Conservation Watch

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Below the Surface - Our Endangered Oceans

Previous issues of Conservation Watch have drawn attention to the problems of our world's oceans. Articles have discussed our country's national ocean policy. We've reviewed what the benefits would be for the U.S. to sign the Law of the Sea treaty. Editions have covered our responsibility to improve the health of our oceans. We've included direction about making wise seafood choices. We've learned about dead zones in our oceans and the death of coral reefs. The perils of climate change as it affects our oceans have been covered extensively. And, most recently, issues have been devoted to last year's gulf oil spill and its long-term effects. In this issue, we focus on the inhabitants of the oceans. Here Garden Club of America readers will learn about the numbers and diversity of fish in the seas. You will learn about a true hero of the oceans, a woman you may not have heard of, who deserves our acclaim. Articles will teach us about new protected areas of our waters where marine life can live and prosper without human interference. We'll learn what fish we should we eat and why. And what we should perhaps avoid. We'll learn how important our country is for ocean protection. Read on and become a participant in the protection of our earth's oceans.

How Many Fish in the Sea?

Biodiversity Loss in Our Oceans

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

As our world becomes more developed and as civilization encroaches upon nature, we are reducing the range and number of plant and animal species found in their traditional habitats. Alarmingly, it is projected that 25 percent of all species may be extinct by the middle of this century. Yet, as E.O.Wilson, the" father" of biodiversity states, we know only 10 percent of the species on Earth. While we have much to discover, species could be lost before we even know about them.

In an effort to find out what kinds of life inhabit the oceans, a group of scientists began the Census of Marine Life in 2000. They developed a strategy to assess and explain the diversity, distribution and abundance of marine life. The founders organized the Census to answer three big questions: What *did* live in the oceans? What *does* live in the oceans? And, what *will* live in the oceans? This report was released in October 2010 and can be found at www.coml.org. The Census encountered an "unanticipated riot of species," – the currency of diversity. It raised the estimate of known



(Photo courtesy of wetpixel.com)

marine species from about 230,000 to nearly 250,000. Scientists believe that there may be as many as three times this number yet to be discovered and named.

After establishing historical baselines from sightings, catches and even restaurant menus, the Census documented declining numbers and sizes of fish even within one human generation. Overfishing was reported to be the greatest threat to marine biodiversity in all regions followed by habitat loss and pollution. One of the summary reports added, "The fact that these threats were reported in all regions indicates their global nature." Analyzing indirect observation from oceangoing vessels since 1899, Census researchers discovered that the food-producing phytoplankton near the surface has decreased globally.

Their findings provide additional information to a 2006 report issued by an international group of ecologists and economists which showed that the loss of biodiversity is profoundly reducing the ocean's ability to produce seafood, resist diseases, filter pollutants and rebound from stresses such as overfishing and climate change. Their results were published in the journal, *Science*, November 6, 2006 issue. "Whether we looked at tide pools or studies over the entire world's ocean, we saw the same picture emerging," said the lead scientist Boris Worm of Dalhousie University in Canada. "In losing species we lose the productivity and stability of entire ecosystems. I was shocked and disturbed by how consistent these trends are – beyond anything we suspected." They projected the collapse of all species of wild seafood that are currently fished by 2050. (Collapse is defined as 90 percent depletion.) "Unless we fundamentally change the way we manage all the oceans species together, as working ecosystems, then this century is the last century of wild seafood," said co-author Steve Palumbi of Stanford University.

The just released Census of Marine Life draws baselines of the diversity, distribution, and abundance of species in the oceans. It documented a changing ocean that is more diverse and less explored than we had known. The legacy of the Census will be the baseline of knowledge, the use of new technology and the cross-border collaborations that will be beneficial for humanity and the oceans.

Sources:

Census of Marine Life at <u>www.coml.org</u>

Worm, Boris, "Impacts of Biodiversity Loss on Ocean Ecosystem Services," Science, Vol. 314, No. 5800 (Nov. 3, 2006), pp. 787-790.

Spotlight on a Hero Dr. Sylvia Earle, Ambassador for the Oceans



Photo from seakeepers.org.

Candace Lyche Hillsborough (CA) G.C. – Zone XII

Dr. Sylvia Earle is a world renowned oceanographer, marine scientist, and deep sea research pioneer. She has been exploring "the blue heart of the planet" since taking her first breath underwater in 1952. She rose to national attention in 1970, after leading the first team of women aquanauts on the Navy's Tektite II expedition, living for two weeks in an enclosed habitat on the ocean floor. She has led more than 100 expeditions and logged nearly 7000 hours underwater, making record breaking dives in a JIM suit (1) to 1250 feet in 1979, and a solo dive in a deep submersible to 3280 feet in 1985. These dives earned her the nickname "Her Deepness" by the New Yorker and New York Times, and she has been hailed a "Living Legend" by the Library of Congress, and a "Hero for the Planet" by Time Magazine. In the 1980's, she started the companies Deep Ocean Engineering and Deep

Ocean Technologies, to challenge the accepted depths of undersea exploration, and make it possible to maneuver and explore at depths that defied existing technology. In partnership with famed ocean engineer Graham Hawkes, the Deep Rover submersible was developed, bringing manned, deep water exploration to 3000 feet. This led to the subsequent development of Deep Flight (2), and the ability to "fly" to the deepest parts of the ocean.

Formerly Chief Scientist of the National Oceanic and Atmospheric Administration (NOAA), Dr. Earle is a National Geographic Explorer in Residence, the Founder of SEAlliance, Deep Ocean Exploration and Research, Inc. and Mission Blue, an international ocean conservation movement, currently on expedition in the Gulf to identify areas of recovery east and west of the BP Deepwater Horizon spill. The team's findings will be compared to historical data on species and ecosystems gathered since 1950 in the same region. Dr. Earle is preeminently qualified to evaluate potential recovery in the Gulf region, as the historical data includes her own doctoral research in the Eastern Gulf of Mexico. At that time, using scuba equipment, she was one of the first researchers in marine science to document significant changes in plants and animals in the Gulf.

Her work in the Gulf today is her most recent in a long career of service to the oceans, for which she has received over 100 national and international honors. In 2009, she made a "wish to change the world" and was awarded the TED (Technology Entertainment and Design) Prize (3), which launched Mission Blue, to heal and protect the earth's oceans through the creation and management of essential marine protected areas.

A recent effort highlights Dr. Earle's understanding that it is difficult to protect a resource as vast and mysterious as the oceans. In her desire to raise geographic awareness of what lies beneath the sea, she inspired the creation of Ocean in Google Earth, with a simple question: Why does Google stop at the coastline, ignoring two-thirds of the planet? She was subsequently asked to lead the Google Earth Advisory Council, providing scientific oversight as content was gathered from well known marine institutions and initiatives, such as the Census of Marine Life (the ten-year effort to catalog marine organisms), Scripps Institution of Oceanography, Monterey Bay Aquarium, and the Woods Hole Oceanographic Institution. The Ocean in Google Earth, via it's 3D rendering, captures Dr. Earle's own passion, to dive through the deepest layers of the ocean and experience its vast panorama in more than one dimension. (4)

Interestingly, Dr. Earle does not eat fish. She describes trawling for shrimp as "using a bulldozer to catch songbirds". In interviews, she often refers to overfishing, making reference to the loss of 90% of the large fish species in the ocean within the last 50 years. Her message to restore the oceans is very simple: watch what we take out, and watch what we put in. Her approach to ocean conservation is equally straightforward: develop a network of Marine Protected Areas, the most versatile management tool for marine resource protection, to create marine ecosystems that do not exclude industry, but are more resilient; designating critical areas only where biodiversity and habitat are at risk.

A tireless speaker, Dr. Earle has lectured widely, appeared on radio and television, documenting the ocean's health, advocating for marine conservation and protection, and connecting the health of the planet to the health of our oceans. A prolific author, she has written many scientific, technical and popular publications including *Exploring the Deep Frontier, Sea Change, Wild Ocean, Dive, The National Geographic Atlas of the Ocean* and her newest book, *The World is Blue: How Our Fate and the*



Ocean's Are One. In this, her latest book, she urges the large-scale creation of Marine Protected Areas – "hope spots" – that Dr. Earle believes are critical to the health of the ocean.

Hats off to a hero, Dr. Sylvia Earle!

Notes:

- JIM suit an atmospheric diving suit (ADS), which is designed to maintain an interior pressure of one atmosphere despite exterior pressures, eliminating the majority of physiological dangers associated with deep diving.
- (2) Deep Flight series of positively buoyant, winged submersibles.
- (3) To hear Dr. Earle's TED acceptance speech, go to:

http://www.ted.com./talks/sylvia_earle_s_ted_prize_wish_to_protect_our_oceans.html (4) Ocean in Google Earth - <u>http://earth.google.com/ocean/showcase/#explore-oceans</u>

The Ocean Conservancy and Marine Protected Areas

Carol Davis, Green Spring Valley G.C. (MD) GCA Zone VI Conservation/NAL Representative

At a joint meeting between the GCA Zone VI clubs of Chevy Chase, Georgetown, and Perennial, attendees heard from Vicki Spruill, CEO of the Ocean Conservancy. Ms. Spruill discussed the oceans' importance, the work of the Conservancy, and how to address the well being of the ocean. Less than one percent of the ocean is protected and ocean acidification is bleaching coral reefs and harming shellfish. Marine debris has created the huge Pacific Garbage Patch. Ms. Spruill noted that 60 - 80% of the trash started on land.

As part of the Conservancy's work, Ms. Spruill noted the Ocean's Conservancy's advocacy for Marine Protected Areas (MPAs) or "National Parks for the Sea." Our oceans are under siege. Coastal development, pollution, habitat damage, overfishing, and other human activities threaten the health of our oceans. The approximately 2,000 MPAs in North America give threatened species room to rebound and provide habitat for migrating species. Some fish populations off California are depleted to less than 10 percent of historic levels and many may take decades to recover to healthy, sustainable levels. In some places fisherman are now catching less than half of what they did in 1990, and the fish they do catch are 45



California's new marine protection areas include a lengthy stretch of Laguna. (Mark Boster for the Los Angeles Times.)

percent smaller. As a tool to help protect ocean ecosystems, Marine Protected Areas (MPAs) can help. Currently, protected stretches of these "no-take zones" have been designated between San Diego and San Francisco and the Florida Keys.

Science is clear - MPAs work. These protected areas allow fish, mammals, and other marine life to breed, feed, and succeed without human interference. Scientific research demonstrates that MPAs can help bring back big fish and restore habitats, especially in the preserves where fishing is prohibited. These protected areas not only harbor more fish, they harbor older and bigger fish than can produce up to 200 times as many offspring as younger ones. These fish can repopulate depleted species that migrate out to places where they can be caught.

Seafood safety and sustainable harvesting of fish also fall within the purview of The Ocean Conservancy. The organization addresses problems with the effluent and pharmaceutical waste disrupting the reproductive health of sea life. They are also tackling the crossbreeding of farmed fish and wild populations leading to genetic mutations. For more information about the Ocean Conservancy and its mission, progress, and programs, contact <u>www.oceanconservancy.org</u>.



Marine Protected Area photo courtesy of Ocean Conservancy.

Food from the **Blue**

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

Do you know where the seafood you purchase in your local store comes from? Americans are eating more and more fish. A great deal of it doesn't come from our own country. Much of our fish supply comes from overseas. And some may contain toxic chemicals that may cause health problems. Some studies show that up to 80% of fish sold in the U.S. is imported, usually because it is cheaper.

A recent NBC news investigation yielded video of catfish in Vietnam being raised in sewage. Many fish are pumped with chemicals banned in our country or fed antibiotics to prevent disease because they are grown in contaminated conditions. The Food and Drug Administration (FDA) tests less than 2% of seafood. If inspectors find toxic fish, it isn't allowed entry into the country. But it still may find its way onto your dinner plate. The owners of the fish may just bring it through another port of entry to the U.S. And very few states test or regulate fish that are to be consumed.

Since 2005, the FDA has mandated disclosure. Customers must be told what country the seafood comes from. This is true for retail stores, but in restaurants in most states, the information is not readily available. It is up to the consumer to ask where the fish is from and how it is raised and caught.

What types of seafood have the worst records of contamination? Shrimp, catfish, crabmeat, and tilapia that are imported to the U.S. from China, Taiwan, Vietnam, Malaysia and Indonesia. They end up in American restaurants and grocery stores. Often the problem chemicals and antibiotics cannot be smelled, tasted, or cooked out of the fish.

What kinds of problems does this create? The most significant, of course, are the health implications such as cancer, anemia, and even birth defects. American fishermen who are playing by the rules are losing their jobs because they sometimes cannot compete with the cheaper foreign importers who are cutting corners.

What can you do to insure you are getting quality, untainted fish? First, be an educated consumer. Ask questions. Buy from a reputable fish market in your area that stocks locally caught fish, where possible, and knows the source of its fish and how it is raised and caught.

Follow the guidelines of the Monterey Bay Aquarium by carrying one of their pocket guides when shopping (along with your reusable shopping bags). Go to <u>www.montereybayaquarium.org</u>. On



the website you will find six different seafood pocket guides for various parts of the U.S. You can print out a guide for your area which folds into an easy to carry size. Each will give you "Best Choices," "Good Alternatives," and fish to "Avoid." The aquarium also produces a Sushi Guide for those of you who enjoy sushi prepared seafood. The "Best Choices" on all the guides are fish that are abundant, well managed, and caught or farmed in environmentally friendly ways. Those to "Avoid" are fish that are overfished or caught or farmed in ways that harm other marine



life or the environment. You can log on to mobile.seafoodwatch.org on your phone and be automatically directed to the latest online pocket guide. And iPhone users can download an app for seafood choices as well.

Another hopeful piece of news is the introduction of fish farming out at sea and cleaner operations for fishing along our shores. Meat consumption has been rising worldwide. But production involves vast amounts of energy, water, and emissions. Fish now supply only 7% of the world's protein. Wild fisheries are declining. Proper aquaculture could become the most sustainable source for protein for the world. Fish farming already accounts for half of global seafood production with the majority of that coming from Asia. Most fish farming is done along coastlines and has created substantial pollution where the fish are raised. Large offshore pens anchored to the seafloor are often cleaner.

Because of all the ocean territory the U.S. controls, we have vast potential for production both near shore or farther out in the ocean, if done properly. There are many new growing techniques being tested. As we have learned, many wild fish are already maxed out while the demand for fish is increasing. We have been told that eating fish is better for us for health reasons to reduce heart disease and improve brain function. In the near future, it is hoped that there will be a certification process for fish, established by the Aquaculture Stewardship Council so that we will have standards for fish to consume.

Given the growing demand, society needs to make hard choices about where greater protein production should occur. Food security should include fisheries and aquaculture – not just grain and livestock production. Perhaps we need to return to the seas for our protein needs, but in a sustainable and healthy way. We need to not just grow more fish in the ocean; **we need to grow better fish better.**

Sources:

Monterey Bay Aquarium website: <u>www.montereybayaquarium.org</u>. Eiland,Travell, "Could Your Seafood Contain Toxic Chemicals?" NBC News Online, Nov. 17, 2010. Simpson, Sarah, "The Blue Food Revolution," *Scientific American*. Vol. 304, No. 2 (February, 2011), pgs. 54 – 61.

(Graphics From Monterey Bay Aquarium.)

America's Ocean Facts

The United States controls more ocean than any other nation.

The U.S. controls 90,000 miles of coastline and about 3.4 million square miles of ocean. The federal government controls waters from 3 to 200 miles from shore, regulating commerce, navigation, power generation, national defense and international affairs throughout state waters. The 1982 United Nations Convention on the Law of the Sea established the right of coastal nations to control their ocean waters

from the low-tide mark on shore out to 200 nautical miles offshore. The U.S. complies with the convention. However, the U.S., which controls more ocean than any other country, has not signed the treaty.

Some places harbor more life than others in the waters.

In the oceans, there are some neighborhoods or patches that are more ecologically valuable (and economically valuable, too) than others. To do good planning, we need to know where these places are. Along the Eastern Seaboard of the U.S., for example, there are deep canyons on the edge of the continental shelf. They are home to diverse coldwater coral communities that may be thousands of years old. There are huge kelp forests off the coast of California. The Gulf of Maine harbors huge numbers of microorganisms suspended in the water, feeding an array of creatures including whales.

Our oceans have become very crowded.

In the U.S., one out of six jobs is marine-related – fishing, boating, tourism, recreation, and transportation. This doesn't even take into account of our own Navy and Coast Guard. The total economic impact of this sector is larger than the entire farm sector! The result can be a chaotic intersection of different habitats and uses. In any given area near America's shores, the engines of human activity are roaring. This vibrant economy depends on clean waters and productive marine ecosystems.

Ocean planning is essential for our future.

The National Ocean Council has been tasked with helping federal agencies do better planning for the ocean to help meet the economic, environmental and societal goals of the future. Solutions to problems like the following would result. Certain places are frequented by nesting sea turtles during parts of the year, but not at other times. What uses can those beaches endure at such times? Shipping lanes could be moved away from whale migration corridors. When they are, the risk of collision with whales can be greatly decreased.

(Adapted from "A Citizen's Guide to Our Oceans," Nature Conservancy Magazine, Winter, 2010.]



Catch of the Day - Book Reviews

(Image from NY Times Book Review.)

Four Fish: The Future of the Last Wild Food by Paul Greenberg

The evolution of fish as a modern food source for our hungry world is examined and clearly explained by Paul Greenberg in his first book, *Four Fish: The Future of the Last Wild Food*. The author presents the history of the global fisheries market and the current situation using four fish: cod, salmon, tuna and bass. World fish consumption is quickly outstripping supply and Greenberg offers common sense solutions to insure sustainability and consumer demand for wild fish. The pros and cons of eating farmed



fish vs. wild fish are well laid out for readers who are fish lovers and want to have more information about what we eat from the sea and how it is produced.

Although Greenberg offers grim and complicated facts concerning the world's common seas – which have all been exploited by countries for commercial gain – this is a very readable and even entertaining book for anyone who is interested in science, fish, and water. After reading this book you may never look at the fish on your plate the same way again!

Ann Lyman, Piedmont (CA) G.C. – Zone XII GCA NAL Committee 1st Vice-Chairman

[Available in Hardcover, Paperback, Audiobook format, and Electronic versions.]

The Empty Ocean by Richard Ellis

This 2003 book is the story of our plunder of the life in the seas and weighs the changes for the oceans' recovery. Through portraits of creatures including whales, dolphins, sea turtles, cod, tuna, coral and others, we are introduced to the sea life that man has fished, hunted, and collected over the centuries. Killing has occurred on a stunning scale, with extinction sometimes the result. A once-teeming ocean is greatly depleted.

Here's an example of how Richard Ellis describes the creatures of the oceans. In discussing living corals, he writes, "The living corals form only a thin veneer of the coral reefs, measured in millimeters . . . This film of living tissue has shaped the face of the Earth by creating limestone structures sometimes over 1300 meters thick, from the surface down to its base on volcanic rock or over 2000 Km long (as in the Great Barrier Reef). Everything that is useful about reefs (to humans and the rest of nature) is produced by this organic film, which is approximately equivalent to a large jar of peanut butter spread out over each square meter of reef. What is killing the world's corals? Anything and everything, but mostly us."

The author, however, also finds instances of hope and resilience about species that have begun to make remarkable comebacks when given the opportunity. Illustrated with Richard Ellis's own drawings, this book provides us with a compelling view of the damage we've caused in the oceans and what we can do about it. *Editor*

[Available in hardcover and paperback.]



Relics to Reefs

A fascinating article in the latest issue of *National Geographic* bodes well for the future of fish. People around the world have long known that shipwrecks are excellent fishing sites. This story of how artificial reefs made from decommissioned subway cars, vintage battle tanks, armored personnel carriers, old oil drilling rigs, and specially made beehives called "reef balls" are changing the populations of marine life in these areas. Currents change with these structures creating a plankton-rich upwelling providing a food source for small fish. These then attract larger predators and other fish seeking the protection the artificial reefs provide. This story tells of the marvelous powers of the ocean to claim materials and make it flower with life.

> Harrigan, Stephen, "Relics to Reefs," **National Geographic.** Vol. 219, No. 2 (February, 2011), pgs. 84 – 103.

> > Editor

More Conservation Topics

Supersized Homes – "McMansions" Here to Stay?

Jane Whitaker, Cherokee G.C. (GA) – Zone VIII GCA Conservation Committee – Vice-Chair, Land Use/Sustainable Development

"Last year, McDonald's phased out its 'supersize' French fries and soft drinks. Portions, it seems, had gone about as far as they could go. Could the same be true of the supersized houses known as McMansions?" So pondered Fred Bernstein in an article for the *New York Times* in 2005 (1). But, not until 2007 did the construction of supersized houses slow down after more than 30 years of steady increase. Is this downsizing a trend driven by the current economic downturn or has a new culture in housing standards emerged?

Influence of Economic Downturn

The average size of a house built in the United States in 1980 was around 1,700 square feet. Since then new houses have grown on average by more than 40 percent, as small dens have given way to great rooms, and bathrooms have become at-home spas. Some believe houses got too big because people were chasing investment gains and there was cheap money. Christopher Leinberger of the Brookings Institution credits the oversized-housing boom to massive subsidizing and to the mortgage tax deduction. Some argue that buyers never truly craved all that surplus space and took it only because that was the way the marketplace measured the worth of their investment. According to Andrew Rice

of the New York Times, there was an attitude of "whatever you buy, you need to stretch, because in two years you'll be able to sell it for double." (2)

Negative Perception of McMansions

The public perception of big house owners has become more and more pejorative. Author James Gauer states that owners of oversized homes are seen now as personas of greed, and that in the corporate scandals of recent years, a persistent underlying theme was the grotesquely large houses of the perpetrators (3).

Owners of urban mega-houses built on postage-sized lots are being shunned in the neighborhood. They are routinely portrayed as architectural yahoos whose "plywood palazzos" leave neighboring buildings in their shadow, states Bernstein (4). Residents of urban neighborhoods from New Canaan, Connecticut to Atlanta, Georgia are taking these concerns to the local zoning boards and city councils, complaining that these mega-houses are destroying the character of the neighborhood and causing a decrease in home values.



Photo by news.com.au.

City Council member and member of a GCA Club, responded to citizen complaints by creating an Infill Housing Task Force, comprised of architectural professors, developers, city officials, realtors and home owners. Their task was to create a formula by which a house could be measured to verify that it was in scale with the neighborhood. Square footage, height, topography, and setbacks were all evaluated. Mrs. Norwood stated that the Task Force "worked hard to find equitable ways to balance protection of neighborhoods and their quality of life with the redevelopment that is inevitable and when done right – desirable." (5)

In 2007 Mary Norwood, an Atlanta

Trend Toward Sustainability

McMansions took a different shape in New Jersey. From 2002-2007, two-thirds of the land that was developed became "low-density, large-lot residential properties, swallowing farmland, wetlands and unprotected forests," according to a *New York Times* article by Ronda Kaysen (6). A study by Rowan and Rutgers Universities postulates that New Jersey is poised to become the first state to develop every acre of unprotected land by mid-century.

However, this same study also states that the trend is now turning toward the construction of smaller houses in denser developments, based on the fact that residential building permits have more than doubled in the past 10 years. Perhaps this can be contributed to an aging population, which includes empty-nesters who are looking to downsize, or to the younger professional generation, who are putting off starting a family in order to get an economic foothold on their lives before settling down.

In any case, McMansions are not going to be the way of the future, states Kaysen. The downsizing trend is here to stay. She quotes a New Jersey housing market director, who states, "Opulence is out. It's smart living that people are looking for." (7) According to Bernstein, consumers are thinking less about square footage and more about the "bells and whistles," such as professional-style appliances and exotic woods. They are looking for durability, flexible spaces, and for connections between indoor and outdoor spaces (8). Living in a community where shopping, dining and entertainment are within walking distance is in; building a house that duplicates a community, with a swimming pool, media center, and a spa within its walls, is out.

Footnotes:

- (1) Bernstein, Fred, "Are McMansions Going Out of Style?" New York Times, Oct. 2, 2005.
- (2) Rice, Andrew, "The Elusive Small-House Utopia," New York Times, Oct. 15, 2010.
- (3) Bernstein, Ibid.
- (4) Bernstein, Ibid.
- (5) Norwood, Mary, Atlanta City Council Member, Interview 10/15/10.
- (6) Kaysen, Ronda. "Builders Move Beyond McMansions in New Jersey," New York Times, Oct. 5, 2010.
- (7) Kaysen, Ibid.
- (8) Bernstein, Ibid.

Phosphates in Dishwasher Detergents Banned in Many States

Diane Stoner, Litchfield (CT) G.C. – Zone II GCA Conservation Committee – Vice-Chair, Climate Change

On July 1, 2010, sixteen states banned the use of phosphates in dishwasher detergent formulation. Phosphates used in household cleaners all eventually end up in lakes, streams and rivers and there they stimulate algae growth, adversely affecting plant and animal life. Phosphates were removed from laundry detergent in the 1990's. The upshot has been a testing of the environmental resolve of many advocates who now are witness to the less than clean wash loads of dishes. Phosphates, in spite of their acknowledged damage inflicted on the environment, are wonderful at removing food and scum from dishes. When Spokane, Washington first banned phosphates in 2008, consumers brought phosphate-laden products into Spokane from states where it was still sold. Proctor and Gamble, makers of Cascade, are in the process of reformulating their product line. In the meantime, consumers are being advised to pre-rinse completely. Here's a source to learn more:



Photo courtesy of punchstock.com.

http://www.nytimes.com/2010/09/19/science/earth/19clean.html

The states included in the ban are: Illinois, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, Ohio, Oregon, Pennsylvania, Utah, Vermont, Virginia, Washington, and Wisconsin.

Billboards Taking Our Victories Where We Can Get Them

Jane Herrmann, The Diggers (CA) – Zone XII GCA NAL Committee – Vice-Chair, Transportation Corridors and Billboards

Los Angeles, California

Representatives from several scenic conservation groups held a press conference recently to announce a renewed effort to fight back against the proliferation of digital billboards nationwide. Mary Tracy, President of *Scenic America*, and Dennis Hathaway of LA-based *Coalition to Ban Billboard Blight* spoke at the press conference held at the intersection of Santa Monica Blvd. and Westwood Blvd. in Los Angeles. Scenic Minnesota, Scenic Michigan and local residents who have been affected by these "TVs-on-a-Stick," joined them at this particularly bill boarded corner. [Source: Scenic America at www.Scenic.org and banbillboardblight.org.]



A life-size fiberglass car was attached to a ramp in the billboard that moves the car up and down to create a Yo-Yo effect as motorists drive by. Photo from motoringfun.com.

Minnetonka, Minnesota

Clear Channel Communication's strategy backfired in this Minnesota city. For more than 41 years this city has carried a prohibition on illuminated signs that change in color and intensity. The city pulled the plug on such signs by issuing stop-work orders and then defeated an effort by Clear Channel to obtain an injunction. Judge Lloyd Zimmerman found that "there is substantial evidence to support Minnetonka's claim that Clear Channel avoided disclosing its plans to deploy LED billboards in the City of Minnetonka and operated 'under the radar' in order to get billboards up and running."

[Source: billboardsinthedigitalage.blogspot.com]

State of Kentucky

In Kentucky state transportation regulations prohibit both Tri-Vision and LED signs. In 2004 the billboard industry was successful in inserting language into regulations allowing Tri-Vision signs into a bill that focused on tree cutting around billboards. The bill got through the Senate and into the House before people realized the provision was even in it. The House killed the bill, as it has done to treecutting bills consistently over the years. This year, a bill that would have allowed electronic billboards and Tri-Vision signs was introduced but died in committee.

[Sources: Scenic America at <u>www.Scenic.org</u>,Tom Fitzgerald and Kentucky Resources Council.]

Pittsburgh, Pennsylvania

A new Pittsburgh affiliate of Scenic America started recently and within days of its formation, a large digital billboard was stopped from going up in downtown Pittsburgh! The city's planning department is now working on legislation that would set conditions on how to regulate the billboard industry within the city. Mike Demko of Scenic Pittsburgh says their goal is "to regulate the size, the brightness, [restrict] how often the messages change, require that they shut off at night and not be visible from the rivers." For more information, see: http://www.scenicpittsburgh.org/.

Notes:

LED Billboards utilize light emitting diodes, an electronic device that light up when electricity is passed through it.

Tri-Vision Billboards consist of three sides that rotate electronically at a certain schedule.

Round Two in the Plastic Bag Wars

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

Following the defeat of a statewide bill (AB1998) that would have banned single-use plastic bags at checkout, several California cities hoped to go forward with bans despite the threat of lawsuits. Green Cities California developed a "tool kit," Master Environmental Assessment and model ordinance that cities could adapt to their needs. With help from them, various jurisdictions have been working on ways to meet the legal challenges of proplastic groups such as the Save the Plastic Bag Coalition and the American Chemistry Council.

Stephen Joseph of Save the Plastic Bag argued that a ban on single use plastic bags required an Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) - a study that would be expensive and drawn out. He took the position that a prohibition would result in an increase in paper bags and do more harm than good. In litigation, pro-plastic groups would turn to CEQA to sue cities and counties on single-use plastic bag bans after 2007 when San Francisco and Malibu adopted their ordinances. Since then, local bans have "either been repealed by a successful lawsuit or ... withdrawn due to threats of such suits. Palo Alto settled its lawsuit (and went forward with its ban) by agreeing not to expand its ban without completing an EIR. Fairfax enacted its ban by voter initiative, which is exempt from CEQA." (1) Oakland was the first city to lose in court, and that lawsuit was cited as precedent in successive briefs.



"Bag lady" protesting plastic bags. Photo by Diana Fish.

On November 16, 2010, the Los Angeles County Board of Supervisors banned single-use plastic bags in unincorporated Los Angeles at grocery stores, pharmacies and convenience stores selling liquor. The Supervisors also added a I0-cent surcharge on paper bags. This surcharge was not a tax since city governments are prohibited from collecting revenue from fees on industry (e.g. - charging customers for plastic bags at checkout). Joseph initially said a challenge was "very justified," but the time to file has run out. In a separate action, the Marin County Board of Supervisors banned plastic bags and approved a 5-cent fee for paper bags on December 14, 2010. However, on January 4, due to concern about a lawsuit, they voted to postpone passing the ordinance; however, one of the Supervisors believes they are on sound legal ground. Their goal is reusable bags.

Sometime in 2011, the California Supreme Court will hear the appeal of the City of Manhattan Beach for review of a lower court decision (Save the Plastic Bag vs. City of Manhattan Beach). At issue is whether an EIR was required since the trial court determined the ban was subject to CEQA. To be continued ...

[See Diana Fish's first article on this topic, "The Plastics Wars," in the Fall, 2010 issue of *Conservation Watch*, pg. 9, still on the GCA website.]

Colorado's Katrina?

Suellen White, Conservation Committee Co-Chair Garden Club of Denver (CO) – Zone XII

As part of the club's ongoing study of water issues, I attended the Governor's Bark Beetle Summit on November 15, 2010 in Keystone Lodge, Keystone, Colorado. The summit, sponsored by former Governor Bill Ritter, pulled together 150 attendees to discuss and to debate the critical issues surrounding an unprecedented threat – the bark beetle – to our beloved state of Colorado.



Photo courtesy of healthygreenworld.com.

How can we remove trees in a systematic, sustainable way to preserve public safety, to protect watersheds, keep recreational areas open and desirable, and stimulate private investment and economic growth? How should we shape reforestation and encourage future forest stewardship? Is there any way to look at this situation optimistically? The daylong summit addressed these questions.

Imagine the entire state of Delaware engulfed in flames. Now take that fire and place it in the middle of Colorado. Imagine three and a half million acres of Colorado forests burned beyond recognition. Towns, roads, forests, animals, industries, and people destroyed. Who would want to be here? Could it happen? Yes. Is it likely? It's becoming more likely every day.

The culprit is the lowly bark beetle, which has been burrowing into mature lodge pole pines since 1996. The beetle's enemy is brutally cold weather. Traditionally, our cold Colorado winters have kept the pest under control. As winters have warmed, however, the beetle has become out of control.

How bad is it? Some estimates suggest that 100,000 beetle-infested trees fall in Colorado every day and, if nothing is done, will continue to do so for the next three to five years, which is how long it should take for them all to fall. The beetle kill is marching through Colorado at a measurable rate, so the forest service estimates it will eat its way through the state within 5 years.



(Photo from global-greenhouse-warming.com.)

A mature lodge pole pine weighs just over 1,000 pounds and falls at a speed of 57 miles per hour. A falling pine can do significant damage to infrastructure, animals, people, and other trees. Indeed, falling trees have already affected some 3,700 miles of forest system roads and 1,300 miles of hiking trails.

But the immediate impact of falling trees is a small part of the problem. The real danger is fire and the resulting havoc. The beetle infestation is moving to higher elevations than ever before and farther west. It threatens not only forests but also watersheds, including the Arkansas, the Colorado, and the Rio Grande Rivers. The combination of burnt forests, massive erosion, and clogged waterways could create a perfect storm of ecological disaster.

Unless our winters suddenly turn colder again, there is no real solution. Our best hope is mitigation and prevention. Since a welter of government agencies control Colorado land, forests, and river systems, mitigation will require unprecedented cooperation between federal, state, and local authorities.

The first step in mitigation is to create incentives for removing fallen trees. During the housing boom, loggers could remove trees and sell them profitably to the construction industry – even after signing long-term contracts and paying fees to the U.S. Forest Service (USFS). When the housing bubble burst, the market for fallen trees evaporated. To create new incentives, the USFS will need to create a new system of contracts and fee schedules. In fact, the USFS may need to set the price of fallen trees at zero to ensure quick action.

New USFS policies are only one step, however. Even if fallen trees are priced at zero, loggers still need a market for the trees. The construction industry will not generate sufficient demand in the near future. Alternative markets will require some open-minded policy makers and, perhaps, some important rule changes. For instance, potential markets include: 1.) burning the wood to create energy or 2.)

converting the wood to bio-char that would help enrich the soils and prevent erosion. Both of these would require changes in regulations that cut across multiple government agencies.

The number of agencies that have some stake in the problem reads like an alphabet soup: USFS, BLM (Bureau of Land Management), EPA (Environmental Protection Agency), USDA (U.S. Department of Agriculture), FEMA (Federal Emergency Management Agency), as well as the State of Colorado and local governments. Therein lies the rub. Since so many agencies are responsible - no one is responsible. While each agency may well be doing its best, the combination can still lead to disaster. Nobody wants Colorado to burn, but nobody is taking decisive action to stop it. Perhaps the best, first step is for newly elected Governor John Hickenlooper to appoint a *"beetle czar"* to bring urgent attention to the problem and cut across agency boundaries to solve it.

[For additional information, see "Mountain Pine Beetle Threatens the West" in the Summer, 2008 issue of *Conservation Watch* by Jennifer Fain, still available on the GCA website.]

Polar Bears - Threatened or Endangered?

Kathy Jones, Lake Minnetonka G.C. (MN) – Zone XI GCA NAL Committee – Vice-Chair, Endangered Species



Threatened or Endangered? (Photo from keyposters.com)

The polar bear, *Ursus maritimus*, has become the iconic image of climate change as Arctic warming with melting sea ice has become a scientific fact. The question now being asked is: Should the world's largest land predators, descended from brown bears about 200,000 years ago, be classified as "threatened" or "endangered" in response to the loss of its habitat?

Under the Bush administration, polar bears were classified as "threatened" in 2008. This designation was continued in the Obama administration, resulting in a lawsuit by environmental groups who wanted the classification changed to "endangered" under the Endangered Species Act. The new designation would enable the government to address the causes and conditions of climate change (including greenhouse gas emissions), the impact of oil and gas drilling, and the loss of habitat. In December 2010, with the court case still pending, the U.S. Fish and Wildlife Service set aside 187,000 square miles in Alaska as critical habitat for polar bears, thus providing some governmental protection. Ninety-six percent of that habitat is sea ice.

U.S. District Judge Emmet Sullivan of the District of Columbia will hold another hearing on February 23, 2011 for all parties challenging the listing. In Congress, two relevant bills have been introduced in the 112th session of the House of Representatives. Representative Don Young (R-Alaska) seeks to take away the power of the U.S. Fish and Wildlife Service to determine the threatened status of the polar bear. Representative Ed Markey (D-Mass.) has reintroduced a bill to protect the Arctic National Wildlife Refuge (ANWR) in Alaska from oil and gas drilling.

Polar bear facts:

Adult males weigh 775-1500 pounds. Adult females weigh 330-555 pounds. Females usually give birth to two cubs. They are on the top of the food chain in the Arctic. They hunt seals in openings in the sea ice. They are found in the United States (Alaska), Canada, Russia, Denmark, Greenland, and Norway.

E-Cycling – a Win-Win Good for the Environment, Good for the Economy ZONE VIII Actively Participates In Electronic Recycling

Lindsay Marshall - Cherokee G.C. (GA) Zone VIII GCA Conservation/NAL Representative

We have a problem. *Fortune Magazine* (September 27, 2010) describes "Gadget Gluttony" this way, "Worldwide annual electronic waste is estimated at 50 million tons and 70% of heavy metals in U.S. landfills comes from outdated electronics. Only 23 states have an electronics law and regulations are inconsistent."

What is **e-Cycling**? The term e-cycling refers to the process of recycling the components or metals contained in used or discarded electronic equipment, otherwise known as electronic waste (e-waste). E-cyclable items include televisions, computers, microwave ovens, vacuum cleaners, telephones and cellular phones, stereos, and VCRs and DVDs. The need for e-cycling facilities has been increasing recently due to technology's rapid rate of obsolescence. (*Wikipedia*)

Reuse or donate electronics vs. E-Cycle? Donation:

- Keeps used electronics out of landfills.
- Recovers materials. Allows for the safe extraction of materials for reuse in other products.

• Reduces the environmental impact and energy demands of manufacturing. Electronics are made from valuable resources such as metals, copper, and engineered plastics.

[The Environmental Protection Agency (EPA) supports these guidelines.]

-Reuse:

Reuse does all of the above, but only if the electronics can actually be reused. Remember, if it is too outdated for you, it may not be useful to someone else.

- Prevention of e-waste is an important consideration. If you donate, ask the organization if will reuse your equipment.
- If the organization receiving the donation decides to discard your electronics, will they E-Cycle according to *product stewardship** and compliance with regulations?

E-Cycle:

Your e-waste is discarded using environmentally responsible disposition.

What are the environmental and economic benefits to electronic recycling?

- A valuable source for secondary raw materials such as tin, iron, aluminum, and gold.
- Toxins including cadmium, radioactive materials, and mercury are not put into landfills and released into the environment.
- Recycling one million laptops saves the energy equivalent to the electricity used by 3,657 U.S. homes per year (<u>www.epa.gov</u>).



Photo from ewastedisposal.net.

What are the laws about this?

At present there is no federal law mandating the re-cycling of e-waste. Some electronics, such as CRT computer monitors, color TV tubes, and some cell phones are hazardous under federal law and require special handling requirements. State regulatory requirements can be more stringent than federal requirements and vary from state to state. Some states have instituted mandatory electronics recovery programs. For a list of electronic recyclers, check with your state agency that deals with recycling, such as the Environmental Protection Agency, Department of Natural Resources, Department of Environmental Quality, or Department of Commerce. As a homeowner you can contact your local municipality or solid waste district for electronics collection programs. The Consumer Electronics Association, Electronic Industries Alliance, and Earth 911 websites identify electronic equipment recyclers in many areas around the country.

Here's what to ask your local e-cycle company if you plan to E-cycle:

- Are you a member of NAID (National Association for Information Destruction)?
- Do you meet all state and federal current E-cycle requirements?
- Do you dispose of hazardous wastes (i.e. mercury)?
- What is your percentage of reuse of raw materials in parts and components for retail and wholesale markets?
- Do you comply with Federal regulations for data destruction?

Here are some examples of what Zone VIII clubs are doing.

Red Mountain Garden Club (Birmingham, AL) is collecting electronic materials for e-cycling. Ann Harrison, Conservation Chair, is collecting discarded materials from club members to be e-cycled by Technical Knock Out, a for-profit company in Birmingham. Club members bring electronic materials to each club meeting for collection and now can also e-cycle themselves this year. Members keep track of their poundage for a yearly club recycling total. Their project benefits the Alabama economy and the environment. In 2009 an estimated 170 tons of metal recycled by Technical Knock Out did not go into landfills. Discarded electronics are disassembled and broken down into components. According to Stuart Arrington, the company's owner, metals, aluminum, copper, and copper wire are sold to pipe manufacturing plants within Alabama. Last year they reported recycling enough metal to make approximately 32 tons of pipe. The inner parts of electronics such as the power supply, motherboards, and opticals are shipped to Colorado for further processing.

Cherokee Garden Club (Atlanta, GA) recycled 531 pounds of materials in 2008, 1,500 pounds in 2009, and hopes to increase the poundage donated in 2011. The club uses *Recycletronics*, a trademark for Molam E-Cycle, a for-profit company based in Atlanta. The company also works with non-profit organizations to give jobs to people with disabilities. They are providing jobs for these people while helping the environment. (<u>www.Recycletronics.com</u>) Cherokee Garden Club chose Molam E-Cycle/ Recycletronics/Tommy Nobis Center because of its zero landfill policy and its reputation as a leader in sustainability. Collection takes place annually at their annual conservation club meeting. The current conservation co-chairs, Caroline Vroon and Robin Croft, will take e-cycled materials to the center in early 2011.

Other clubs in Zone VIII have caught the E-Cycle bug, too. We hope to report on them soon. What is your club doing about used electronics?

[* product stewardship - a term used by the EPA, which promotes greater electronic product stewardship. It means that all who make, distribute, use and dispose of products share responsibility for reducing the impact of these products. EPA works toward this goal in the following ways: fostering environmentally conscious design, manufacturing, and toxics reduction for new electronics, increasing reuse and recycling of used electronics, and ensuring that management of old electronics is safe and environmentally sound.]

Book Review

Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming

by Naomi Oreskes and Erik M. Conway

The result of five years of research, this important book should be required reading for anyone interested in environmental politics. Through example after example, the authors reveal how public awareness of environmental issues has been swayed by a handful of men, their corporate allies and ideologically driven think tanks. This band of shadow power brokers included three scientists - Frederick Seitz, Fred Singer and Bill Nierenberg. They were "Cold War Warriors" who viewed the world in terms of opposing forces and feared government regulation, interference in the free markets, and government intrusion into personal lives. These men saw *environmentalism* as the new threat. With their political connections, associations with industry, and ability to skew the environmental dialogue, they were able to discredit real science as "junk science," sow the seeds of doubt on mainstream science, and obfuscate with phony facts, "red herrings," and counter-narratives.



This group took aim at the connection between tobacco and cancer, the problems of secondhand smoke, the link between coal smoke and acid rain, chlorofluorocarbons and ozone depletion, and human activities and global warming. After a 1953 study linked cigarette tar with cancer in mice, the tobacco industry created the Tobacco Research Committee to throw doubt on the evidence and prevent or delay regulation. "Doubt is our product" was the idea, and a tobacco industry pamphlet, *Bad Science: A Resource Book*, offered sound-bite messages and a list of paid consultants who could comment on any topic. The authors point out that between 1954 and the late 1970s

there were over 100 lawsuits, and not one plaintiff won damages. One study found that almost one quarter of our population still thinks there is no real evidence that smoking kills.

Rachel Carson was vilified as part of a revisionist tactic. The argument was that Carson was responsible for hundreds of thousands of malaria-caused deaths that could have been prevented by DDT. "In the demonizing of Rachel Carson, free marketers realized that if you could convince people that an example of successful government regulation wasn't, in fact, successful - that it was actually a mistake - you could strengthen the argument against regulation in general." (1)

How is the rhetoric of these naysayers spread? As the authors observe, many of the contrarians' claims have already been debunked by mainstream science, but peer-reviewed science is published in specialized journals the ordinary person is not likely to read. Television and radio stations are willing to present opposing views on issues and allow time for alternate views as part of the fairness doctrine. However, "balanced reporting" can mean false balance. For example, would we give equal time to air the views of someone who denied the earth orbited around the sun? A decade after the cause of acid rain had been established, the naysayers still managed to keep the controversy alive. "The media became complicit as they reported these claims as if they were part of an ongoing scientific debate." (1) There is also a cacophony of voices. The Internet acts as a vehicle where anybody can have an opinion, true or false, outrageous or reasonable, malicious or evenhanded.

In 2006, 64% of Americans thought scientists were still arguing about global warming, when in fact the IPCC Fourth Assessment Report called global warming "unequivocal." (2) Scientific consensus had been building since the 1990s. "The divergence between the state of the science and how it was presented in the major media helped make it easy for our government to do nothing about global warming ... Scientifically, by 1997, global warming was an established fact. Politically, global warming was dead." (3) In surveys by the Pew Center for the People and the Press, the question was posed if there was "solid evidence the Earth is warming." The "yes" answers went from 71% in 2008 down to only 57% in 2009. (4)

Merchants of Doubt prods our memories. For years, environmental preservation was bipartisan. Think of Theodore Roosevelt, John D. Rockefeller, John Muir, Gifford Pinchot and others. The Alaska National Wildlife Refuge (ANWR) first became federally protected land during the Dwight



Eisenhower administration. The EPA began under Richard M. Nixon, who also signed into law the Clean Air Act Extension, the Clean Water Act, the Endangered Species Act and the National Environmental Policy Act. With these, the role of government morphed. Suddenly, there were new rules and regulations that might affect economic activity, and local problems with global consequences that might have to be addressed. Environmental preservation and environmental regulation were no longer bipartisan, and the potent group of naysayers entered the fray with their political and economic agenda. They questioned science on critical issues they perceived as "unsettled," requiring further facts, or being too costly to implement. As Oreskes and Conway conclude, "All scientific work is liable to be upset or modified by advancing knowledge. That does not confer upon us a freedom to ignore the knowledge we already have, to postpone action that it appears to demand at a given time." (5)

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

Footnotes:

- Oreskes, Naomi and Conway, Erik M., Merchants of Doubt, How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming. New York/Berlin/London: Bloomsbury Press, 2010: 217.
- (2) Ibid, 241.
- (3) Ibid, 169.
- (4) *Ibid*, 215.
- (5) Ibid, 170.
- (6) Ibid, 273 (quote taken from Austin Bradford Hill).

Conservation Watch Focuses on Zone I (Massachusetts, Maine, Vermont, and New Hampshire)

Zone I's GCA Conservation/NAL Representative Sharon Malt of the Beacon Hill Garden Club (MA) reports to us on some of the happenings in her zone. She shares with us news of the **Regional Greenhouse Gas Initiative** (**RGGI**), a regional initiative by states and provinces in Northeastern U.S. and Canada to reduce greenhouse gas (GHG) emissions. The RGGI has designed a cap and trade program for greenhouse gas emissions from power plants. States participating include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont (parts of GCA Zones I, II, III, IV, and VI). States and Canadian provinces acting as observers include Pennsylvania (Zone V), Québec, New Brunswick, and Ontario. The first three-year compliance period began two years ago. Proceeds are to be used to promote energy conservation and renewable energy. The goal is to cut GHG emissions to 10% below 1990 levels by 2018. There has been a significant decrease already.

Zone I had a mini-meeting of club conservation committee chairs on October 13, 2010 at the Tower Hill Botanic Garden in West Boylston, Mass. It included a roundtable discussion of conservation efforts, programs and ideas. Sharon informed those present about the upcoming GCA NAL meeting in Washington D.C., what club chair responsibilities are, how to access and utilize *Conservation Watch*, environmental education tips, and how to access the excellent periodic GCA conservation reports on the website. The morning's speaker covered the Asian Long-Horned Beetle and a discussion of the problem followed. Two Zone I club's new publications on invasive plants were featured. These are Bennington (VT) G.C.'s "Guests Who Won't Go Home," and the G.C. of Dublin (NH)'s "Controlling Invasive Plants in the Monadnock Area." (See below.)

Conservation/NAL Chairs and interested Conservation Committee members from both Zones I and II will have a joint meeting and luncheon on April 20, 2011, in Brookline, Massachusetts. John Kassel, President of the Conservation Law Foundation (CLF), will provide a lecture and discussion entitled, "Regional is the New National: Why and how our regions can make the environmental progress that

Washington, DC cannot deliver." He will address how politicians, community groups, business interests and environmental advocates in New England and the Mid-Atlantic states are stepping up to forge regional solutions to our problems. The Conservation Law Foundation (CLF) is taking a leadership role in this effort. Anyone interested in attending can contact Sharon Malt at <u>smalt62@gmail.com</u>. (Price for the luncheon is \$35 per person.)

One of the most exciting things happening in Zone I clubs at present is the creation of a Zone I website. Designed and administered by North Shore G.C.'s Arabella Dane, this is a useful tool for members and conservation chairmen. You can access this beautiful and user friendly site by logging onto www.zonelgca.org (using the same passwords as the GCA website). You will find current conservation news items, club conservation projects, information about invasive plants and problem animals and insects. Take a look!

Zone I Conservation/NAL Chairs worked hard last fall to promote the passage of full funding for the Land and Water Conservation Fund (LWCF), teaming with the organization, Outdoors America. Sadly, the legislation died at the end of the last session.



Here's a peek at what a few Zone I clubs are doing.

Cohasset Garden Club (MA)

Sandra Durant reports on their 44 page **Green Resource Guide**, which contains eleven sections that list almost 300 of the best organic, natural, and sustainable resources that can be found in their local area, online and through the Zone I website. It includes listings of all the local Farmers Markets, where to buy safe baby, pet, lawn and cleaning products, a list of the "green" architects in the area, and where new, innovative and recycled building materials are available. Contact Sandra for a hard copy or for questions at <u>sadurant@comcast.com</u>. (Copies are \$12 each or 2 for \$20.)

Milton Garden Club (MA)

Each year, Milton Garden Club members go into every 4th grade public school classroom in town and teach the students about the ecology and natural history of the Neponset River. The lesson lasts about an hour and covers the water cycle, the Neponset estuary as it flows into Boston Harbor, and the native plants and animals that are so vital to the region. Now in its fourteenth year, the program is received enthusiastically by both students and teachers, reports Conservation Chair Judith Darrell-Kemp.

Dublin Garden Club (NH)

As a demonstration project for the Summer 2011 joint Flower Show, the conservation committees of the Dublin and **Monadnock Garden Clubs** have removed an invasive plant at the Dublin Post Office and replaced it with a native. This is a continuation of the clubs' long-term efforts in maintaining the plantings at the Post Office. The invasive burning bush (*Euonymus alatus*) which is illegal to sell in New

Hampshire and Massachusetts, was removed and replaced with two Mount Airy (Fothergilla intermedia) that are native, sweet smelling, and a good nectar source for insects.



Dublin members hard at work planting. Photo by Karen Bunch.

In addition, Louisa Birch shares with us news of their new booklet, "**Controlling Invasive Plants in the Monadnock Area**." The entire booklet, along with its drawings of invasives by Mary Lord, is available free on the Zone I website! Complete descriptions of sixteen problem plants are included. In presenting this booklet to the garden club last summer, Louisa showed a cutting of an invasive at the beginning of each meeting. She explained why the invasive is harmful, how to eradicate it, and suggested good native replacements for the plant. Contact Louisa at <u>louisalbirch@gmail.com</u> for more information.

Garden Club of Mt. Desert (ME)

Ann Kinney reports that the new book, **Plants of Acadia National Park**, is a bestseller. *Plants of Acadia* presents scientific descriptions of 862 plant species, illustrated with 2,200 color photographs. The book is the result of a five-year long partnership between the Garden Club of Mount Desert and Friends of Acadia, who jointly funded and contracted with botanists at the Maine Natural History Observatory to produce the book. It establishes an important benchmark for plant material existing at this time. In the course of research for this publication, **200 species were located that were thought to no longer survive.** *Plants of Acadia National Park* is used for educational purposes at the Coast Maine Botanical Garden and the Frenchman Bay Conservancy and has been distributed to libraries throughout Maine. It is also useful



for studying plant material throughout New England. The book is available from the University of Maine Press (www.umaine.edu/umpress) and Amazon.com for \$24.95.

These are just four of the clubs in Zone I we've chosen to highlight, but there are many more worthy projects happening. Zone I clubs are actively involved in their projects for the GCA Centennial Tree Project, too. For more information, contact Sharon Malt, Zone I Conservation and NAL Representative, at <u>smalt62@gmail.com</u>.

What is your club doing? ConWatch would like to hear all about it!

[Note: The Little Compton Garden Club of Rhode Island is also part of Zone 1.]



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Elva Busch, Editor