Because land doesn't come with a manual...

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The ecological landscaper

The Newsletter of the Ecological Landscaping Association **Vol. 16, No. 2** **Summer 2009**

"If you built castles in the air, your work need not be lost; that is where they should be. Now put the foundations under them." —Henry David Thoreau, *Walden*

From the Editor

• Kat Good-Schiff

Fertility and home – these two nurturing concepts form the core of our summer newsletter, and both of these concepts are at the heart of ecological landscaping. Soil fertility ensures healthy plants, and the basis for a sustainable, fertile soil is the soil food web: the foundation of our home on Earth. In this issue we hear of several perspectives on and new developments regarding soil fertility and biological activity. We also feature a member's LEED Platinum home, and we discuss possibilities for incorporating edible plants into the landscape, which can help build connection with the land in our – or our clients' – home environment.

Fertility and home – one concept is practical, one is a bit loftier. If you start with the desire for a healthy home, do as Thoreau suggests and put a foundation of healthy soil beneath it. If you start from the ground up with healthy soil, you will very likely end up with a beautiful, natural home.

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Organic Fertilizers, Nutrient Throughput, and the Soil Food Web: An Interview with Shepherd Ogden

Shepherd Ogden is an independent consultant to the organic industry, specializing in startups. We are grateful to Bill Skerrett at ICT Organics for putting us in touch with him. —Ed.

How do various categories of organic fertilizers compare in terms of sources of nitrogen, phosphorus, and potassium?

The N-P-K question is only one of a range that is appropriate to the discussion of organic fertilizer options. One of the things we have learned from the growth of organic agriculture is that not all ecological impacts are located directly on the organic/non-organic continuum. A thousand-acre, technically organic farm growing a monoculture crop may have more negative environmental impacts than a hundred-acre mixed crop operation that does not meet all the standards of the National Organic Program.

> ***"If we maintain a viable and sufficient soil microbial population, then nutrient cycling will be appropriate to the growth needs of the plants because plant growth and microbial activity are both driven by environmental cues..."***

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The ELA board meets throughout the year in various locations in eastern Massachusetts. All members are welcome. Contact us for specific dates and locations.

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Most organic fertilizers are comprised of recycled or byproduct materials, but not all are. For example, there have been reports of ocean fish harvests solely for the production of fish fertilizers, yet I think it is fairly certain that most users of fish fertilizers assume only byproducts of fish processing are used to make them. Compost and compost teas on the other hand are, by definition, recycled materials.

That said, almost all commercially available organic fertilizers are blends of various materials and thus it is a matter of where the specific materials in any fertilizer came from rather than the finished mix itself.

Nitrogen and phosphorus are the two N-P-K components whose source matters most. In "straight" organic materials, nitrogen levels range from 1-10, with composts coming in below that, fish fertilizers somewhere in the middle, and only feather meals and corn gluten meal (a byproduct of corn processing) getting toward the top end of the scale. There are a few materials with higher N but they are either mined non-renewable resources, or tweaked byproducts that stretch the meaning of the word organic.

Phosphorous, while important for seedling establishment (and in agriculture for flowering and fruiting) is almost a *persona non grata* in landscaping, and the goal now enshrined in many local and regional watershed protection regulations is to have the minimum amount of phosphorus necessary to accomplish a given aim.

"The one old rule of thumb, true to this day, is that compost will improve soils at both ends of the spectrum: compost will lighten tight, heavy soils and bulk up and bind light, loose soils."

Compost and compost teas are usually well balanced in terms of N and P, but many manures are higher in P than would be desired. This can be remedied by proper formulation of blended fertilizers, but these are generally more expensive than simpler materials. The key is to catalyze soil microbial transformation of soil reserves to reduce the need for external nutrient and mineral applications, and this is best accomplished by application of locally made compost and compost teas.

How does soil type affect the role of different fertilizers and soil organisms?

Soil type affects just about everything that happens in its horizon. This is really a two-leveled question because soil organisms are the key to the release of the "hidden" nutrients in fertilizers—especially with organic fertilizers. Just as soil type affects water infiltration, it also affects how nutrients are held and released, and not just through its relation to cation exchange capacity (CEC). Moisture levels affect the activity of the microbial populations—they need to be within a certain range—and that is related to soil type since light, sandy soils will drain faster and tight, clay soils will waterlog faster.

The one old rule of thumb, true to this day, is that compost will improve soils at both ends of the spectrum: compost will lighten tight, heavy soils *and* bulk up and bind light, loose soils. The addition of compost should improve the performance of any organic fertilizer, and compost teas should enhance

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Protecting the Castle Walls: Wielding the Benefits of Actively Aerated Compost Tea

• Alane O'Rielly Weber of Botanical Arts, San Mateo, CA

Since Roman times, we have known that there was something good for plants in compost.

With the advances of ecology and microbiology, science can now explain those benefits as the interrelated functioning of essential microbiology called the soil food web. As our knowledge of these essential microbes expands with research and field trials, we are able to use it to make biological tools to increase plant health, production, and environmental health as a whole.

Decades of research in this field have been completed by Dr. Elaine Ingham of Soil Foodweb, Inc. Her literature and worldwide lecturing, including her soil food web models and her promotion of actively aerated compost tea (AACT), have brought a profound understanding of these principles to farmers, horticulturalists, and backyard gardeners. When AACT is applied, it provides beneficial bacteria, fungi, protozoa, nematodes, and micro arthropods that benefit the soil, plant root zone, stem, and leaf surface.

Until recently, the only sure way of getting rid of rust on roses or mildew on grape leaves was repeated applications of fungicides which have cumulative effects on the environment. AACT can be applied to leaf and stem surfaces with the beneficial result of helping to prevent initial infection of surface pathogens. (Note: it will not kill an existing infection.) In foliar trials using AACT, the resulting biological coating is found to be so thick that under magnification, the leaf surface is completely unrecognizable under the "biological castle walls." When there is no unprotected leaf surface available as a site of pathogen entry, there is little chance of the plant being infected.

Consider an often used metaphor of Dr. Ingham's: "The castle wall protects its vulnerable inhabitants from the ravages of invaders." Mother Nature already protects plant surfaces in the wild; however, those defenses are stripped in our urban environments by air pollution, pesticides, herbicides, inorganic fertilizer spray, and irrigation with water containing soap, salts, fluoride, chlorine, and chloramines.

AACT applied to new whorls of a zucchini plant demonstrates its effectiveness against mildew.

The accompanying photograph I took of a zucchini plant illustrates the effectiveness of foliar applications of AACT as a means to replace this natural protective coating of biology. This plant was not initially treated until the two outer whorls of leaves were completely infected with powdery mildew. Overhead irrigation with chlorinated water is suspected to have stripped the inherent protective biology which one application of AACT replaced. Repeated applications at two-week intervals kept the newer zucchini leaves free of mildew until the plant was removed at the end of its productive cycle in late October. I have seen many examples of this biological mechanism at work on roses, cucumbers, *Nandina*, apples, and snapdragons.

Well-made compost concentrates the soil's beneficial microbes. Compost that is properly aerated in nutrient solution and actively brewed (AACT) makes a living solution that allows one to harness the benefits of compost and focus them as a useful tool to help prevent disease. In this way, we can promote environmental health as a whole, healing past damage while living in the balance of Nature's wisdom.

Biochar: A Soil Amendment that Combats Global Warming and Improves Agricultural Sustainability and Environmental Impacts

• International Biochar Initiative

Introduction to Biochar

Biochar and bioenergy co-production from urban, agricultural, and forestry biomass can help combat global climate change by displacing fossil fuel use, by sequestering carbon in stable soil carbon pools, and by dramatically reducing emissions of nitrous oxides, a more potent greenhouse gas than carbon dioxide.[1, 2] As a soil amendment, biochar helps to improve the Earth's soil resource by increasing crop yields and productivity, by reducing soil acidity, and by reducing the need for some chemical and fertilizer inputs.[3, 4] Water quality is improved by the use of biochar as a soil amendment, because biochar aids in soil retention of nutrients and agrochemicals for plant and crop utilization,[5, 6] reducing leaching and run-off to ground and surface waters.

Biochar production and utilization systems differ from most biomass energy systems because the technology is carbon-negative: it removes net carbon dioxide from the atmosphere and stores it in stable soil carbon "sinks".[7] Other biomass energy systems are ***at best*** carbon-neutral, resulting in no net changes to atmospheric carbon dioxide.

Biochar Production

Bioenergy and biochar can be co-produced from thermal treatment of biomass feedstocks. The thermal conversion of biomass, under the complete or partial exclusion of oxygen, results in the production of biochar and bioenergy or other bioproducts. Biochar production processes can utilize most urban, agricultural or forestry biomass residues, including wood chips, corn stover, rice or peanut hulls, tree bark, paper mill sludge, animal manure, and recycled organics, for instance.

Under controlled production conditions, the carbon in the biomass feedstock is captured in the biochar and the bioenergy co-products. Theoretically, the biochar co-product will retain up to 50% of the feedstock carbon in a porous charcoal structure; and the remaining 50% of the feedstock carbon will be captured as bioenergy. While it is technically infeasible to capture 100% of the biomass carbon, since energy is invariably used and lost in the production process, the optimal biochar production process can capture roughly half the biomass carbon in biochar and half as bioenergy.

Biochar can be produced by pyrolysis or gasification systems. Pyrolysis systems produce biochar largely in the absence of oxygen and most often with an external heat source. There are two types of pyrolysis systems in use today: fast pyrolysis and slow pyrolysis systems. Gasification systems produce smaller quantities of biochar in a directly heated reaction vessel with air introduced. Biochar production is optimized in the absence of oxygen.

Gasification and pyrolysis production systems can be developed as mobile or stationary units. Small scale gasification and pyrolysis systems that can be used on farms or by small industries are commercially available with biomass inputs of 50 kg/hr to 1,000 kg/hr. The bioenergy produced from these systems, which can be in the form of a synthetic gas, or syngas, or bio-oils, can be used to produce heat, power, or combined heat and power. At the local or regional level, pyrolysis and gasification units can be operated by co-operatives or larger industries, and can process up to 4,000 kg of biomass per hour.

Biochar

Biochar is a fine-grained, porous charcoal substance that, when used as a soil amendment in combination with sustainable production of the biomass feedstock, effectively removes net carbon dioxide from the atmosphere.[8] In the soil, biochar provides a habitat for soil organisms, but is not itself consumed by them to a great extent, and most of the applied biochar can remain in the soil for several hundreds to thousands of years[9, 10] (see also Terra Preta soils). The biochar does not in the long-term disturb the carbon-nitrogen balance, but holds and makes water and nutrients available to plants. When used as a soil amendment along with organic and inorganic fertilizers, biochar significantly improves soil tilth, productivity, and nutrient retention and availability to plants.[11]

Bioenergy

The bioenergy produced during biochar production may be in the form of thermal energy, a synthesis gas, aka syngas, or a bio-oil. The syngas or bio-oil can be used to heat the pyrolysis unit for continued production, and surplus syngas or bio-oil can be used to provide additional energy for on-site uses, such as heat and electricity. Syngas is rich in hydrogen, methane and carbon monoxide and in addition to its use for heat or

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power, it can be converted to liquid fuels or industrial chemicals. The bio-oils can also be used for on-site power and heat generation, or converted to liquid fuels or industrial chemicals.

Economics of Biochar Systems

The co-production of biochar from a portion of the biomass feedstock reduces the total amount of bioenergy that is produced by the technology, but even at today's energy and fertilizer prices the net gain in soil productivity is worth more than the value of the energy that would otherwise have been derived from the biomass feedstock. As the cost of carbon emissions rises and the value of CO_2 extraction from the atmosphere is also considered, the balance becomes overwhelmingly attractive in favor of biochar co-production.

Rural and Developing Country Applications of Biochar Systems

Biochar systems can reverse soil degradation and create sustainable food and fuel production in areas with severely depleted soils, scarce organic resources, and inadequate water and chemical fertilizer supplies. Low-cost, small-scale biochar production units can produce biochar to build garden, agricultural, and forest productivity, and bioenergy for eating, cooking, drying and grinding grain, producing electricity and thermal energy, for instance.

For more information about biochar, visit www.biochar-international.org. ELA thanks the International Biochar Initiative for permission to reprint this article.

NOTES

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Members Making a Difference:

The First LEED Platinum Home in Western Massachusetts

• Kat Good-Schiff

Landscape historian and ELA member Marie Stella, owner of Kirin Farm Design, has designed a new sustainable residence and teaching facility named The Beaver Lodge.

The Center for Ecological Technology (CET), a leading non-profit organization offering green building services across western Massachusetts, certified the single family home in Ashfield, Massachusetts, with the highest rating possible from the U.S. Green Building Council LEED® for Homes rating system. The residence becomes the sixth home in Massachusetts that has earned the difficult LEED Platinum rating.

After completing the final analysis, CET verified the Stella project had earned the platinum designation with a total of 101.5 points out of a total of 136 possible points. CET's analysis also determined that the home's energy performance will be 59% more efficient than a typical home built in Massachusetts.

An instructor in the graduate program at The Landscape Institute of Harvard University, Stella will offer on-site instruction in sustainable design at The Beaver Lodge. See events listing on page 11 for more information.

The Beaver Lodge: Illustrating the Integration of Art, Technology, and Environment

• Marie Stella

Frustrated by a yearlong intensive search for the "right house," it finally became apparent to me that if I wanted to pursue a green agenda, I would have to construct my own environmentally engineered home. I was intrigued by the challenge of striving for LEED Platinum. As a landscape historian and designer, the Renaissance ideal of the harmony of art and technology influenced me, and drives the design of systems for my new teaching and landscape laboratory, The Beaver Lodge. Surrounded by acres of forest protected by conservation restrictions, the house overlooks a large pond thriving with wildlife.

My holistic approach addresses environmental responsibility, sustainability, and attractiveness. I give a great deal of thought to the aesthetics of each situation I encounter, balancing the function of innovative, emerging technology with minimal negative impact on the ecology of the site, hoping for an artistic outcome.

Green features of The Beaver Lodge include:

- Natural daytime lighting using exterior glass sliding doors and interior glass partitions
- Reclaimed, salvaged and reused wood
- Super insulated shell with 2" closed cell urethane foam and 6" to 8" recycled dense pack cellulose sprayed insulation
- Locally sourced natural materials: hemlock siding, quarried mica schist floor tiles and paving stone, red oak flooring harvested from building footprint
- Energy efficient rehabilitation of small existing timber frame structure with an addition whose natural materials blend into the regional context
- Pocket doors and movable walls make space adaptable and multi-purpose
- Heavy emphasis on recycled materials
- Photovoltaic panels and passive solar design with stone floor and counters as thermal storage
- Edible landscape: organic vegetable, herb, and fruit garden instead of front lawn
- 90% preservation of the native habitat and natural vegetation in a non-disturbance zone
- 100% water permeable paving

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- Bio swales, buffer zone, and rain garden designed to capture run off
- Rainwater harvesting with cistern used for garden irrigation
- Water features such as rain chain and runnels become art objects in the landscape
- Vegetated green roof mitigates heating and cooling costs
- Environmental land art by participating artists

I believe The Beaver Lodge reflects its local context and provides constant intimate contact with natural systems. Shifting views inside and outside are linked with arbors, patio, and deck in a transparent house that is one room wide and sited for passive solar orientation and maximized day lighting. The healthy, stress-less atmosphere provides both relaxation and engagement, following Thoreau's advice to build our own home, as a bird builds its nest.

Eat your Plants! Edibles in the Landscape

• Navid Hatfield of Pioneer Valley Organics Landscaping

I often question the traditional paradigm of ornamental shrubs and perennials used for the foundation, fence line, and island planting beds in a landscape, while a few edible perennials are relegated to the back of a garden, past the tomatoes. The fact is edible trees, shrubs, and perennials are highly valuable and productive plants. Used thoughtfully, edibles can enhance an otherwise traditional landscape design.

Trees are the anchors of a landscape. Fruiting trees provide fantastic spring bloom and prolific summer fruit, and they attract birds and wildlife. Cherries, apples, pears, and peaches can easily replace ornamental cherries, crab apples, and Japanese maples. Espaliered trees can even be made into living, fruiting fences. Through grafting, multiple varieties of the same genus can be grown on the same tree. Many lesser-known fruit also work well within the landscape. American persimmon, for instance, is an underused tree with custard-sweet fruit that will stay ripe on the branch into November or December. There is nothing like trudging through the snow to pick the frosty hanging fruit for jam. Pawpaw is another tree known for its creamy, custard-like fruit.

Fall foliage of the highbush blueberry. Photo credit: Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database / USDA SCS. 1991. *Southern wetland flora: Field office guide to plant species.* South National Technical Center, Fort Worth.

Among woody shrubs, one of the most common edible plants in the landscape is the highbush blueberry. With its delicate, white, bell-shaped flowers; delicious fruit; and brilliant fall color it is ideal for decks and patio planting beds. It makes a wonderful native replacement for the invasive winged *Euonymus* and Chinese barberry. Currants, raspberries, and Nanking cherries make excellent hedges, screens, and living fences. Other woody shrubs of note are lowbush blueberry, which makes an excellent edible border, and gooseberry.

Edible perennials can draw people off the path to and from the parking lot and into the garden. Strawberries make a terrific sunny border plant. Nothing catches the eye and quickens the heart like seeing juicy red berries ripening in the sun waiting to be picked. Rhubarb features bold green foliage on juicy red stalks, and its flower is quite unique. Coupled with the strawberry border it is a pie waiting to be made in one fun planting bed. Chives have stunning purple flowers, deter rodents, and can be used as an accent of color and texture or a spiny border. Asparagus shoots are the first to come out in spring and can grow 5-6 feet tall, adding a delicate, fern-like texture.

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the performance of any existent soil microbial life, thus improving nutrient availability to plants.

How is the role of soil organisms as fertilizer storage affected by different types of fertilizers?

Storage is not really the right term here and that distinction is one of the key elements to understanding how organic/ecological landscape management is different from its conventional counterpart. What is important is throughput, not storage. If we maintain a viable and sufficient soil microbial population, then nutrient cycling will be appropriate to the growth needs of the plants because plant growth and microbial activity are both driven by environmental cues such as moisture availability, temperature and sunlight.

Based on this understanding, any fertilizer that enhances soil microbial life will be positive and any one that inhibits it will be negative. Synthetic fertilizers damage the soil microbial community due to the caustic nature of their components, while organic fertilizers generally provide food sources for soil microbial life.

In this sense, there is no question that use of organic fertilizers both enhances the vitality of soil microbial life and provides the stage on which they can transition a less than perfect soil to an optimized growing environment for plants. Compost and compost teas only ramp this process up and are thus a positive addition to virtually any soil health management program, whether conventional or organic.

Is there anything else you'd like to add on this topic?

It is important to remember that there is a big difference between the soil generally and the soil in the rhizosphere. Lorenz Hiltner coined this term in 1904 to describe the narrow zone (roughly a millimeter to a centimeter) of soil surrounding plant roots, where microbe populations are stimulated by root exudates. It distinguishes from the "bulk" soil, which is not influenced directly by growing roots.

The original concept has now been extended to include the soil surrounding a root in which physical, chemical, and biological properties have been changed by root growth and activity (McCully 2005). The soil rhizosphere zone occupies no more than 5-7% volume of the upper 15 cm of surficial soil in a vegetable field; in turf it can be as high as 40%. Important physiological processes in this zone are the uptake of mineral nutrients and microbial activity enhanced by root exudates.

Via photosynthesis, plants use sunlight to turn carbon dioxide and water into carbohydrates and sugars, which are stored in roots where up to 50% of these nutrients can be exuded, thereby feeding microbial populations in the rhizosphere. The metabolic processes that break down nutrients in the mineral portion of the soil are then available to the plant roots in a symbiotic relationship. This is the basis of the "soil food web," the ability for healthy soils to begin nutrient cycling and support a plant's nutrient needs without the need for synthetic inputs.

To find out more about Shepherd Ogden's work or to read other articles he has written, visit http://www.shepherdogden.us/.

A new local company serving Organic and Biological Landscapers, Farmers & Gardeners

A full line of Biological and Organic Soil Amendments, Nutrient Drenches and Foliar Sprays covering all bases necessary for maximum biological soil life, mineral balancing and optimum plant performance.

Nutrient Density Supply Company

- Lime
- Gypsum
- Rock Phosphates
- Paramagnetic Rock
- Granite Dust
- Humates
- Ziolytes
- Sea Minerals
- Bulk Pricing
- Micronized Minerals
- BioChar
- Biological Innoculants
- Mycorrhyzal Fungi
- Broad-spectrum Minerals, Rock Powders
- Bulk Quantities
- Special Order
- Mixing & Bagging
- Trace Elements: Manganese, Copper, Zinc, Boron & More
- Fruiting and Growth Liquid Nutrient Drenches & Foliar Sprays
- And More...

Full Product line and Services available Fall 2009. Contact Dan Kittredge at (978) 257 2627 or Dan@NutrientDensitySC.com for more details. Distributing from Central MA.

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An apple tree in full spring bloom. Photo credit: USDA-NRCS PLANTS Database / Herman, D.E., et al. 1996. *North Dakota tree handbook*. USDA NRCS ND State Soil Conservation Committee; NDSU Extension and Western Area Power Administration, Bismarck.

As for vines, chain link fences or ugly partitions can be completely covered in a few years by the rampant and seriously productive hardy kiwi. Honeysuckle and wisteria can easily be replaced by grape vines, kiwi, or hops.

Edible trees and plants entice people out into their yards, allowing them to interact with the environment in ways they might not otherwise. The statement "I grew that!" provides a sense of accomplishment and pride. The feeling brought by harvesting food from the land is both grounding and empowering; it connects us to the cycles of nature that ornamental gardening alone does not bring. It can also bring a little peace and quiet to a busy family in need of an activity and a healthy snack.

Epilogue

There was a moment of concern when my wife and I noticed the eerie quiet of our three children. Usually such calm signifies the fixing of something broken or the hatching of a nefarious plot. However, we found our children grazing happily in the front walkway. Crouched under the arching ornamental grasses, the youngest was picking tiny treasures from the native lowbush blueberry border. The middle child at the end of the same bed was adding small sprigs of lemon thyme to her water and blueberry drink. In the parallel bed, under our living room window our oldest, smiling with blue teeth, feasted on the native highbush blueberry.

gleanings

Save Resources and Reduce Waste with Catalog Choice
Would you like to receive less paper in your mailbox? Catalog Choice is a free service that lets you reduce unwanted mail and choose how you hear from merchants. The organization states that they have "removed over 85 million unwanted catalogs a year from the mail stream… saved more than 192,000 trees. Visit www.catalogchoice.org to set up an account.

New Book Addresses Personal Side of Global Warming
Thoreau's Legacy: American Stories about Global Warming introduces a new generation of writers and photographers with a personal connection to global warming. A foreword by author Barbara Kingsolver serves as a powerful call to action. Visit http://www.ucsusa.org/americanstories/ to read the e-book or purchase a hardcover copy.

ELA Member Rocks Out in "Lawn and Order"
California's Garden Wise Guys (on "guitar" ELA member Owen Dell) have produced their very first MTV-style rock video. Part of a TV episode titled "Lawn and Order," the video shows the Wise Guys letting down their hair and getting funky with a sustainable landscaping take on the old favorite, "Grazin' in the Grass." Visit http://www.citytv18.com/garden.htm to watch it.

Rain Garden Guide for the Northeast Region
A new University of Connecticut publication titled *Rain Gardens in Connecticut: A Design Guide for Homeowners* is available FREE upon request. The 12 page full-color brochure addresses the following topics: What is a rain garden; common concerns; placement of the rain garden; soils suitability; sizing your garden; installation; and planting. A suggested plant list, appropriate for Connecticut, is also included. The brochure is available both online and in hard copy. To obtain a copy, call (860) 486-3336, email store@uconn.edu, or visit http://www.sustainability.uconn.edu/.

Educational Opportunities in Massachusetts
Townboard.org is a one-stop calendar site for town boards and individuals in Massachusetts, providing up-to-date information on relevant training and educational opportunities in the state and region, particularly on land-use issues. Visit http://townboard.org to view their extensive event calendar listings.

events

Programs in Sustainable Living and Design
Come to Ashfield, Massachusetts, for either a one-day or three-day intensive workshop in the foothills of the Berkshires. Courses will explore the Beaver Lodge, a residence designed by Marie Stella, LEED Platinum certified. This hands-on laboratory setting will offer classes in the promotion of sustainability, innovative use of native plant materials, construction of rain gardens, green roofs, vegetated walls, rainwater harvesting, use of local green materials, and organic vegetable gardening. Offsite visits to a local quarry and to native and wetland plant nurseries will be included. Room and board can be arranged. For additional information, contact: Marie Stella, Kirin Farm Design, 719 Barnes Road, Shelburne Falls, MA, 01370, 413.625.2009, kirinfarminc@aol.com. See article on page 6 of this newsletter.

The 5th annual NOFA Organic Lawn and Turf Course will be held Friday, August 7th at UMass Amherst in the Student Union Ballroom from 8 am to 5 pm. The course covers all aspects of lawn and turfgrass management including soil health, pest management, water conservation, cultural practices and more. Lunch and the NOFA Organic Lawn & Turf Handbook are included in the course fee. $150 for first person from firm/town or individuals; $125 each additional person. For more info: www.nofasummerconference.org or call Kathy Litchfield (413) 773-3830 or email kathy@nofamass.org.

ELA Annual Meeting
The ELA Annual Meeting takes place on August 12th at 1 pm at Tower Hill Botanic Garden, in Boylston, MA (directions at http://www.towerhillbg.org/thwebdir.html). This meeting is held at the end of the organization's fiscal year to report on the proposed projects of the organization, the budget review, and the election results of officers as well as new and incumbent board members.

ELA Summer Roundtable
When: August 12th, 2009 2 - 4:30 pm
Where: Tower Hill Botanic Gardens
Boylston, MA
Topic: "Fertilizers and Soil Amendments: What are Your Favorite Recipes?"

Panelists M.L. Altobelli, Roger Sturgis, and Michael Talbot bring more than 80 years of accumulated experience to ELA's Roundtable. Understanding fertilizers and soil amendments is fundamental to landscaping of any kind and is essential to successful ecological, sustainable, and organic landscaping.

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The ELA Summer Roundtable includes general admission to Tower Hill Botanic Gardens.

$20 ELA Members - $25 Non-members To pre-register, email ela.info@comcast.net Walk-ins Welcome!

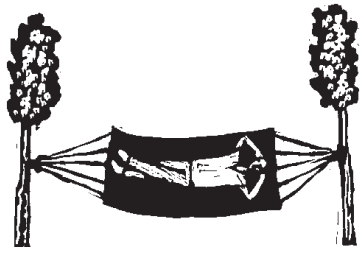
California Water Management Certification
California Landscape Contractors Association Water Management Certification Program training and test takes place in the Sacramento area at the Folsom Community Center, 52 Natoma Street, Folsom, CA. Thursday, September 3 from 9 am - 3:00 pm. To enroll or to request more information or make arrangements for a test in your area, please contact David Silva at 916-830-2780 or email davidsilva@clca.org. For additional test dates and times, visit http://www.clca.org.

Coastal 2009 Conference
The Northeast Beaches Conference is sponsored by the Northeast Shore & Beach Preservation Association and the Northeast Chapter of the International Erosion Control Association. The theme is "Local Efforts in Shoreline Management and Protection." The program will likely consist of a half-day field trip and two days of presentations, with a small number of exhibits and plenty of opportunities to network.

Where: Woods Hole Oceanographic Institution, Falmouth, MA
When: September 21-23, 2009
For more information:
http://www.ieca-nechapter.org/coastal2009/conferencelocation.html

Erosion Control Conference & Trade Exposition
The annual conference of the Northeast Chapter of the International Erosion Control Association is open to engineers, scientists, regulators, field technicians, land developers, attorneys, academics, vendors, manufacturers, and all others in the erosion control and stormwater management communities. The two-day program will consist of presentations and exhibits on erosion and sediment control, water quality issues, low-impact development, source controls, regulatory issues, and current research in the field.

Where: Hartford Hilton, 315 Trumbull St., Hartford, CT
When: October 27-28, 2009
For more information:
http://www.ieca-nechapter.org/nec09.html
Contact:
Steve Trinkaus, PE, CPESC, CPSWQ, strinkaus@earthlink.net



New Member Benefit

The ELA Membership Committee is pleased to announce a new ELA membership benefit in which you determine the benefit. The new Member-to-Member Discount is an initiative designed to promote additional networking and business opportunities between members.

The following ELA members have already signed up to participate, and we know the list will continue to grow. Learn more about the participating companies and their products and services by following the links below or by locating the companies. Contact them to learn the details of their Member-to-Member discounts.

Cape Cod SafeLawns

Designer of Greens

Ecological Landscape Designs, LLC

Forgione Lawn Care

Good Scents Garden Co

Groundscapes Express, Inc.

Hilltown Tree & Garden, LLC

Land Escapes

Love's Gardens

Maria von Brincken Landscape Garden Design

Old Sod Landscaping, Inc

Roots to Shoots Ecological Landscape and Conservation

Wondercide, LLC

You, the member, control the details of your offering to other ELA members. You might offer a free consultation, a one-time discount on products or services, or ongoing discounts. Participation will be highlighted in the ELA Membership Directory and in upcoming editions of *The Ecological Landscaper*.

Please contact us if you would like to add your company to the growing list of ELA members offering a Member-to-Member Discount, contact us at ela.info@comcast.net.