Conservation Watch

A Publication of The Garden Club of America

Volume XIX, Issue 4 **Fall, 2010**

Crude Awakenings

Gulf Oil Spill Update

Gulf Spill Redux: Cleanup and Questions Continue

Scientists are wary of predictions. Fishermen are grim. Residents of the Gulf area are worried about their future. The water looks like chocolate syrup in some parts and Coca-Cola in others. It smells like an auto body shop in places. There are stains on boats, marsh plants on the shores, and on fish life itself.

Many say there is no doubt – this is oil. The cleanup of the worst offshore oil spill in U.S. history continues on the Gulf coast. Many still rail about the speed, or lack of it, in the cleanup. Many more are skeptical about optimistic talk of how successful the cleanup has been and there is continuing concern about cover-ups and and conspiracies. Thousands are still at work, booms are still deployed, and the fear of the unknown remains. What is the degree of damage now and years in the future? We are months, or perhaps years away, from knowing the long-term effects. Apprehension abounds in Gulf citizens, potential tourists to the area, the consumers of the fish from the Gulf, and, we hope, to the country at large. And still we drill, ever deeper.

Conservation Watch devoted much of the last issue (Summer, 2010 still available on the GCA website) to a special section entitled, "The Gulf Oil Spill – A Sea Change in the Making?" In this issue, we revisit the topic to see where we are six months after the BP oil rig exploded – and to remind Garden Club of America members that the disaster should result in life-changing choices. The political and environmental fallout has just started. *Editor*

"The true reckoning is still unknown as scientists mull the impact on the sea life that feeds millions of Americans."
Evan Thomas and Daniel Stone (*Newsweek*, June 7, 2010, pg. 26)

Photo from treehugger.com

Where Did All the Oil Go?

Jennifer Fain, Hancock Park G.C. (CA) – Zone XII
GCA Conservation and NAL Committees – Vice Chair, Oceans

We are all wondering what happened to the approximately five million barrels of oil spilled into the Gulf of Mexico. In early August of this year a report by government scientists declared that three-fourths of the spilled oil had disappeared by dispersants, burning and skimming. National Oceanic and Atmospheric Administration (NOAA) Chief Jane Lubchenco announced that the dispersed oil "is in the process of being very rapidly degraded naturally, and so Mother Nature is assisting here considerably." Following this, a group of marine scientists from the University of Georgia questioned the government report and said that the rate of evaporation and biological breakdown had been greatly exaggerated. Their report indicated that 79% of the oil had **not** been recovered and remains an environmental threat.

Later in August, another team of scientists, from the Woods Hole Oceanographic Institution, wrote in the journal *Science* (Aug. 20, 2010) about the discovery of a huge 22-mile underwater oil plume. Most troubling was that the scientists saw little evidence of the oil being consumed by the Gulf's petroleum-eating microbes. This contradicted the government's report and raised the possibility of significant damage to the ecosystem. A week later a study published in *Science* (Aug. 27, 2010) declared that the undersea plume had vanished, most probably degraded by previously unknown cold-loving microbes! "This enrichment of petroleum degraders, with their rapid oil biodegradation rates, appears to be one of the major mechanisms behind the rapid disappearance of the deep-water dispersed oil plume," said Terry Hazen, a microbiologist and oil spill expert at Lawrence Berkeley National laboratory.

Photo from oilspillnews.net

In September, the government issued a report on dissolved oxygen levels in the deep waters near the Macondo well. Their samples indicate that oxygen levels dipped about 20 percent in deep waters, which would indicate microbial activity without threatening wildlife. Earlier, scientists had been concerned that the oil could cause a bacterial feeding frenzy that would deplete ocean oxygen, a condition known as hypoxia, which could result in dead zones. The theory is that the oxygen levels only moderately dipped rather than plummeting due to the nearby presence of oxygen-rich waters which mixed with the plumes.

On September 10, on NPR radio's "All Things Considered", it was reported that scientists on a research vessel in the Gulf have found a layer of oily sediment on the ocean floor! "Their discovery suggests that a lot of the oil from the Deepwater Horizon didn't simply evaporate or dissipate into the water – it has settled to the seafloor." Samantha Joye, Professor in the Department of Marine Sciences, University of Georgia, who was on the Research Vessel *Oceanus*, described seeing layers of oily material, in some places more than two inches thick, covering the bottom of the seafloor. The ecological impacts of oil on the seafloor depend on the depth of the ocean where it lies. Joye's findings so far have found oil in depths ranging from 300 to 4,000 feet. It will probably take years to know its impact on the marine ecosystem.

The Deepwater Horizon well was finally permanently capped after 108 days. However, even if the deep waters of the Gulf prove to be capable of diluting and degrading the spilled oil, scientists still don't know what havoc 4.9 million barrels of leaked oil can wreak on the subsurface ecology of the ocean. It's also unknown what the toxicity of even low levels of degraded oil contaminants might be.

The Gulf oil disaster and the fifth anniversary of Hurricane Katrina are bitter reminders of our fragile relationship with the ocean and our obligation to act as stewards of our coasts. The Mississippi River Delta has suffered for years from man-made degradation. The same environmentally unchecked commercial ambitions that led to the oil rig explosion have destroyed wetlands and barrier islands that historically provided protection from storm surges. The Mississippi River has been dug deeper to accommodate cargo ships and then channeled by levees for flood protection. Miles of pipelines and navigation channels have been built for gas and oil drilling. The delta is now starved of the sediment that once naturally replenished it. As a result, one-third of the marshlands and barrier islands has been lost, and are currently disappearing at a rate of a football field every 30 minutes.

The Mississippi Delta is of course not the only coastal area with challenges. Over half of the world's population lives within 50 miles of a coast and the numbers are increasing. Growing populations and the resulting development destroy wetlands. Eighty percent of marine pollution comes from land-based activities. Some of the biggest problems come not from factories but from tens of thousand of non-point sources such as run-off from lawns, farms, streets and parking lots. When a watershed is "paved", water that would normally percolate into the ground runs into the storm drains that feed the rivers. Anything that gets into the streets is carried down the river and into the ocean.

Already at risk from storm surges, coastal communities and low-lying settlements along river deltas are facing even bigger threats. Climate change could result in higher sea levels and more severe coastal storms. The ocean will become warmer and more acidic. Our population and dependence on the ocean will continue to grow, and we will need to accommodate these potentially conflicting uses while ensuring nature can thrive as well.

Photo from katu.com

Each of us can do our part by learning more about our dependence on the urban ocean, how we effect the environment, and what we can do to reduce our environmental footprint. Some simple ways to make a difference are to keep pollution off our streets and out of the ocean, reduce or eliminate chemical fertilizer and pesticide use in our gardens, conserve water, purchase sustainable products, and support legislation that improves ocean use and protects its wildlife.

"Just because we are not seeing the heart-wrenching images of oiled wildlife or marshlands on the evening news anymore doesn't mean the Gulf of Mexico has completely healed. Wildlife continues to suffer every day. We need to keep these images fresh in our mind every time we are at the gas station, grocery store or trashcan. We all need to take **personal responsibility** for this oil spill and continue to strive for ways to live a more sustainable lifestyle, depending on more renewable energy sources, producing less waste, and living within our means, ecologically!

Jean-Michel Cousteau, Oceanographer and son of Jacques Cousteau
Ocean Futures Society, October 2010 Newsletter

Climate Change and the Gulf Oil Spill

Diane Stoner, Litchfield (CT) G.C. - Zone II
and
Suzanne Booker-Canfield, Garden Guild of Winnetka (IL) - Zone XI
GCA Conservation and NAL Vice-Chairs, Climate Change

Photo by Cleveland.com.

The failure to pass climate and energy legislation this year comes at a time when polling numbers reveal that clean energy and response to the oil spill are among the highest priorities for Americans.[1] A Stanford University poll finds 70 percent of Americans in Florida, Maine, and Massachusetts support government limits on greenhouse gas (GHG) and 67% support cap and trade.[2] A recent National Resources Defense Council poll finds that 60% of Americans support regulation of GHG from such sources as power plants. The Gulf Spill serves as a visible reminder of the price of our addiction to oil. With this high public support, the timing of climate legislation seemed auspicious, yet, once again, Congress failed to pass a climate bill. Meanwhile, the price of inaction increases. We've had the hottest six months in history; nine countries have set their all-time record highs this year; and the effect of that heat is accelerating global warming[3]. Floods in Pakistan, wildfires in Russia, and drought in the Southwest all attest to the change. And this change costs money. In fact, the U.S. Forest Service, for instance, now spends 49% of its budget on firefighting.[4]

The mid-term election results make passage of comprehensive climate legislation unlikely for this Congress. However, Californians overwhelmingly rejected a proposition to overturn their state's strict global warming law. A bellwether for future climate legislation, this ballot measure was the first popular vote on climate change and is especially significant because California is the largest state in the union

with the eighth largest economy in the world. Meanwhile, in the absence of national climate legislation, it remains vital to preserve the EPA's ability to regulate greenhouse gas emissions from large industrial sources under the Clean Air Act, a cornerstone of environmental policy that has been under recent legislative attack.

The global warming debate will not be settled anytime soon. The summer of 2010 will be remembered for its disasters but beyond this, the evidence mounts that forces beyond normal climatic variation are at work. As the floods and droughts and snow of the past twelve months have shown, the extremes are the *new normal*. Climate scientists say that if all industrial activity were to cease tomorrow, the built-in inertia in the system would allow warming to continue for many years. But the next fifty years, not the next five, are the concern of all scientists and policy makers. We must find ways to limit our dependence on fossil fuels.

Footnotes:

[1] "Study #10435 NBC News/Wall Street Journal Survey." *Wall Street Journal. June 2010.*
[2] Krosnick, Jon. "Public Opinion on Global Warming: An In-Depth Study of Florida, Maine, and Massachusetts. Woods Institute for the Environment. Stanford.edu. 8 Sept. 2010.
[3] McKibben, Bill, "Climate Change: It's Time to Talk, and Act, Tough," *Los Angeles Times*. 4 Aug. 2010.
[4] Maron, Dina Fine. "A man who doesn't want his work to go up in smoke." EENews. 9 Aug. 2010.

Be the One to Make a Difference

Jeanne Coors Arthur, Memphis (TN) Garden Club
GCA Zone IX Conservation/NAL Representative

Zone IX of the GCA is made up of Arkansas, Louisiana, Mississippi, Tennessee, and Texas. The Mississippi River unites us. Members of the New Orleans GCA clubs, New Orleans Town Gardeners (NOTG) and the Garden Study Club of New Orleans (GSCNO), joined forces after Katrina with a diverse group of women from New Orleans and south Louisiana to raise awareness about the Gulf Coast. They created ***Women of the Storm*****,** a non-political, non-partisan group, formed in 2006 under an umbrella 501-C3 organization. A thirteen member Executive Committee manages it. Its founder is Anne Milling, a former president of NOTG**.** Other members of the Executive Committee are Liz Sloss and Sally Suthon from GSCNO; Bev Church, Peggy Laborde, and Carmen Duncan of NOTG.

Following the April, 2010 oil spill in the Gulf of Mexico, **Women of the Storm created a 90-second You Tube video, "Be the One," which underscores the importance of the Gulf coast to America and urges support of coastal restoration. Click on www.restorethegulf.com, watch the quick star-studded video and sign the petition, demanding coastal restoration. Please support this campaign and share it with family and friends.**

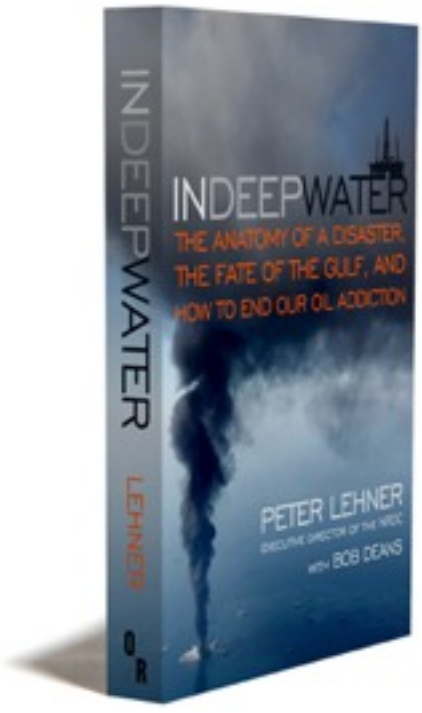
If the Gulf seems far away and disconnected from you, remember the Mississippi is North America's longest and largest river, transporting 20% of America's commerce. Its drainage basin is the world's second largest and includes tributaries from thirty-two U.S. states and two Canadian provinces. The watershed encompasses 40 percent of the contiguous U.S., and the Mississippi delta is the largest system of wetlands in North America. We urge you to add your voice in demanding restoration of this vital delta.

A Women of the Storm gathering.
Photo from womenofthestorm.net.

When you think about it, almost all of the river water east of the Continental Divide to the Atlantic ends up in the Mississippi River and ultimately in the Gulf of Mexico. It is imperative that we ALL consider the consequences and limit our hazardous and environmentally unfriendly discharge. The Gulf of Mexico is indeed OUR problem!

Media Reviews about the Oil Spill

In Deep Water: The Anatomy of a Disaster, the Fate of the Gulf, and How To End Our Oil Addition by Peter Lehner and Bob Deans



If a Gulf oil spill response plan includes no mention of hurricanes but a contingency plan for walruses, "an animal that hasn't been within three thousand miles of the Gulf since the last Ice Age," should that raise a red flag? According to Peter Lehner's *In Deep Water: The Anatomy of a Disaster, the Fate of the Gulf, and How to End Our Oil Addiction*, British Petroleum's plan—much like that of all the deepwater drillers—apparently did not. The passage of more than half a year since BP's Macondo well spewed 200 million gallons of crude into the Gulf tempts us to believe the matter is resolved. Lehner's book, the first to address the Gulf spill, reawakens the anguish Americans felt as they watched news reports of oil spreading over more than 600 miles of coastline, leaving a slick in the ocean the size of South Carolina.

In Deep Water, an important read for every GCA member, provides a compelling human narrative to rid us of the easy abstraction of a disaster that occurred out of public sight. Executive Director of the Natural Resources Defense Fund, Lehner has been on the scene investigating the environmental impact, which includes the effects of both the 1.84 million gallons of toxic chemical dispersant sprayed and the remaining 26% of the leaked crude, oil which is still unaccounted for. With Louisiana home to 40% of our tidal

wetlands, much of which is now soaked in oil, the spill continues to threaten biodiversity in the area by destroying much of the matrix for marine life. Some 97% of the commercial fish and shellfish rely on the estuaries and the wetlands at some point in their life cycle, so the impact on the marine biodiversity and, in turn, on the fishing industry remains uncertain.

Lehner's analysis of the corporate and regulatory framework under which the devastating spill occurred points to a lethal combination of lax regulations and corporate negligence. With fewer than 60 inspectors responsible for conducting more than 18,000 inspections annually, the public safeguards provided by the Minerals Management Service, the governmental agency charged with oversight, sometimes amounted to inspectors' tracing over in ink the inspection forms completed in pencil by oil company officials. In addition, BP's emphasis on the bottom line led them not only to use a cheaper well design but also to cut the cost of testing the cement used, cement that recent reports have stated both BP and Halliburton knew to be defective. The savings of $128,000 to skip the test ultimately contributed to the worst environmental disaster in American history, one that cost the lives of eleven men. In addition to Lehner's thorough account of the causes and effects of the spill, *In Deep Water* is a call to action to reduce our dependence on oil, which drives companies to drill in deeper and riskier Gulf waters.

Suzanne Booker-Canfield, Ph.D. - Garden Guild of Winnetka (IL) - Zone XI
GCA NAL Committee - Vice-Chair, Climate Change

[Note: This new publication from OR Books is available in paperback, audio book, and e-book formats.]

National Geographic Magazine, October 2010 - "The Spill"

A special issue of the magazine focuses on the BP oil spill and its consequences. Included is a special map supplement describing the Gulf ecosystem and showing the region's oil infrastructure and its vastness. Articles in the issue focus on both the current and the long-term environmental effects of the apocalypse that commanded so much attention for months. The incredible photographs in the issue, true to National Geographic standards, help the reader understand the accident even more fully.

The Gulf remains vulnerable to accidents on the nearly 3500 drilling platforms in operation today as we search ever-deeper for oil. You may still be able to find the issue on newsstands and there is an e-version available on iTunes including an interactive version of the map supplement. This fall the National Geographic Channel premiered three specials about the spill. They have aired already, but will be repeated, so watch for them. *Editor*

Photo from nationalgeographic.com.

More Conservation Reports

GMOs On Trial in the Supreme Court

Helen Elkins – The Gardeners (PA) – Zone V
GCA NAL Committee – Vice-Chair, Agriculture

A GMO is an organism whose DNA has been changed in a laboratory to produce a desired effect.

If crabgrass and plantain are giving you a problem in a landscaped area of your yard, it's easy to whip out that spray bottle of Roundup (glysophate is the generic name) to take care of those little spoilers. If they're still looking healthy a few days later, perhaps the possibility of Round-up resistance crosses your mind, but you have other ways to tackle the problem, not the least of which is the old fashioned way - pull them out. For farmers it is more complicated.

Roundup Ready (RR) crops, such as RR corn and soybeans, have been developed by Monsanto, the U.S. based multinational agricultural biotechnology corporation. These crops are genetically modified to be resistant to Roundup, Monsanto's herbicide. Farmers can apply Roundup to these crops in place of several applications of other herbicides, saving fuel and, in theory, the amount of herbicide applied. Monsanto has also developed a Roundup Ready alfalfa, but strong protest to this seed carried the issue's legality all the way to the U.S. Supreme Court, which issued it's decision in "Monsanto Co. v. Geertson Seed Farm" this past June.

Alfalfa is grown in the western U.S. for seed and therefore it is allowed to flower. Cross-pollination then becomes a viable concern. When the U.S. Department of Agriculture (USDA) allowed commercial planting of RR alfalfa in the west, organic alfalfa growers led by Philip Geertson of Oregon sued and a federal court found that the USDA's approval of RR alfalfa was illegal. Their argument was that they did not complete the required full Environmental Impact Study (EIS) required under the National Environmental Policy Act (NEPA). A preliminary assessment had been under way but had not been competed. Next, the federal Ninth Circuit Court upheld the judgment of the lower court, at the same time issuing two injunctions: one, that the USDA could not allow a limited planting of RR alfalfa while it prepared it's final EIS; and two, that farmers were stopped from planting any RR alfalfa. The organic growers had convinced the court that genes could spread to their neighboring fields, preventing the sale of their crops as "organic," and that they faced the likelihood of "irreparable harm" from genetic contamination.

A farmer scatters alfalfa for cattle to eat.
Credit: Brian Vander Brug, *Los Angeles Times*.

Monsanto then appealed to the Supreme Court, setting the stage for the Court's first-ever ruling on genetically modified crops. The Defenders of Wildlife, the Center for Biological Diversity, the Humane Society of the United States, and the Center for Food Safety filed *amicus curiae* (friend-of-the-court)

briefs on behalf of Geertson, saying a ruling for Monsanto would weaken NEPA, the most reliable tool to ensure that federal agencies fully consider the impacts of their decisions on the environment, particulary wildlife and plants. The American Farm Bureau Federation, the U.S. Chamber of Commerce, the American Petroleum Institute, Croplife America and the National Association of Home Builders came in on Monsanto's side.

The June Supreme Court ruling in a 7-1 decision reversed both District Court injunctions saying the court had overreached itself procedurally in halting the plantings. Monsanto immediately claimed victory, announcing that all would be in place for a fall 2010 planting. But not so fast, retorted the opposition. The Court ruling had not overturned the central tenet of the case: that the USDA had prematurely approved RR alfalfa. Indeed, the heart of the decision was not about the science of genetically engineered seed or the rights of corporations, but about the separation of powers between two equal branches of government. The other issues had not been challenged: RR alfalfa is illegal to sell without a completed EIS. Lawsuits may be filed in order to stop any poorly-conceived or improperly executed rule that a federal agency passes. The threat of contamination by "gene flow" has a reasonable probability of causing harm that could be recognized by federal courts.

Meanwhile, the USDA is completing its EIS of RR alfalfa and expects to be finished in time for the 2011 spring planting. Philip Geertson is happy with the Supreme Court decision but has moved his organic alfalfa operation to Canada to avoid contamination from RR alfalfa that's already been planted. RR sugar beet planting was stopped in federal court until its impact on other crops is fully reviewed. RR crops have been a boon to many farmers, but clearly judges' rulings are not the only present concern. "Superweeds," those that are resistant to Roundup, are increasingly evident, costing farmers more time, money, and labor to control. Alternative sustainable methods to control weeds include crop rotation, cover crops and carefully managed tilling. New thinking and appropriate incentives for research and solutions are needed, while we keep our safeguards for plant diversity and consumer choice in place.

Sources:
Lancaster Farming 5/29/10, 6/26/10, 8/21/10.
The True Food Network 6/21/10.
National Sustainable Coalition of Agriculture 6/22/20.
Grist 6/21/10.

*[*For more information, see additional articles about GMO's by Heidi Ho Conjugacion in *Conservation Watch* Fall, 2009 and Winter 2009-10, available online on the GCA website.]

The Plastics Wars

Diana Fish, Carmel-by-the-Sea G.C. (CA)
GCA Zone XII Conservation/NAL Representative

When the bill to ban single-use plastic bags failed to pass the California Senate in 2010, supporters felt the state was taking a step backwards in efforts to prevent plastic pollution and environmental harm. The American Chemistry Council (ACC), which represents bag makers Exxon Mobil, Dow Chemical, and others, had lobbied aggressively and spent huge sums on advertising to get their message across: the ban would cost jobs in an economic downturn and create a $4 million bureaucracy. The ACC and its affiliates were determined to defeat the landmark legislation so such bans would not be copied in other states.

In the wake of this loss and the lack of statewide standards, many suggested that local municipalities and counties could draft their own ordinances. However, pro-plastic advocates have found another way to stave off bans or restrictions – litigation. After San Francisco became the first American city to prohibit

plastic checkout bags at big supermarkets and chain pharmacies, industry groups began counterattacking to prevent the idea from spreading. In these suits, lawyers argued cities had implemented bans without doing proper Environmental Impact Reports (EIRs) on potential increases in paper bag consumption and resulting negative impacts. As of March, 2010, a number of California jurisdictions have pending legal actions or are in the process of drafting EIRs to deal with challenges. These include Berkeley, the City of Los Angeles, Los Angeles County, Malibu, Manhattan Beach, Oakland, San Diego, San Jose, Santa Monica and Santa Clara County. The Town of Fairfax, north of San Francisco, chose to avoid legal problems by asking voters to approve a ban on a local ballot initiative. Under a settlement, Palo Alto was able to keep its existing ban but not be able to proceed further without a substantive, costly EIR. (1)

Photo courtesy of google images.

Outside the state, bans have been approved or instituted in a number of places such as Portland, OR; Westport, CT; Edmonds, WA; Brownsville, TX; Kauai and Maui, HI; some counties in North Carolina; and American Samoa. Cities also have tried to lessen the volume of waste by imposing fees and taxes. Washington, DC has a 5-cent charge on all paper and disposable plastic carryout bags. Seattle established a grocery bag tax in 2008, but citizens voted against it in a referendum heavily funded by plastic interests. Both paper and plastic sacks would have been taxed, encouraging consumers to bring their own totes and not just opt for paper.

Corporate businesses may play a significant role in discouraging single-use plastic. When IKEA charged for bags, consumption dropped. Whole Foods no longer supplies plastic bags at checkout and "rewards" shoppers for bringing their own sacks. As one of the world's largest dispensers of plastic shopping bags –– 27 billion in 2007 – Walmart has set a 2013 goal of reducing plastic in its stores by 25% in the United States and 50% internationally.

World Watch Institute estimates that Americans throw away about 100 billion polyethylene bags annually, and only 0.6% are recycled. (2) As Julia Brownley, sponsor of California's anti-plastic bill, commented, "It is not a matter of if, but a matter of when, consumers bring their own bags and become good stewards

of the environment." (3) Fees or bans, reinforced by educational programs, may help alter consumer behavior, but in the end it is up to the individual to reduce, reuse and recycle - and remember to carry a reusable sack.

Footnotes:
(1) There is hope for cash-strapped cities and counties facing intimidating legal hassles. Non-profit Green Cities California has consolidated useful studies for EIRs into a Master Environmental Assessment. See www.greencitiescalifornia.org.
(2) wwww.worldwatch.org/node/1499
(3) www.edgeseattle.com/index.php?ch=style&sc=life&sc3=&id=109770.]

Synthetic Food Dyes - Harmless or Potential Health Threats?

Annie Ager, French Broad River G.C. (NC) - Zone VII
GCA Conservation Committee – Vice-Chair, Air Quality/Toxic Substances

Are synthetic food dyes posing a threat to our health? Despite our common impression that we had eliminated dangerous dyes when red M&M's disappeared sometime in the early 80's, I have discovered that there are still nine dyes the FDA approves for use in food. Guess what they are made from - originally coal tar, and now petroleum. I should have known!

Source: William Sonoma website.

Why do we need food dyes? Besides coloring Christmas cookies and decorating birthday cakes, we rarely actively put dyes in our food. Food manufacturers, desirous of our purchasing their products, add dyes for brightness and vibrancy to foods that might otherwise be drab. Would you buy brownish maraschino cherries (their natural color) or white lime sherbet? What child would long for Fruit Loops if they weren't so interesting looking? Would the popsicles doled out in the summer have nearly their appeal if they weren't many shades of color including that dreadful blue that turns the children's tongues and lips a frightening shade? Food dyes are added to fruit drinks, gelatins, frozen desserts and countless other products to conceal the absence of real fruits and vegetables and make the food "appear better or of greater value than it is." (1)

In defense of food dyes the Food Industry says that some dyes protect the foods and that the labels clearly state what dyes have been used so consumers can easily use that information. The nine dyes still in use are approved by the Food and Drug Administration (FDA). The FDA's safety requirement states, "There is convincing evidence . . . that no harm will result from the intended use of the color additive."(2) However, studies now suggest that most of the dyes cause health problems including cancer, hypersensitivity and neurotoxity (including hyperactivity) in some individuals.

Historically, regulation of dyes in foods began in 1906. Congress passed a law regulating food dyes because at the time metals such as lead, mercury and copper sulfate had been used to color pickles, candy, tea leaves and other foods. (3) Eighty dyes were then considered safe. Today only nine dyes are still considered safe. Red dye #4 was specifically reintroduced after being banned for maraschino cherries in 1965 inasmuch as they were considered a decoration, not something people might eat. (4) Since 1955, the per capita consumption of dyes has increased five fold. (5) This is partly the result of more processed foods on the market and more consumer demand for

"attractive" products.

The Center for Science in the Public Interest, a non-profit advocacy group interested in health issues, called for a ban of all food dyes. CSPI feels that there is enough evidence that the dye can cause health problems, including worsening the behavior of children with behavioral disorders and even those without behavioral problems. Two British studies caused enough concern that the British government urged the food and restaurant industries to remove the dyes by December 31, 2009. The dyes are no longer being used in Europe. Kraft Mac and Cheese made in Europe relies on natural colors while the Mac and Cheese in the U.S. is still colored by Yellow 5 and Yellow 6. (6)

There are alternatives to synthetic dyes. Beet juice, grape skins, Chlorophyll, beta-carotene, saffron, turmeric are all used now and can replace the synthetic dyes. Natural dyes are more expensive and can be less stable than the synthetic ones and don't have the vibrant color. This might require an adjustment in choices by consumers. Buying an orange that is not so orange (orange dye is used for some oranges to make them more attractive) is a learning process. Consumers already know that the reddest apple might not be the best. The best way to avoid food dye is to eat "whole foods," buy locally grown foods, or grow your own vegetables and fruits.

Footnotes:
(1) "Food Dyes, A Rainbow of Risks," published by the Center for Science in the Public Interest, p. 6.
(2) *Ibid.* p. 7.
(3) Institute for Agriculture and Trade Policy, Food and Health Program, Smart Guide to Food Dyes: Buying foods that can help learning.
(4) Wikipedia - maraschino cherry.
(5) CBS News (Health), June 29, 2010.
(6) Nutrition Action Health Letter, newsletter of the Center for Science in the Public Interest, September, 2010.

A Novel Idea: Modeling Crop Production on the Prairie

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

Have you heard? There's good news and there's bad news. The good news, the *really* ***good*** news, is that geneticists and agronomists are developing *perennial* grains. The bad news is that, although they are 10 years into this effort, it is expected to take another 40 to achieve - although, in evolutionary terms, that's really pretty quick!

Photo from cbc.ca

1313But why bother to develop perennial crops, with questions of synchronized maturity and harvesting, when we're currently raising record quantities, exporting worldwide, and meeting demand? The reason is that the production of food as now practiced – annuals grown in monocultures – is simply not sustainable. For one thing, soil erosion, exacerbated by annual tillage and subsequent loss via wind and run-off, is rampant and worldwide. The average sediment loss, including topsoil which holds the nutrients needed for plant growth, is some 4 billion ton *per year – just in the United States*.[1] Carried along in the run-off is the overflow of chemical inputs, synthetic fertilizers and pesticides as well as the non-therapeutic antibiotics added to animal feed. Nutrient run-off reduces oxygen in our waterways, causing fish-kills and augmenting the dead zone in the Gulf of Mexico. In some areas nitrates in run-off are making drinking water unsafe, and causing miscarriages in animals.[2] As the nutrient load in the soil diminishes, so does crop yield, which engenders increased fertilizer input, accelerating soil and water degradation. How do we stem the tide?

As world population increases, global grain demand is expected to double by 2050.[3] Given the un-sustainability of our present agricultural practices, is there a way to build up our soils and their nutrients while also addressing increased demand for food? Or are these antithetical goals?

Over 20 years ago, in the middle of Kansas, the geneticist Wes Jackson saw the surrounding prairie anew, recognizing it as a model for sustainable crop production, and therefore, possibly, food security. A model of self-sufficiency and ecological integration, native prairie polycultures stem erosion, cycle nutrients efficiently, avoid pest epidemics and generally manage weeds while depending upon "the contemporary sun" for energy.[4] *Perennial* crops would mimic these benefits, including a reduction in energy consumption and less dependency upon fertilizers and pesticides, reducing costs to the farmer. Farmers would also not need to purchase seeds annually. Most significantly, the development of these crops "could reverse the current decline of our domestic genetic reservoir."[5] The key ingredient to these benefits is the perennial root system. Compared to annuals, perennial root systems are substantially deeper and more extensive (see Figure 2) and, therefore, can draw water and nutrients from extended underground levels, as well as retain water and nitrates. This ability fortifies the plants against drought and pests, which is significant as climate change increases global temperatures. Although there is winter die off in the root system, its established system allows an accelerated growth in spring, permitting farmers to realize their first harvest while annual crops are just emerging. Covering annual fields with perennials will also augment carbon sequestration, with an anticipated increase of between 50 and 100%.[6]

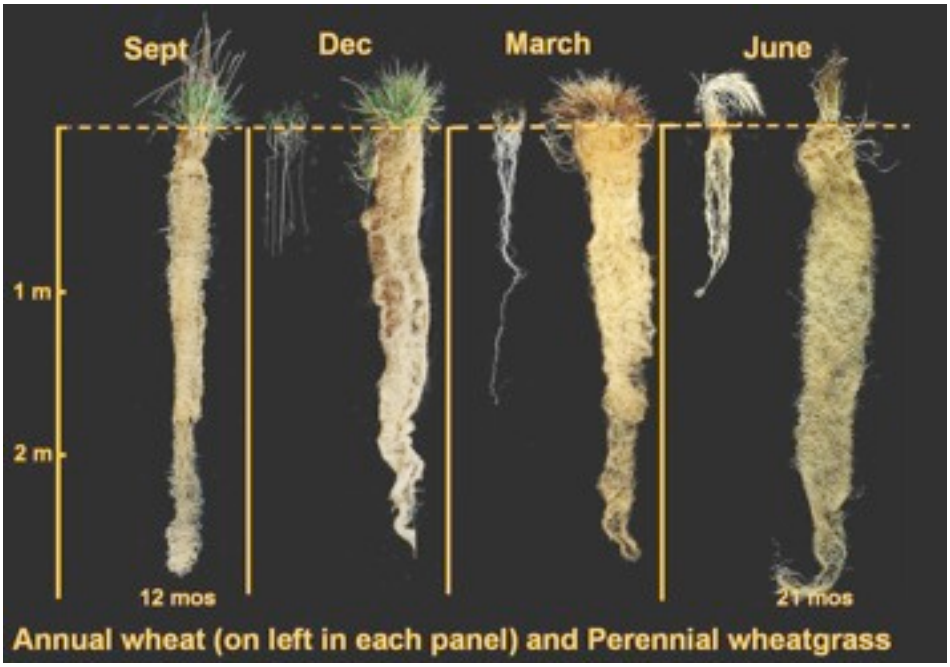


Figure 2 - Root systems of annual wheat (on the left in each panel) and intermediate wheatgrass, a perennial, at four different times of the year. Courtesy of The Land Institute.

Wes Jackson, who founded The Land Institute in Salina, Kansas in 1976, assembled a team of scientists to pursue sustainable agriculture, focusing on the native prairie as their standard. Their study evolved into research and breeding trials to develop perennial grains planted in complementary plant groups, *Natural Systems Agriculture*, echoing their model of a naturally balanced, self-sustaining ecosystem. By the 1990s their work centered on wheat, sorghum, sunflowers and some legumes, utilizing an array of traditional and advanced breeding techniques.[7] The continued process of breeding and planting thousands of plants to accumulate the desired traits takes time, perseverance and painstaking record-keeping.

Lee DeHaan, a Land Institute breeder, focused on turning perennial intermediate wheatgrass, *Thinopyrum intermedium (*wheat in name only), into a viable food source. As perennials are slow to take hold, DaHaan has routinely waited for the second generation of plantings to evaluate traits.[8] After 10 years, he has elicited increasing seed yield. This past summer at The Land Institute's annual *Prairie Festival*, one pound bags of flour derived from this wheatgrass (trademarked "Kernza") were offered for sale for the first time. This grass offers extensive genetic diversity.[9] It also is high in nutrients with significant human health benefits, such as Omega 3 fatty acids and calcium. High in folates, it is important in stroke, cancer, heart disease and infertility prevention.[10] At this stage Kernza lacks sufficient gluten for bread-making unless coupled with wheat flour. The hope is to be able to provide enough kernza for commercial use within ten years.[11] Trials continue. In crossing annual bread wheat with perennial grasses, the Land Institute scientists have discovered that the key to "fertility and sturdy *perennialism*" appears to require equal numbers of chromosomes from both the annual and the perennial parent.[12] This breakthrough is the result of ten plus years of trials. Significant traits concerning both sustainability and human health are being developed. The most encouraging aspect of these studies is the prospect of anchoring the soil as well as moving toward its reconstitution.

The idea of perennial crops and excitement over its benefits are sparking scientific attention. The Land Institute has sent funds the last three years to the world's only perennial rice-breeding researchers in Kunming, China. Other institutions in the U.S., as well as Canada and Australia, are pursuing perennial crop trials.[13] Natural Systems Agriculture signals a most exciting and promising future.

Footnotes:

1 Jackson, Wes, *New Roots for Agriculture,* University of Nebraska Press, 1980, p. 21.
2 *Ibid,* p. 24.
3 Glover, J.D. and Reganold, J.P., "Perennial Grains/Food Security for the Future," *Issues in Science and Technology,* Winter 2010, p. 43.
4 Cox, Picone, Jackson, Research Priorities in Natural Systems Agriculture, *Journal of Crop Improvement,* 12 (1/2), p. 513.
5 Jackson, Wes, *Ibid,* pp. 106-107.
6 Glover, J.D. and Reganold, J.P., *Ibid,* p. 44-45.
7 *Ibid*, p. 44.
8 Strand, Michael, "Going with the Grain," *Salina Journal,* 10/1/2010 at www.salina.com.
9 *Ibid*.
10 Logsdon, Gene, "Pancakes From Perennial Wheatgrass Grain," *The Contrary Farmer,* in Gene Logsdon Blog on July 7, 2010 at 6:46 am.
11 *Ibid*.
12 The Land Institute, *Condensed Annual Report,* June 30, 2010.
13 Glover & Reganold, *Ibid,* p. 45.

Progress in Restoring the Everglades - An Update

Lindsay Marshall - Cherokee Garden Club (GA)
GCA Zone VIII Conservation/NAL Representative

The Everglades was forever changed beginning in 1900 with levees and drainage canals that made way for Florida growth. The Comprehensive Everglades Restoration Plan (CERP) is a joint federal and state project launched in 2000 by the U.S. Army Corps of Engineers and the South Florida Management District (SFWMD). The CERP goal is to reverse the ecosystem decline while attempting to meet growing demands for clean water and flood control. The plan, approved in the Water Resources Development Act (WRDA), includes over 50 major projects that should greatly improve the quality, quantity, timing, and distribution of water flows into the Everglades area. More than 240 miles of canals and levees will be removed to reestablish the natural flow of water through the Everglades. The Everglades cannot be restored without restoring *sheetflow* - an overland flow or downslope of movement of water taking the form of a thin, continuous film over relatively smooth soil or rock surfaces and not concentrated into channels larger than rills.

(See *Conservation Watch*, Winter 2009-2010, pages 21-23 "Following the Flow: The Everglades Journey for 2010," by Sharon Stewart Neri, still available on the GCA website.)

Action on Additional 5.5 miles of Tamiami Trail Bridging

The Tamiami 5.5 mile bridge plan is a major step in restoring the "River of Grass" that is the Everglades by increasing sheetflow. The "Skyway" is the name adopted by the Sierra Club for the original vision of 11 miles of elevated road to restore flow to the Everglades largest tributary, the Shark River Trough. The current plan, a compromise backed by the Everglades Coalition and the Sierra Club, is now 5.5 miles in a series of bridges plus the one-mile bridge project now underway. Construction on this first one-mile bridge along the Tamiami Trail started in 2010 and should be completed by 2013. (1) Building the "skyway" not only benefits the parched flora and fauna in the park, but it also is crucial to mitigating the impacts of future sea level rise. Restoring freshwater flow across the Tamiami Trail will help to rehydrate the soil and provide a head of fresh water to counter those rising seas. Obama administration officials and Congress said earlier in 2010 that the new bridging would be a priority. But it will be up to Congress next spring to secure funding. (2)

Construction on the Tamiami Bridge project.
Photo from U.S. Army Corps of Engineers.

September 2010 Report from the National Research Council

The National Research Council is part of the National Academy of Sciences. The most recent report, released in September of this year, is the third in a series of biennial assessments mandated by Congress. This report on the progress that has been made by CERP is more positive than the 2008 report. Important scientific advances have been made, there is improved federal and state cooperation, and the pace of implementation of projects has increased. However, water quality issues remain. Attaining desired water quality goals throughout the entire ecosystem is proving to be more difficult and expensive than originally anticipated. The current Storm Water Treatment Areas that remove phosphorus from the water are insufficient to treat existing water flow in the Everglades Protection Area. (3)

South Florida Management District Acquires 27,790 acres of land from US Sugar Corporation

What began two years ago as a 1.75 billion dollar purchase of 187,000 acres of land for Everglades Restoration from US Sugar Corporation and its assets closed with only 26,790 acres of land sold for $197 million. The District will now take ownership of this strategically located land with high restoration potential while preserving the option to acquire the remaining 153,200 acres of additional lands if future economic conditions allow. The River of Grass Initiative, which includes the recent purchase, could provide additional land needed for water treatment and storage. The land acquisition deal closed on October 12, 2010. The district and Governor Charlie Christ had been negotiating an agreement to acquire the larger parcel of US Sugar Corporation agricultural land for Everglades restoration. After years of extensive negotiations, public comment, and the current economic downturn, the District completed the modified, smaller purchase. (4)

Third Major Federal Contract Awarded for 2010: (Dedication October 29, 2010)

The US Army Corps of Engineers, Jacksonville District is constructing the Site 1 Impoundment project in a 50/50 partnership with the South Florida Water Management District, the U.S. Fish and Wildlife Service, and the Florida Department of Environmental Protection. This is the third major federal contract this year to further the Corps' commitment to the goal of restoring Everglades ecosystems. The project site is a 1,800-acre triangle of land located south and east of the Loxahatchee National Wildlife Refuge approximately 20 miles west of Boca Raton in Palm Beach County. It will augment drinking water supplies as well as provide construction jobs for Florida residents. The SFWMD acquired the land, originally slated for a landfill. The Corps of Engineers will do the first phase of the construction, which will include erosion control measures, and construction of a six-acre wildlife wetland area. This Site 1 Impoundment will increase needed water storage capacity and water management flexibility adjacent to the wildlife refuge. (5)

Everglades Returns to the World Heritage Danger List

The United Nations has added the Everglades National Park to the World Heritage in Danger List. The Park had been on the World Heritage Danger List since 1979. The Park was removed from the list in 2007 at the request of the previous administration. The Obama administration has put the Park back on the list. Placing the Everglades back on this list will give impetus to continue specific ecosystem restoration projects that will serve as a basis for eventually removing the Park from the danger list. (6)

Everglades Restoration Provides Economic Benefits for Florida

A recent study prepared for the Everglades Foundation demonstrates the value that water and fisheries supported by the Everglades provide to South Florida. The yearlong study involved extrapolations from fish harvest figures and spending in tourism and recreation related to fisheries. It also addressed the cost of additional water treatment by public utilities because of weakening water flow in the Everglades.

Another study conducted by the Bonefish and Tarpon Trust and partly funded by the Everglades Foundation, showed there is approximately $1.2 billion a year in economic activity generated by just recreational or sport fishing in the 13 county Everglades region. (7)

Everyone who works, lives, or visits Florida will benefit from healthy Everglades. Lakes, rivers, and wetlands as well as plants and wildlife that make Florida so unique are all a part of the greater Everglades ecosystem. It is ours to save and restore.

Footnotes:
(1) www.saj.usace.army.mil
(2) www.sierraclubfloridanews.org/2010, www.evergladesfoundation.org
(3) www.nationalacademies.org
(4) www.nytimes.com/2010/08/13/us/13everglades, www.evergladesfoundation.org/pages/us-sugar
(5) rwww.evergladesplan.org/news
(6) http://whc.unesco.org/en/danger/everglades
(7) Greenwire, "Everglades: Investment in restoration reaps four-fold return study," 10/18/10.

Dawn Redwood - A Living Fossil

Kathy Gillespie, Pasadena (CA) G.C. – Zone XII
GCA Conservation Committee – Vice-Chair, Forests and Redwoods

The least known member of the redwood family is the Dawn Redwood, *Metasequoia glyptostroboides*. Identified from fossil remains in 1941 by a Japanese paleobotanist, it was given the name *metasequoia* or "new Sequoia". Until 1944 when three living trees were found by a Chinese forester growing in Sichuan, China, it was thought to have been extinct for the last 5 million years. Fossils have placed it in North America and China at the time of the dinosaurs. The speculation is that the last Ice Age brought it to extinction everywhere but the valleys of Sichuan, China where the glaciations were minimal. [1]

Photo courtesy of cirrusimage.com.

The tree is smaller and faster growing than the Coast Redwood, *Sequoia sempervirens,* and the Giant Sequoia, *equoiadendron giganteum,* reaching a height of 140 feet. But its most distinctive characteristic is that it is deciduous. In China it is known as the "water fir" since it likes to grow in lowlands near rivers and streams. There is speculation that the tree survived extinction over the centuries because it was used as a divination tool to predict the rice crop. Many cones high up signified a good yield, few cones, a bad year.

The Save the Redwoods League promoted the Dawn Redwood for public and private gardens. In 1948, they sent a team to collect seeds and cuttings of the tree and sent them to Harvard's Arnold Arboretum for study and promotion. The original trees have thrived, but despite its popularity and

cultivation, North American Chinese Dawn Redwoods are showing the results of their descent from the original three trees discovered in China. Of limited genetic diversity, mature trees are not producing enough seed. A project to collect seed from the more recently dis-covered Chinese groves is underway at the The Dawes Arboretum, near Columbus Ohio. "The goal is to allow these trees to eventually interbreed, producing viable seeds that would incorp-orate much of the total genetic diversity of the species as it exists in China today," according to Dr. Ralph Taggart of Michigan State University. [2]

Sources:
http://findarticles.com/p/articles/mi Home and Garden publications
http://taggart.glg.msu.edu/bot335/redwood5.htm

Footnotes:
[1] 1 http://scenery.cultural-china.com/en/161Scenery609.html
[2] http://taggart.glg.msu.edu/bot335/redwood5.htm

Partners for Plants
"We get by with a little help from our friends."

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

The GCA Conservation Committee started Partners for Plants in 1992 after five GCA members realized that the botanists who worked on federal lands were short of help. The original partnership was between these two entities but since then Partners for Plants has expanded. First the GCA Horticulture Committee became a partner. Over the years lands under state, county and city jurisdiction have been added as possible venues for projects. Partnership is an essential element since only the coordinator needs to be a GCA member. That person recruits plant partners from outside the club.

Ginny McCanse and members of the Westport Garden Club (Kansas City, MO) have started a project in Jerry Smith Park and Saeger Woods Conservation Area in cooperation with Kansas City WildLands. KC Wildlands has formed an extended group of partners to work on this project including Kansas City Light and Power. The power company brought in heavy equipment to remove encroaching trees. The company cuts power to the lines that cross the park when a prescribed burn, necessary to keep the prairie healthy, is taking place. Ginny and the Westport G.C. members join other volunteers in gathering seed that is germinated and grown by nearby Powell Gardens. When the seedlings are large enough they are planted in the park.

Westport GC members plants wildflowers in Jerry Smith Park. (Photo by Ginny McCanse)

When the Seattle Garden Club went to work removing invasive ivy, clematis and blackberry from its Montlake Cut project, the SGC coordinators (Sue Blethen, Diana Neely and Juliet Romano) formed partnerships with the US Army Corps of Engineers and Seattle Parks Department who each have jurisdiction over the park. An Boy Scout troop and their

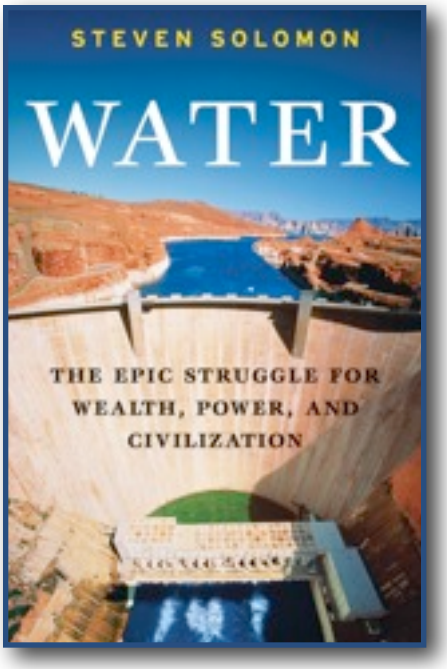
fathers were involved as well. Four-footed partners joined in when a herd of goats was hired to munch down the invasives before the two-legged volunteers started lopping and mulching. In order to expand the volunteer pool, they advertised the project to the public via flyers in the neighborhood and with publicity in the King County monthly newsletter. They posted large signs at both entrances to the park so people using the park are informed and can get involved too. With over 100 people and the goats at work, the first phase of the project was completed quite quickly.

Broadmoor GC members off to hunt for yellow ladyslippers. (Photo by Sarah Young)

Sometimes the governmental organization will help to get more volunteers. When Broadmoor Garden Club (CO) GCA coordinator Sarah Young started her project on Cheyenne Mountain she contacted the Forest Service biologist who brought in several volunteers from the Denver Botanic Garden to help count the ladyslipper orchid, *cypripedium calceolus*. One garden club member brought friends from the Native Plant Society and others brought husbands and non-GCA friends. Sarah also made the media a partner by inviting a local journalist to cover the event to let the community know that many people enjoy the local wild areas for something besides off road vehicles.

Doing a Partners for Plants project is rewarding as well as fun. For more information please contact Susan Osborne: osusan@comcast.net or Chris Caudill: clc3245@aol.com.

Book Review



Water: The Epic Struggle For Wealth, Power and Civilization by Steven Soloman

The title of Soloman's book is a summary of his 500 page book. He examines the history of the rise and fall of the world's civilizations and shifts of political power from the Old Kingdom in Ancient Egypt (3150-2200BC) through the twentieth century period of great dam building. It is told from the perspective of what water resources and technologies where available to those societies and how they were utilized. The book is divided into four sections; the first covers the ancient world, the second covers the age of discovery and the rise of steam power, the third covers the industrial revolution through the age of the great dams and canals, and the last section is a discussion of the water challenges different areas of the world face in this century. Soloman's writing style is fluid and occasionally even witty. I found using the lens of water to view world history to be quite interesting. Occasionally the book slips into being a tad *preachy* but the majority presents a balanced view of the issues surrounding water use and availability.

History buffs will love this book. Those for whom history is not their "go to" genre may have to get accustomed to the rhythm of the book in the first chapter or two. The maps included are very helpful for those who may not recall just where Ancient Mesopotamia was located! The book is available in hardcover and electronic versions. It's a great idea for a holiday gift.

Sara O'Connell – Connecticut Valley G.C.
GCA Zone II Conservation/NAL Representative

Club News

Butterfly Garden Becomes *Pollinator* Garden!

When your beautifully designed Butterfly Garden morphs over ten years into a salad bar for ruminants and rodents, and a preferred nest for a snapping turtle, do as the Conservation Committee of the Litchfield Garden Club of Connecticut did. Reimagine your project! Instead of admitting the deer and rabbits had won, members decided to broaden the focus to include all native pollinators, remove self-seeded invasives and deer candy such as *hemerocallis* (daylilies), and redesign with native plants.

The garden, a partnership with the White Memorial Conservation Center, abuts a path that school students stroll. Before, a sign announced, "Butterfly Garden" - nothing more. Now strollers find four interpretive signs. One asks (and answers), "What is a pollinator? Anything that eats and excretes." Others identify three natives whose habitats shrink daily. There are labels for native plants in the garden. When exploring handicap access to the garden, committee members investigated permeable pavers and worked with another partner, the Graduate Department of Geography at Central Connecticut State University, in using Geospatial Information System (GIS) plotting. This establishes the topography of the area showing where a handicap-access path is possible in their future plans.

Dale Ryan, Palmer Marrin, and Polly Brooks hard at work in the garden.
(Photo by Bronwyn Schoelzel.)

The staff at the Conservation Center, who mowed around the garden since 1998, itched to remove towering invasive bushes and replace them with natives. The area surrounding the garden gets cleared a bit further each year, but it cannot be completely redone yet. The Center hasn't funds to replace the invasives, which provide shelter for birds, with sufficiently sized natives as of yet. However, what could have been the end of a project has became the kickoff for a fuller partnership.

Marana (Polly) Brooks, Conservation Committee Co-Chair
Litchfield (CT) G.C. – Zone II

Maine Club's Storm Drain Project

In May of this year, the Piscataqua Garden Club of Maine undertook a storm drain project in response to a charge from GCA to focus on water related issues for this next year. Club members had also heard a sobering message from the State of the Estuaries Conference held last fall, that the environmental quality of the Piscataqua River estuaries was declining with 11 of 12 indicators showing either negative or cautionary trends. Researchers suggested that these problems were due to population growth with associated increases in nutrient loads and non-point source pollution.

Members of the garden club worked alongside fourteen students from the Peer Leadership Group of Portsmouth (NH) High School to stencil the message "Dump No Waste - Drains to River" next to 42 storm drains designated by the Portsmouth Department of Public Works. Students did the preparation of the site and painted, while garden club members handed out informational leaflets in the neighborhood and spoke with interested passers-by. The students interacted with children in the neighborhood to further spread the message.

Members of 'Peer Leadership' at Portsmouth High School during their storm drain stenciling project. (Photos by Kitty Clark)

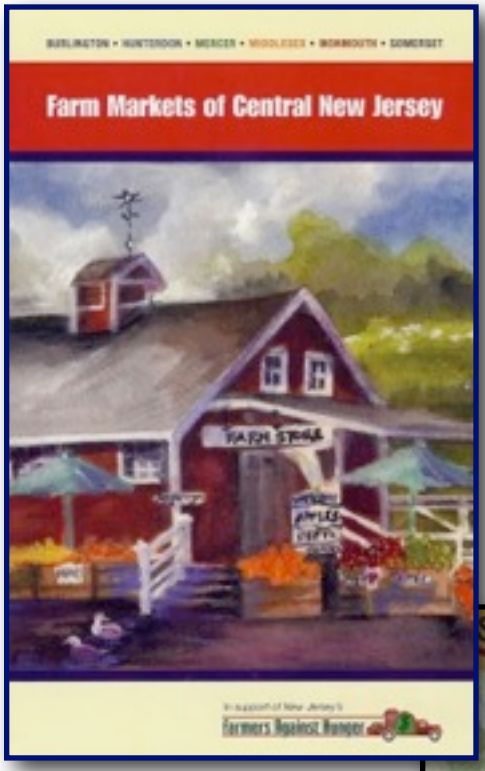
Water that runs into these drains goes untreated into the Piscataqua River. This is a huge source of contamination of the waterways with an enormous impact on the animal and plant life on the shores and the river basin. Piscataqua Garden Club's informational leaflet makes the following suggestions, which apply everywhere:

What can you do to help reduce water pollution?

1. Maintain your car and recycle used oil, antifreeze and other fluids. Fix oil leaks.
2. Wash your car at a car wash where they reclaim and revitalize their water.

3. Reduce use of pesticides and herbicides. Use slow release nitrogen, low phosphorus fertilizer (2% or less) and don't fertilize before a heavy rainstorm.
4. Replace part of your lawn with native, drought-resistant plants and bushes.
5. Pick up and properly dispose of pet waste.
6. Reduce the impervious surfaces on your property and increase the vegetated ground cover. Permeable paving or patio surfaces will filter your runoff water.
7. Reduce rooftop runoff by redirecting your downspouts to a vegetative area rather than to the storm drain. Consider collecting rooftop runoff in a rain barrel or cistern for storage and later use on your garden. This helps during dry spells and reduces your water bill.

Carolyn Rini, Conservation Committee Chair
Piscataqua G.C. (ME) – Zone 1



Princeton Club Produces Helpful Local Farm Guide

Over the past two years members of the Garden Club of Princeton have been diligently gathering information for their newly released publication, *Farm Markets of Central New Jersey.* This comprehensive 80-page guide tells consumers where they can purchase locally grown fresh fruits, vegetables, meat, poultry, dairy products and wine. The cover of the booklet is a watercolor painting by artist and garden club member Kate Leigh Cutler. The 5" X 8 1/2" soft cover booklet will easily fit in the side pocket of one's car for easy access when shopping. Included are county-by-county listings of farms and farmers' markets, what products they sell, and general directions on how to find the farms.

As a group, the Princeton members have made a strong commitment to buy directly from farmers. This is one of the most effective ways to support the farmland and open space in their community and to reduce the influence of agribusiness. The booklet was introduced to the public at a press conference with the State Secretary of Agriculture at the state capital farmers' market in September, 2010.

Garden club members present a copy to NJ's Sec. of Agriculture Douglas Fisher. (Photo by Kim Rizk)

The booklet is available at local New Jersey farm markets or through farmmarketsscnj@gmail.com. The purchase price is $10.00 with the proceeds benefiting the non-profit Farmers Against Hunger. Readers can check out gcaprincetonlocavores@blogspot.com. (Access it through movingtoprinceton.com.) The blog features info on the farmers in the booklet along with seasonal recipes and updates on sales and donations to Farmers Against Hunger. In this way, the club is achieving their mission of making fresh, nutritional fruits and vegetables available to those who are most in need. Purchase a copy and consider a project in your club to help shoppers find the local growers in your area.

Kim Rizk, Conservation Committee Co-Chair
Garden Club of Princeton (NJ) – Zone IV

Back to the Future – Bringing it Home

This year the Orinda Garden Club Conservation Committee continues with the theme: "Back to the Future—Bringing It Home!" Club members are emphasizing how we can make a difference in our everyday lives, on a local level. Conservation involves not only caring about how our natural resources are affected nationally, and globally, but also about the choices that we make every day within our own households. For example, when we choose locally grown, preferably organic, produce, we are not only protecting our environment from a larger carbon footprint, but we are also helping to protect the health of our families. This is how our grandmothers shopped. They didn't have a choice to do it any other way, but we can benefit by going "back to the future." And, after all, what resource is more precious than our families, and their health?

Last year the conservation committee organized a local E-Waste collection event with the proceeds benefiting local schools. In addition we held informational conservation forums directly following our monthly Board meetings, which are open to the entire membership. We conserved gasoline by having these meetings all in one day, at the same location. We will continue our theme this year by presenting suggestions at our monthly general meetings for living greener not only in our food shopping, but also regarding our pets, cleaning supplies, makeup and waste. The key to integrating these lifestyle choices into our everyday lives is to develop an understanding of how our actions affect the environment, and how easy it is for all of us to incorporate small changes. We can all do our part in thinking about the way we live day to day and incorporating thoughtful change into our way of life. It can, and will, make a big difference in the future of our planet.

Our conservation committee's motto (thanks to a member's grandmother) is: "Use it up, wear it out, make it do, or do without." Simple advice that makes a lot of sense, and can help all of us make greener decisions each and every day.

Pamela Stefan and DD Felton, Conservation Committee Co-Chairs
Orinda (CA) Garden Club – Zone XII

Guilford Garden Club and Friends School of Baltimore Collaborate to Create "Conservation Campus"

From roots deep underground to the heights of the tree canopy, native plants absorb, divert, and filter the water that falls and flows around them while providing food and shelter for wildlife communities. Friends School of Baltimore has a growing awareness of the benefits of this system of natural engineering. In a six-year partnership with Guilford Garden Club (GGC) in Baltimore, the school has created Native Plant Teaching Gardens employing Chesapeake Bay Watershed native plants to attract pollinators and other wildlife and to manage surface water on the school's bowl-shaped campus.

Friends School is the oldest school in Baltimore, now in its 226th year, with a campus tucked between two Olmsted Brothers designed neighborhoods - Roland Park and Homeland. Managing storm water runoff has been a constant challenge for the school, which is located on a sloped site that acts as a funnel for rainwater and snowmelt into the Stony Run, a creek on its border that ultimately runs into the Chesapeake Bay. Furthermore, when geothermal wells were dug for the new environmentally sensitive Middle School building in 2005, it was discovered that the campus sits atop pressurized aquifers. Over the past six years, the GGC has worked with students, faculty and the extended community, providing garden plans and planting guidance. The two groups have labored side-by-side, creating a series of native plant gardens designed to capture and control the flow of water, simultaneously accomplishing goals of limiting erosion, creating habitats, and increasing beauty.

Kay McConnell, Community Projects Chair
Guilford G.C. (MD) – Zone VI

Kingsley Moore supervises Upper School students
in planting at the Friends School of Baltimore.
(Photo by Heidi Blalock)

Bedford Garden Club's *Call to Action*

In January, 2009 the Bedford (NY) Garden Club co-sponsored the Bedford Environmental Summit, a meeting to educate and create a community of advocates. Over 1000 persons attended and 120 partnering organizations were involved. On Saturday, January 29, 2011 the Bedford "*Call to Action*" will follow-up with a program focused on the specific ways Bedford is working to reach the goals of the Climate Action Plan, unanimously passed by Bedford's Town Board in 2010, to reduce the Town's greenhouse gas emissions by 20% by 2020.

The Bedford 2020 Coalition, created in response to the outpouring of interest in the Summit, is a 501c3 nonprofit charged with implementing the Climate Action Plan. The "*Call to Action*" will be the first

introduction to the general public of the work of Bedford 2020's nine task forces. Five task forces are content-focused: energy, transportation, waste/ recycling, food/agriculture and water/land use and four task forces are focused on user groups: schools, businesses, religious entities and civic associations.

The day's events will include lectures, discussions, workshops, an exposition of home energy retrofits and renewable energy; water and land use including quality of water, land conservation, and living lighter on the land; community gardens, including a major community garden funded by Rusticus G.C. of NY; school gardens, like a Title I elementary school vegetable garden funded by the Bedford G.C.; and Bedford G. C.'s Tree Project modeled on Casey Trees. Other topics will include transportation initiatives (hybrid and electric cars) and initiatives by schools, businesses and religious entities who are "going green".

The Bedford Garden Club is delighted to host the Zone III Conservation Chairs Annual Meeting and to facilitate their participation in the *Call to Action* meeting.

There will be many specific ideas for local action that GCA members can take back to their communities. The day will provide a peek into the future. "*Call To Action*" planners believe that the depth of commitment by a municipality, that has morphed into a countywide initiative, is a model for how towns, villages and counties will take on the fight to remedy the impact of climate change as our state and federal governments are paralyzed by political bickering.

The day will end with a session focused on how to replicate the Bedford mini-summit to meet the culture and constituency of other garden club areas. For more information, please contact Mimi Lines, President of the Bedford Garden Club at line2lines@aol.com.

Linda James, G.C. of East Hampton (NY)
GCA Zone III Conservation/NAL Representative

Mimi Lines, Bedford (NY) G.C. – Zone III
Club President

Lindsay Matthews, Bedford (NY) G.C. - Zone III
Club Conservation Chair

Index

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

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

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

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

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