers who are well educated on the looming dangers of climate change, as well as those who need to expand their knowledge, will appreciate this work of incredible scope presented in an eminently readable style. Although Mr. Schweiger's book is best read from beginning to end, it is carefully structured to highlight areas of specific interest ranging from biodiversity,



endangered species, invasives, water, air, energy, transportation, weather and more. In addition, it offers readers practical recommendations on how to get involved and clearly presents the extensive, science-based reasons supporting the urgency for action now.

We live in an interconnected world, and the many feedback loops illustrated in *Last Chance* show us the existing evidence of an already changing world and the fears about what is to come. Without a doubt, it is time to seize the moment as the planet is teetering so precariously out of balance. I hope everyone will heed Mr. Schweiger's call to action in whatever way they can. Future generations are counting on us.

Derry MacBride, Piedmont G.C. (CA) – Zone XII  
GCA NAL Committee Advisor and Former NAL Chair



### **Big Box Reuse** by Julia Christensen

What happens when a “big box” store leaves town or moves to a new location? The landscape where the store existed has been changed forever. This book chronicles ten communities that have changed vacated Wal-Marts and Kmart into new uses – a school, a churches, a library, a medical center, a courthouse, a recreation center, or a museum. The first person accounts and color photographs tell the hidden stories behind these recreations. They show how new community functions are created. This is recycling at its best!



The Spam Museum, a renovated Kmart.

*Editor*

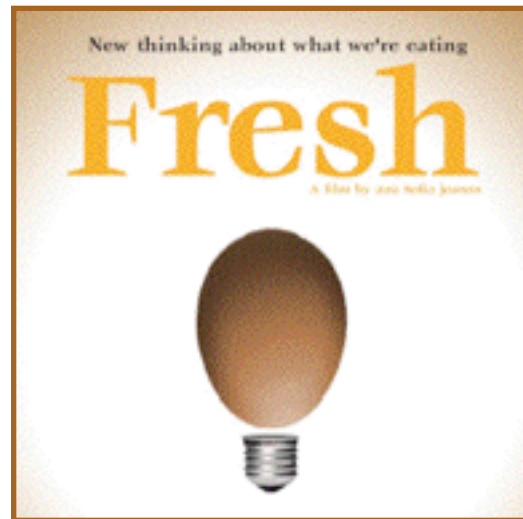
### **FRESH - DVD**

If you read Michael Moss' October 3rd *New York Times* article, “E. Coli Path Shows Flaws in Beef Inspection,” the DVD FRESH will give you hope. This new documentary is an upbeat sequel to “Food, Inc.,” celebrating sustainable farming and those who practice and promote it.

With FRESH, Ana Sophia Joanes, the director/producer, focuses on four farms, shifting the camera in comparative frames between them. The film follows Joel Salatin, the Virginia farmer made famous in Michael Pollan's *Omnivore's Dilemma*, as he moves his pigs to new pasture on his fully sustainable farm. The apparent wholesome naturalness of this enterprise and Joel's dedication is contrasted to a highly industrialized Arkansas chicken farm, owned by Mr. & Mrs. Fox. These brave farmers appear trapped by a system that does not reward creativity, dictates management decisions, and demands seven-year contracts. Next in line is Russ Kremer who speaks forcefully about the control agro-business has over the farmers in their system. He should know. He had been an industrialized pig farmer, but rethought his operation when a boar gored his knee and he nearly died from the antibiotic resistant strep infection that ensued. Kremer understood the role of agro-business. With its huge antibiotic input, this system promotes antibiotic resistance. Guilt set in and he “went cold turkey.” He exterminated his herd and started over, but smaller. Now 300 pigs roam his Missouri pasture. He has not used antibiotics for 14 years. With no antibiotics and no vet bill, he saved over \$14,000 in the first year of his new venture. In



the final part of the film Will Allen (Growing Power) and Joel Salatin, representing urban and agrarian sustainability, take center stage. The magical abundance on three acres of urban land Allen ascribes to a focus on soil and composting; his “babies” are the worms that break down the six million pounds of food waste delivered annually from Milwaukee’s wholesale food industry. Joel Salatin points to grass as being key to his methodology. Livestock are moved daily to new pasture, approximating animal movement in nature. This movement keeps the fields from being overburdened with waste. Three days after the cattle are moved, the chickens follow, picking out the seeds and dead flies from the now-caked manure. Salatin’s operation, like Will Allen’s, is modeled on nature. The Virginia farm is based on cycles and rhythms - and the result is a balance of human, avian and animal interdependence.



The agrarian picture presented by this film is a full one. Besides the comments of the farmers interviewed, salient points are made by several individuals involved in food safety, farmers’ markets and coops. Analysis is provided throughout by Michael Pollan and John Ikerd, author and Professor Emeritus of Agricultural Economics at the University of Missouri. The on-screen discussion presents alarming facts concerning our food system and the resultant compromises to the environment and animal and human health. At the same time, a different and hopeful paradigm is proffered. The film’s cinematography, framing, color and music combine for an artistic whole that delivers the message of FRESH with visual impact.

The publicity for FRESH is carried out by word of mouth, the website [FRESHthemovie](http://FRESHthemovie.com), Facebook, Twitter and selected restaurants using local produce. The website posts viewing sites and where you can order it online. Purchasers are urged to organize a group showing followed by a discussion. A handout of discussion questions accompanies the DVD. You will also receive “Ana’s 10 FRESH Solutions.” The name of the production company? - “Ripple Effect!” Your club will find a viewing thought-provoking.

*Colles Larkin, St. Paul (MN) G.C. – Zone XI  
GCA Conservation Committee - Vice-Chair, Agriculture*



## Contacts

Susie Wilmerding, Chairman  
Conservation Committee  
Garden Club of Philadelphia (PA) - Zone V  
260 Booth Lane  
Haverford, PA 19041-1717  
(610) 642-5537  
(610) 642-2947 (fax)  
[swilmerding@yahoo.com](mailto:swilmerding@yahoo.com)

Nancy McKlveen, Chairman  
National Affairs and Legislation Committee  
Committee  
Des Moines Founders Garden Club (IA) - Zone XI  
5803 North Waterbury Road  
Des Moines, IA 50312-1339  
(515) 279-2116  
[nancymck@earthlink.net](mailto:nancymck@earthlink.net)

Elva Busch, Editor  
Santa Fe Garden Club (NM) - Zone XII  
20 Windridge Circle  
Santa Fe, NM 87506  
(505) 982-4435  
(505) 982-4437 (fax)  
[elvabusch@comcast.net](mailto:elvabusch@comcast.net)

Anne O'Brien, Assistant Editor  
Columbine Garden Club (AZ) - Zone XII  
6018 East Cholla Lane  
Paradise Valley, AZ 85253  
(480) 874-3323  
(480) 970-8328 (fax)  
[annie39ob@cox.net](mailto:annie39ob@cox.net)

Conservation Watch, a publication of The Garden Club of America, is produced by the GCA Conservation Committee. Readers' ideas, contributions, and suggestions are welcome. Letters to the Editor may be e-mailed, faxed, or mailed to the Editor and will be published as space permits.

Elva Busch, Editor

## Index

	Page
Conservation and the 2013 Centennial Tree Project	1
Centennial Tree Projects Across America	1
Would You Ever Eat a <i>Fishberry</i> ? - GMO's	3
The World's Most Perfect Caldera	5
Climate Change - Safeguarding America's Wildlife	7
The Truth About Bottled Water	9
Partners for Plants	10
Update on Six Bills GCA's Committees Are Watching	11
What It's Like When Your State Is Also Your Zone	12
Club News	13
Media Reviews	15