

December 2013 Green Living Installment

Like a lot of people, I find the Holidays a time for reflection and memories, most of which are happy. Growing up in a large family has a way of coloring the seasons in very special ways. As a child I never had a full appreciation of my parents and their siblings as members of what author Tom Brocaw calls the Greatest Generation. Now my recollections are seen through the eyes of someone who has experienced life's ups and downs, raised two children, and witnessed the human condition in many countries, all around the world. All of this gives me a deep appreciation for the upbringing I had, and I am forever amazed at what my parents accomplished as a result of their blue-collar work ethic, generosity and Christian family values. My parents were hard working, frugal people who sacrificed as needed to give us a good start in life. Part of that was passing on their sense of humor and self-sufficiency, two traits I appreciate the most. It might not have been obvious to me as a child, but now I can clearly see the how the lives they led enriched the way we celebrated the holidays. They were green before green was vogue, and it was all very natural, in ways both large and small.

When eleven family members, friends and relatives got together, holiday meals were always quite an event. Large family gatherings were a time we opened a few extra quarts of canned fruits and vegetables to be sure there was enough to go around. I remember retrieving them from the cold cellar, pausing to admire the neatly stacked rows of colorful contents; bright yellow peaches beside deep red beets and green beans next to Ball jars full of red tomatoes. (This may have been my first lesson in color theory!) The blackberries were retrieved on a previous trip for pies made earlier in the day. Spading and weeding the large family garden in the heat of summer were a distant memory, replaced by the unforgettable aromas emanating from the kitchen and the visual grandeur of our dining room table, and adjacent make shift tables, where all of the harvest bounty added to the joy of getting together. In a tradition that continues to this day, nothing was wasted, and leftovers went home with anyone who wanted or needed them. Even our pet dogs got a little extra treat, and the bird feeders were topped off with apple cores. That same generosity was extended to members of our church and larger communities through contributions to food drives and bake sales which themselves were memorable simply for the people and the spirit of the season they engendered. At our house no one was forgotten.

The number of Christmas gifts varied from the youngest to the oldest and were partly dependent on the resources available and the state of our family finances. The school classroom Christmas present project inevitably made it to someone, enjoying the prestige of a prominent place under the tree. The best hand me downs were wrapped just as carefully as anything new, and were equally appreciated. The fact the wrapping paper was recycled, or consisted of an imaginative reuse of the colorful comic section of the newspaper did not dampen the excitement over what was inside. Over the years a number of reconditioned bicycles and other toys made their rounds through the family with the friendly reminder to "take care of that, because I get it next!" The funniest, heartfelt greeting cards and tags were homemade, and Mom was famous for resending cards she received in previous years with hand written notes of love and peace placed above the original text. It may have had something to do with the envelopes having the return address of the original sender, or the simple logic that nothing says a perfectly good greeting card can't be used more than once. I don't know anyone else who ever did that, but today Mom's Christmas and birthday cards, adorned with her beautiful handwriting, and are rare, priceless heirlooms. Today I understand the practicality and

convenience of eCards and emails, and the fact they save trees, but I would like to get one of those recycled cards, just one more time.

Our Christmas tree was always purchased from an organization whose proceeds went to help others. Ornaments from “the old country” shared the branches with homemade paper chains and other objects that gave the season special meaning. Strings of popcorn that ultimately went to feed the birds were always part of dressing the tree. The rest were pressed into popcorn balls, the hopefully edible binder of which remains a secret to this day. Old 8mm movies and aging photographs record those glorious trees as well as each of us passing through time. My most memorable gifts were an Erector Set and a Jon Nagy Learn to Draw kit. Any wonder I became an architect?

We were raised to be ever mindful of our blessings and the needs of others less fortunate. The holidays were a time for making sure people we will never know had food, shelter and clothing. To parents and grandparents who lived through two major world wars and the Great Depression, this was as natural as getting up in the morning. Special collections were taken at Church for the homeless and other charities. These were never perceived as an obligation or an imposition, just the right thing to do. I don’t remember words like “welfare” or “socialism” ever being used. My curiosity and questions about where things were going were answered with a gentle “it doesn’t matter, as long as someone can use them.”

Many years have passed since I was a little boy. The parents and grandparents who made our Holidays so special have passed with them. Today I wonder aloud with friends and family how we are so incredibly blessed to have the memories we do. I stress to my children it is more important to make memories than to accumulate material things. It really is better to give than to receive, and no gift can match the reward of a random act of kindness; the more anonymous and spontaneous, the better. It’s clear to me the simple gifts that nurtured my curiosity and creative side contributed to a career that has taken me around the world. I have seen firsthand where the food needs to go and where the clothes we drop off in collection bins end up. My childhood curiosity and questions about where the things go that we donate has been answered in ways that are at once indelible and very moving. I can appreciate how our parents sacrificed in silence and sheltered us emotionally through the controlled chaos of the Holidays, never losing sight of what actually matters, or the real reasons we celebrate at all.

I feel obliged to put some environmental sustainability spin on all of this, but that would dilute what I’ve tried to convey here. There are clearly messages of self-reliance, recycling, repurposing and living an energy, material and resource efficient life style ingrained in how we celebrated the Holidays as we were growing up. The real message is there is no reason to spin something that is natural, wholesome and good. The better exercise is to assess our current traditions and habits, and ask ourselves if the real meaning of the Holidays still informs what we do and why we do it. My main contribution to this effort is to ask my children and siblings to relax and de-stress as much as possible over the Holiday season. It is, after all, a *season*, and not one day. My gift to them is to not obligate traveling long distances only to share fractions of one hectic day with loved ones in multiple locations. There is no room for the guilt associated with not being able to show up at noon on Christmas day. If it works out, great, but I will gladly trade all of that for a relaxed, extended visit before or after Christmas or New Years, and it will be just as special. Second is my insistence I have everything I could ever want or need, starting with my family, and any resources expended in my name are better directed to someone who could truly use them. If there is anything I have learned from all of my amazing Christmases

past, it is that. I will never fuel consumerism at the expense of a happy heart. If my family and friends see these gestures based on love, unselfishness and understanding, my requests will carry the sentiments and heart felt feelings I remember from my childhood, and will be gifted beyond measure.

So, I would like to extend my best wishes to all of you for an enjoyable Holiday season. All the better if they are green beyond the color of the tree. Let love be “the *reason* for the Season” and please extend that love beyond your immediate circle of family and friends to those you will never know, and to the Earth that provides for us all.

November 2013 Green Living Installment

I like to think I live simply. I share my urban home with adult students attending local universities and others doing research in the nearby hospitals. We shop locally, recycle what we can, compost our organic waste, and try to be frugal about what we purchase and why. My diet does not depend heavily on red meat, and I sometimes, but always, buy organic eggs and vegetables. I try to avoid any fast foods, largely on the recommendation of my personal care physician who has tasked me with keeping an eye on my cholesterol. I am not materialistic and enjoy making memories more than collecting things. I have kept my same acoustic guitar for 40 years, knowing nothing today sounds better than it does. I cut our patch of grass with a small electric mower I share with our neighbors, and still hope to convert what is left of our lawn to flowers and vegetables. I work out of my home, walk (infrequently) to the post office, local restaurants and pubs. My work files and correspondence are sent around the world without the need for hard copy or air-based transportation or ground based mailing services. I drive very little, which I really appreciate in the winter, and usually take local transit to the airport when I travel, which is almost always on an as needed basis for business.

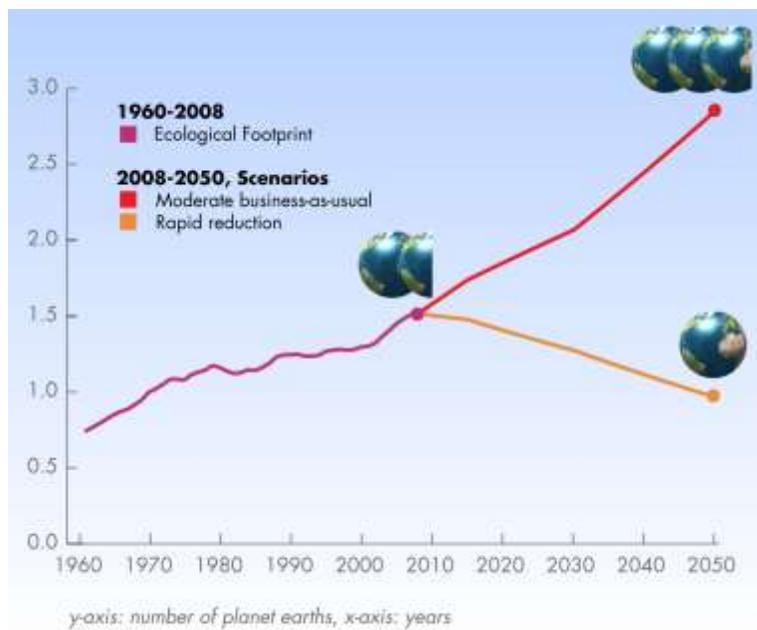
Our three story Victorian home is completely insulated, and retrofitted with high performance windows and doors. Even the single pane stained glass has insulated glass panels. We set the thermostat at 68 degrees to conserve heating energy and money, and wash the reusable furnace filters at least twice during the heating season. We don't have whole house air-conditioning, relying instead on ceiling paddle fans to keep comfortable in the summer. I am fanatic about turning off lights, and have my TV and stereo on surge protectors I can turn off, making sure those devices are not consuming electricity when not in use. The three bathrooms have all been fitted with low flow devices, including the toilets, and the hot water temperature is just above the “grumble setting.”

So, I was feeling pretty good about taking an online survey that calculates ones environmental footprint. Environmental footprint can be loosely defined as the impact our life style and attendant habits have on the global environment. Using the term “environmental footprint” in a keyword search will turn up several interactive surveys that estimate what it takes to support one's lifestyle relative to the carrying capacity of the planet. The environmental footprint survey I took is published by the Global Footprint Network (GFN). It is animated, easy to use, and gives the option of making estimates based on average consumption categories, or more closely entering detailed consumption information. It is available online at <http://www.footprintnetwork.org/en/index.php/gfn/page/calculators/> The surveys on the GFN site are organized into a number of categories such as Global Footprint, the one I took, as well as related footprints for business, cities, biodiversity, carbon and others. *Imagine my astonishment to learn if everyone lived the same lifestyle I enjoy it would take 4.8 Earths to support us all! I*

was more than a little disappointed by this, so I proceeded to investigate what it is about my lifestyle that makes it such a heavy burden on our one and only planet Earth.

If I want to live a more ecologically sensitive lifestyle I would need to live more communally, giving up my single family detached home. I would have to use only mass transportation or ride my bike exclusively. Clearly, my “frequent flying” is a major impact on the planet. My diet cannot include meat, especially red meat, and everything I eat would have to be produced locally without any external energy or resource inputs like fertilizers and herbicides, or the need for transporting food long distances. I would need to eliminate my reliance on anything linked to electricity or space conditioning generated from fossil fuels, and switch everything to renewable energy sources. It would be better to wear recycled clothing, and increase the amount of recycling and composting to totally eliminate anything going to a landfill. When I inputted these alternatives into the Footprint Calculator I was able to reduce my ecological footprint to the point where if everyone lived like me we would only need 3.4 Earths. 3.4 Earths? I don’t know where we are going to get the additional 2.4 Earths, so I investigated further.

The harsh reality is the Earth is over-populated and only has a limited ability to regenerate the basic resources we need to live. This is referred to as global ecological overshoot. Today all of humanity consumes the equivalent of 1.5 planets to provide the resources we use and absorb our waste. This means it now takes the Earth one year and six months to regenerate what we use in a year. Scenarios put forth by the United Nations suggest if current population and consumption trends continue, by the 2030s, we will need the equivalent of two Earths to support us. Turning resources into waste faster than waste can be turned back into resources puts us in global ecological **overshoot**, depleting the resources on which human life and biodiversity depend. http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/



The result is collapsing fisheries, diminishing forest cover, depletion of fresh water systems, and the buildup of carbon dioxide emissions, which creates problems like global climate change. These are just a few of the most noticeable effects of overshoot. Overshoot also contributes to resource conflicts and wars, mass migrations, famine, disease and other human tragedies—and tends to have a **disproportionate impact on the poor**, who cannot buy their way out of the problem by getting resources from somewhere else. It is noted a child born in a western country will use thirty times the resources of a child born in Africa, year after year.

The Earth provides all that we need to live and thrive. So what will it take for humanity to live within the means of one planet? Individuals and institutions worldwide must begin to recognize ecological limits. We must begin to make ecological limits central to our decision-making and use human ingenuity to find new ways to live, within the Earth's bounds. This means investing in technology and infrastructure that will allow us to operate in a resource-constrained world. It means taking individual action, and creating the public demand for **businesses** and **policy makers** to participate.

Using tools like the **Ecological Footprint** to manage our ecological assets is essential for humanity's survival and success. Knowing how much nature we have, how much we use, and who uses what is the first step, and will allow us to track our progress as we work toward our goal of sustainable, one-planet living.

October 2013 Green Living Installment

I love autumn. The heat and humidity of the high summer give way to beautiful, clear, comfortable days, and nighttime temperatures are great for sleeping with the windows open. The daylight hours are shorter, but as the sun arcs a little lower each day the moon compensates by rising a higher each night, lighting the way for the coming of winter. The frost is on the pumpkin, the aroma of wood smoke is in the air, and migrating birds signal nature is stirring. I get to wear my favorite fashions; sweaters and a light jacket, and football, my favorite sport, is at the height of its season. Best of all, in many parts of our country Mother Nature gifts us with her spectacular autumn leaf spectacle.

But autumn is also the time we need to get ready for winter knowing its right around the corner. Many of us have our seasonal traditions and "to do" lists indexed to the fall equinox. We need to act before inclement weather arrives, and are sometimes spurred on by an unexpected cold snap. Our desire to live green can inform many of the fall chores we do and how we do them. Here's my list.

1. *Harvest the leaves and the lawn.* I say harvest, because our leaves and grass clippings are valuable resources that can be composted or mulched into our gardens. I live in an urban neighborhood, and don't have too many leaves or a large lawn to worry about; it's not a major chore. When I thinned out a long growth of junipers next to my house this summer I took the yard waste to the local urban garden recycling center. From there I understand the compost is distributed to the city parks and landscape contractors. We need to be careful not to stress ourselves raking leaves, lifting large bags or generally over exerting ourselves as yard work can be physically challenging. I find the best thing to do is take your time, enjoy the cooler weather and don't over exert yourself. Also, many hands make light work.
2. *Put the gardens to bed.* Fall is the time we finish our harvests, complete our canning and retire our gardens. This is mostly a simple task of mulching in any spent plants,

available organic matter and natural soil amendments that are recommended for application in the fall. I take the opportunity to break up the soil, let it aerate one more time and say goodnight for the winter. I can do all of this in an afternoon because my back yard garden and flowerbeds are very modest in size. Larger gardens may require renting a rotor-tiller if you don't already own one. While you're at it, see if you can help your neighbor. Many fall chores are easier and more fun when done with friends and family.

3. *Prune the trees and shrubs that should be tended in the fall.* I'm not an expert on this, but the arborist I had come to my house says my pin oak should not be touched until very late fall or winter. My Siberian crab apple can be pruned in early spring or fall if needed. In both cases any major cuts should have tree salve applied to prevent spores and parasites from entering. My hedges and ground cover are pretty robust and can be trimmed anytime. For me it's a matter of coordinating a trip to the urban recycling center. For homeowners with a wide variety of trees, shrubs and ground cover it may be more involved. Information about when and how to tend outside plants is available on line and from your local agriculture extension service. Remember, all of the refuse produced in the pruning process can be composted.

4. *Replace storm door and window screens with their winter glass inserts.* My storm doors are made to accommodate summer screens for ventilation and insect control as well as winter storm window inserts. When the weather cools to where it is no longer comfortable opening the doors and windows for ventilation it is time to insert the winter storm door and window panels. Use the opportunity to check the storm door and main door weather stripping and repair it if necessary.
5. *Remove window air conditioning units.* Even the best window air-conditioning unit installations are prone to air infiltration around the AC unit. At the end of the cooling season it is best to remove portable room AC units for the winter and return the windows to a fully closed position. Many window AC units are heavy, so be sure to get help in removing and transporting the units to where they are stored. This is a good time to check the AC units for coil damage, and be sure to store any removable filters along with the unit so they don't get misplaced.
6. *Weatherize your windows.* Modern windows can be remarkably energy efficient, with good R- values and air tightness. However, if your windows do not feature insulated glass, good gaskets and hardware that provides tight seals, you should consider installing window weatherization materials. Window weatherization kits usually consist of clear plastic sheeting and gasket material. Directions for proper installation are typically included. Materials are cut or trimmed to accommodate the window being treated. Window weatherization kits are relatively inexpensive, and can be reused if they are installed and removed with care. Also, some utility companies and not for profit organizations specializing in energy conservation offer weatherization kits at low cost or no cost to low income home owners and renters. In addition to saving energy, window weatherization kits can significantly improve comfort.
7. *Remove, drain and store outside hoses and rain barrels.* This is done to prevent any

freeze damage to the hoses and rain barrels over the winter. I take the added step of turning off the inside water valve, making sure the supply to the hose bib is also empty. Some rain barrels can withstand rain water freezing, but I recommend following the manufacture's recommendations for winter conditions.

8. *Check your gutters after the leaves have fallen.* Late fall and winter rain and snowmelt can be problematic if gutters are clogged with leaf debris. It's best to give your gutters a quick check after the leaves have fallen to be sure they are clear. This is also a good time to inspect the gutter hangers to confirm they are in good shape and able to support the coming snow and ice. As in any home maintenance project be sure to exercise care when on ladders. Cleaning gutters or performing and maintenance that takes us off the ground is best done with a helper. 'Usually more fun, too.
9. *Inspect your furnace or other heating equipment.* Fall is when our furnaces start to kick on. It is best to inspect the furnace and change the filters prior to when the furnace is cycling on a regular basis. Be sure to verify the thermostat settings, and verify the heating mode has been selected. Select a temperature a low as you can possible, based on your own comfort needs, and be sure to set programmable thermostats to reflect your winter living habits.
10. *Flip your ceiling fan.* Many ceiling fans are designed to rotate in both directions. In one direction, air is forced down for summer cooling. In the other, fan rotation is intended to break up and redistribute warm air stratified against the ceiling. In rooms with high ceilings this can provide a noticeable improvement in comfort and may lower your heating bills.
11. *Stock up on ecological ice melting supplies.* Some ice melting materials are more eco-friendly than others. Do a web search using the key words "ecological ice melting materials" to see which ones you feel are best for you, and locally available. Ecologically friendly in this application means non-toxic to the skin, and friendly to the soil, wildlife, pets and storm sewer systems.
12. *Think about the local wildlife.* We enjoy feeding the birds. Bird feeding is something that is best done consistently, as wild birds (and squirrels!) come to rely on the food and water we provide. However, the changing seasons bring different species with difference preferences. You have the opportunity to attract a number of new visitors by investigating the seed, suet, fruits and nuts our winged winter visitors enjoy. Be sure any water feeder is freeze-proof and make the effort to insure the water is drinkable and in sufficient supply during the snowy winter months.
13. *Get ready for winter bicycling.* Riding your bike doesn't have to end when late fall and winter arrive, but we need to prepare and take some precautions. Our friends at REI have some great suggestions for choosing the proper clothing, weather proofing our bikes, making sure we have suitable tires, and adopting habits that combine more public transportation with bike riding when the daylight hours become shorter and we find ourselves commuting in the cold and dark. <http://www.rei.com/learn/expert-advice/winter-bicycling.html>

I'm sure there are more things we can do to get ready for winter in the greenest way possible. We would like to hear your suggestions. You can contact us with your ideas at www.greenedge-supply.com. Once you have completed your list I suggest grabbing a hot cup of locally made organic apple cider and swooshing through some fallen leaves – before you have to rake them

again!

September 2013 Green Living Installment

“Let’s take a *vacation!*” The very words evoke memories of past experiences and excitement of what the next vacation getaway will bring. While not all memories of vacations past are great, most of us associate time doing anything other than working or grinding through our daily routines as time well spent! Vacations are as varied as those who enjoy them. Our vacation goals range from simply relaxing and rejuvenating ourselves, to more elaborate excursions that can take us anywhere in the world we are legally allowed to go. Many of us use our vacation time to pursue our hobbies, visit family and friends who are not close by, or simply enjoy some down time at home. Family traditions and values, the number and ages of who will be going, work and school obligations, and our budget, among a number of other things, can all influence our vacation plans. But large or small, short or long, extravagant or simple, vacations are one way we celebrate life and each other.

Travel for recreation is one of the world’s largest industries. Twenty percent of people who travel for recreation every year are Americans. While the phrase “summer vacation” is iconic, the fact is favorite vacation times vary with the reasons for traveling and the intended activities and destination. Many vacationers enjoy late summer and early fall, after our children are back in school and the crush of summer travelers has receded. Others look forward to winter getaways in warm places, or their favorite ski resorts in mid-winter. Still others are associated with major holidays that happen throughout the year. Where we go and where we spend our travel dollars has real economic and political significance. *Ethical Traveler* believes that thoughtful travel can bring many benefits, both personal and global. By choosing our destinations well and remembering our roles as global citizens, we can create international goodwill and help change the world for the better. This sentiment is addressed by a steadily growing number of people worldwide who are interested in eco-tourism and green vacations.

Eco-tourism is a form of [tourism](#) involving visiting fragile, pristine, or relatively undisturbed natural areas. It is manifest in low-impact, often small-scale alternatives to standard commercial tourism. <http://en.wikipedia.org> Generally, ecotourism deals with living systems and the natural environment. [To enjoy these things](#), ecotourism focuses on socially responsible travel, personal growth, and environmental sustainability. Eco-tourism is almost always educational. <http://www.unesco.org> It typically involves travel to destinations where the [flora](#), [fauna](#), and [cultural heritage](#) are the primary attractions. Money spent on eco-tourism is often directed to [ecological conservation](#) via organizations that provide for the [economic development](#) and political empowerment of local communities, or to foster respect for different cultures with a focus on [human rights](#). This typically includes the unobtrusive observing of, or interacting with, local cultures and indigenous populations. Since the 1980s environmentalists have considered ecotourism a critical endeavor, so future generations may experience destinations relatively untouched by human intervention.

Eco-tourism and green vacations are intended to offer tourists insight into the impact of human beings on the environment, and to foster a greater appreciation of our natural habitats. Responsible ecotourism programs include those that minimize the negative aspects of conventional tourism on the environment and enhance the cultural integrity of local people. In addition to environmental and cultural factors, an integral part of ecotourism is the promotion of [recycling](#), [energy efficiency](#), [water conservation](#), and economic opportunities for local

communities.

Along with all of the global benefits associated with eco-tourism, there are a number of more personal rewards and benefits associated with a green vacation. Many cross over into the realm of conventional tourist accommodations and activities, but with significant differences. For instance, eco-tourism and green vacations often include a number of activities that emphasize physical fitness, and caring for our general well-being. Many are characterized as non-polluting, and energy and water conserving. Low impact hiking, zip lining through forest canopies, white water float trips and sailing are emphasized over more mechanized, or sedentary activities. Snorkeling sensitive reefs and cycling established, protected trails with knowledgeable guides enrich the educational value while providing great exercise in land and water environments that are beautiful and pristine. Green accommodations for eco-tourists can include allergy free, nontoxic rooms or more natural, benign shelter that can be tolerated by travelers with allergies or chemical sensitivities. Many specialize in local, organic food and pure water. Accommodations can also include hypoallergenic bedding, furniture, soaps, shampoos and skin care products that are ecologically sensitive and suitable for anyone with or without environmental sensitivities.

Perhaps the best thing about eco-tourism and green vacations is the opportunity to participate in activities that benefit the environment while we experience it. Organizations such as *The Regenerative Leadership Institute* <http://www.regenerative.com/regenerative-leadership-wilderness-quest> offer courses and classes that can be taken while on vacation. Other more exotic experiences include working with indigenous cultures in emerging countries through global charities or church groups. Green vacation and eco-tourism opportunities are limited only by our willingness to seek out the organizations that provide them. Today, a keyword search using the Internet precipitates more eco-tourism opportunities than we can avail ourselves of in one lifetime, and most travel agencies are able to arrange for a variety of eco-tourism and green vacation getaways. A little research shows ecotourism can range between simple, low impact tent camping to extended stays in five star eco-resorts. The International Ecotourism Society <http://www.ecotourism.org> has over five hundred member organizations and is growing. There is clearly a green vacation option for every budget, and for all members of the family, young or old. <http://travel.nytimes.com/travel/guides/eco-tourism/>

Our interest in eco-tourism or taking “green vacations” will always be a function of our personal values and how we feel about environmental and social responsibility. It is a reflection of how we choose to live, and the sensitivities we have to nature, our environments, and other people we share the planet with. Eco-tourism is a logical extension of green living, and a great way to feel good about taking a vacation. So, next time, “Let’s take a green vacation!”



Zip lining in Costa Rica

August 2013 Green Living Installment



Rockwell's Thanksgiving Dinner

Few things are more central to how we live than how we eat. I grew up in a large family in a time where everything associated with putting food on the table was a shared responsibility. Much of what we ate came from a large garden that was both a necessity and a source of pride. At one point we had three generations under the same roof. My parents and grandparents lived through the Great Depression and two world wars when Victory Gardens were central to the national effort to martial resources of all kinds. Our local grocer encouraged us to pick through what was going to be discarded, and never questioned why we thought it was a good idea to do that. The apple and peach pies that resulted were reason enough for me. As a young man I remember basement shelves stocked with row after row of Ball jars full of brightly colored peaches, beets, corn, tomatoes and numerous other vegetables, juices and jellies. They were the product of hours of work labored over pressure cookers full of steaming vegetables and berries whose aroma was rivaled only by the joy of how they brightened our Thanksgiving feast and Christmas dinner when the garden was fallow and there was snow on the ground.

As a child I never thought about the energy or sustainability issues associated with food. Since then working around the world has put issues associated with the quantity, quality and equity issues associated with the distribution of food worldwide in sharper focus. Part of that awareness stems from the fact that growing, harvesting, processing, distributing and preparing food all have energy and carbon footprint implications. In an April 2009, USA Today article titled *"Eating Can Be Energy Efficient Too"* columnist Elizabeth Weise shared the following:

With Americans looking to reduce their "carbon footprints," food seems an obvious place to start. Choosing a diet with a smaller carbon footprint means choosing foods that are processed in ways that emit less carbon dioxide — a heat-trapping "greenhouse" gas — into the atmosphere. In general, experts say, it breaks down to these guidelines:

- **Cut down on meat.** "That doesn't mean never eat meat, it means eat less of it," says Gail Feenstra, a food systems analyst at the University of California-Davis Agricultural Sustainability Institute. Meat is less efficient because we eat the animal that eats the grain instead of eating the grain ourselves. It takes about 15 pounds of feed to make 1 pound of beef, 6 pounds of feed for 1 pound of pork and 5 pounds of feed for 1 pound of chicken, the Department of Agriculture estimates. For catfish, it's about 2 pounds of feed per pound of fish. Add to the feed the cost of raising, transporting and producing cattle, and beef is by far the least energy-efficient meat. Nathan Fiala, a doctoral candidate in environmental economics at the University of California-Irvine, estimates it requires about 15 pounds of carbon dioxide to produce 1 pound of beef.

"A family of four that gives up eating beef one day a week has basically traded in their pickup for a Prius," he says.

- **Eat what's in season.** In winter, most produce is trucked in from Mexico and Central America or comes from Florida or heated greenhouses in Canada, Feenstra says.

- **The less processed, the better.** Boil a potato instead of buying au gratin dried potatoes in a box. Make oatmeal instead of eating frozen waffles. Eat an apple instead of a fruit snack bar.

- **Organic is good but not always best.** In general, organic foods grown locally have the most gentle environmental footprint. In addition to the carbon savings in transportation, such foods rely on animal manure as fertilizer. Most conventional fertilizers rely on ammonia made from natural gas. One ton of fertilizer requires about 33,000 cubic feet of natural gas. But the carbon-footprint benefits of organic foods become less clear over larger distances because of the efficiency of the nationwide distribution systems for mass-produced foods.

On its own, a tomato — organic or not — that comes from 1,500 miles away seems more wasteful than one that comes from 60 miles away, says James McWilliams, an agricultural historian at the University of Texas-Austin. "But that comparison is meaningless unless you say how many came in each shipment and how many gallons of fuel did it take for each tomato," says McWilliams, author of *Just Food: How Locavores Are Endangering the Future of Food and How We Can Truly Eat Responsibly*

- **Don't drive far to shop.** How far people travel to buy their groceries can overshadow all previous stages of a food's life cycle. "If you bought cherries from a store that were grown in your area, but you had to travel 10 miles one way to get to the store and didn't do anything on the way, they'd actually have the same carbon footprint as if you ate cherries that were flown in," says Laura Stec, co-author of *Cool Cuisine: Taking the Bite Out of Global Warming*.

• **Buy only what you need.** "If you buy things and then let them rot in your refrigerator, all of the greenhouse emissions throughout the supply chain that went into producing and storing and processing them are a complete waste," Feenstra says. At least throw them into the compost bin rather than the trash, "so the nutrients are recycled back into your garden," she says.

Lastly, and this is one of my favorite takeaways from the article, "Start with small steps in reducing your environmental footprint, because if it isn't fun, it won't get done," Stec says. "We don't want to turn the whole food system into just taking a pill because it's the lowest carbon footprint, for heaven's sake!" With that, I reflect back to the times when "participating in the Kobet food production cycles" was fun. Berry picking was fun. Shucking fresh corn from the garden was fun. Choosing what brightly colored Ball jars were going to be opened for supper was fun. It would be decades before I learned of sustainability, or carbon footprints. It was just fun, and it tasted great!

July 2013 Green Living Installment

In the last Installment of *Green Living* we explored the importance of understanding where we live. The microclimate, solar geometry, geology and hydrology specific to our property present both challenges and opportunities for environmental stewardship and maximizing our quality of life. Some of what we can do requires re-examining some of the things we take for granted, including basic building services and alternative approaches to how we can maximize the resources we have. For me, there is value in looking back in order to look forward.

I have always treasured the experiences that put what I love and value in perspective. Many years ago I visited Monticello. Like many visitors to Jefferson's home I was taken with his creativity and how he integrated his love of the arts and his penchant for architecture and engineering to solve the real world problems of providing for his family and servants. I was particularly struck with the home's large brick cistern, the way it served the house and garden and how it compensated, in part, for the home being located atop a hill where springs were scarce and the opportunity to collect surface runoff was limited. As a sailor I have always been interested in lighthouses. Their location and the era in which most were constructed required a similar, site-specific response to natural forces and the need to collect potable water. As the country matured and cities and towns developed the nationwide civil infrastructure projects we undertook eventually eliminated the need to collect rainwater, or rely on out houses and septic systems for waste disposal. The industrial revolution provided systems, processes and products that rendered the age of relying on natural systems a nostalgic memory.

But now we find ourselves in a new age of enlightenment where the back to the earth movement shares the stage with an increased awareness there is a connection between environmental stewardship and economic opportunity, and the bottom line of green is black. Conventional development patterns are being replaced, or at least challenged, by the tenets of sustainable design and development, and many are looking for ways to live better for less, based in part on a modern approach to what we did in days past. Enter the rain garden and it's primary accessory, the rain barrel.

The City of Portland, Oregon's citywide initiative to conserve water, lower the amount of waste being treated, control storm water runoff and "shock loads" to storm water management systems, and clean up the Columbia River is based on the use of the common rain barrel. <http://seagrant.oregonstate.edu/sgpubs/onlinepubs/h10001.pdf> . The program was started when the City was faced with the need to increase its capacity for municipal waste treatment.

The solution is an “upstream” answer that diverts storm water out of the municipal system and reallocates the resource to individual homes and neighborhoods. In the process, multiple businesses have been incubated or have emerged to supply rainwater-harvesting systems, and job-training programs serving the unemployed and underemployed have successfully put people to work. There has been a boom in home gardening projects, specifically rain gardens, giving the Rose City an even more beautiful ambience. Rain gardens are simply areas in a yard designed to catch rainwater, rather than have it run off or go directly into storm drains. They are characterized by low maintenance, hydrophilic plants that provide ideal habitat for butterflies, songbirds and beneficial insects. The Columbia River is measurably cleaner, and there has been a significant reduction in the municipal waste stream.

There are numerous cities in the US and other countries faced with the same infrastructure challenges. The Portland, Oregon *Contain Rain* project has attracted attention around the country. Portland, Maine and Seattle, Washington have like programs that are experiencing similar results. http://www.pwd.org/environment/sebago/Rain_barrels.php. The new International Green Construction Code (IGCC) has codified alternative approaches to irrigation, helping to increase the use of grey water. <http://www.iccsafe.org/cs/IGCC/Pages/default.aspx>.

In Pittsburgh the Nine Mile Run Rain Barrel Initiative is underway, already providing measurable benefits. <http://www.ninemilerun.org/rain-barrel-initiative/> . Currently, Stormworks is managing the program.

<http://www.swpgh.com>

Rain Gardens and rainwater harvesting using rain barrels are classic green living opportunities. Individual involvement, multiplied thousands of times, can beautify neighborhoods, improve the health of our rivers, reduce the municipal treatment loads and improve the environmental stewardship of a region. <http://www.mnn.com/your-home/at-home/stories/catching-rain-with-rain-barrels> My goal is to join the effort; I have already researched the barrels I would like to use. My yard will be more attractive, my plants will love it, and so will I. Thanks for the inspiration, Mr. Jefferson.



June 2013 Green Living Installment

To date we have been focusing primarily on making our homes healthy, energy efficient places to live and play. This month I would like to turn our attention to what surrounds our homes. Our homes and the landscapes that host them share an intimate and ongoing relationship we should strive to understand. Having a good sense of place and an understanding of how our homes and sites influence each other is key to good stewardship of our domestic environments.

June is a time when many of us celebrate the exhilaration of late spring with its longer daylight hours and warm weather by spending more time in our yards. Part of this is by necessity – we have work to do out there! But many of us simply enjoy celebrating all of the qualities and attributes our yards have to offer as the seasons change, however large or small our property may be. I hasten to add what I want to share this month is as applicable to an urban lot as it is to a small farm.

Appreciating how our homes and sites interact requires a rudimentary understanding of what makes up the *microclimate* that surrounds us, and the influence it has on the energy, materials and resources we need to live a green lifestyle. Understanding the conditions around our homes is an important part of *site assessment*. Site assessments can be quite detailed, though most are based on the following basic elements:

1. *Solar Geometry*. Solar geometry is simply how the sun tracks across our site. Solar geometry can be enjoyed casually and intuitively, or studied in depth with tools as simple as the apps found on our smart phones, or any number of detailed sources that list solar altitude and azimuth. Each is a function of latitude, and each varies slightly each day as we orbit the sun. A simple compass app can indicate true south, and more sophisticated apps can provide the altitude and azimuth of the sun at any hour of the year. We often know “where the sun is” as we are familiar with where and when the sun is in our favorite rooms. We know where the sun comes up in the morning, and where it sets in the afternoon. We appreciate the sun coming through a window in the winter, and work to keep the direct rays of the sun out of our homes in the summer. More subtle influences result from the interaction of the sun’s movement and the position of our home and trees when shade and shadow are created. We appreciate the “sunny side” of our homes as well as the pleasure of sitting in the shade of our favorite tree. Understanding the influence of the sun on our homes and sites can inform where the best place is for a garden, as well as where we should place shade tolerant plants. We can use the same information for placing shade trees, or determining which windows are providing useful passive solar gain in the winter.
2. *Site Hydrology*. Hydrology is the study of water. Water management in our homes and site includes a variety of subjects, from keeping our homes dry and controlling humidity for health and comfort, to rainwater harvesting and how to irrigate our gardens cost effectively. Our goal should be to minimize the negative impact water can have on our homes and property while optimizing how we can use water as a natural resource. Our site water knowledge starts with understanding the nature of groundwater, including the water table under our homes and the influence it has on our home’s foundation and interior. The level or presence of groundwater often varies with the rainfall in each season, but may be more or less constant if the source is underground as in a shallow aquifer or surface spring. It may or may not be a strong influence on how we use or and development our sites. Conversely, it is good practice to recharge local aquifers if it can be done ecologically. Rainwater harvesting and the establishment of rain gardens are also central to site water management.

3. *Wind*. Like the sun, how the wind influences our homes is often experienced simply as a function of living in any location. Our goal is to optimize beneficial cooling breezes in the summer while minimizing the potential damage or discomfort wind can also cause. We need to put equal emphasis on weatherizing our homes against unwanted cold air infiltrating into our homes in the winter, while appreciating the potential for breezes to provide passive solar cooling in the summer. The National Oceanographic and Atmospheric Association (NOAA) publishes average wind speeds and wind direction for most locations in the US. However, wind is very site specific and can be highly variable, even between adjacent properties. We can landscape to provide protection from the wind, but must keep helping or hurting passive solar design in mind. The wind can tickle wind chimes, and power residential scale wind generators.

There is great value in understanding how the microclimate impacts our homes and yards. Conducting a site assessment is the first step to planning a number of projects that are environmental in nature. It will help determine the feasibility of a raised bed vegetable garden as well as a rain garden that takes advantage of a naturally wet part of our site. Transforming our lawns to edible landscapes can beautify our property and increase its value while reducing maintenance costs. Solar geometry and wind conditions will inform our plans to renovate or build an addition. Harvesting rainwater can have a number of benefits, each with the potential to increase the productivity of the property while saving us money.

Green living is a multifaceted subject based on both objective and subjective considerations. Exercises in quantifying the return on any investment in our homes are often balanced with satisfying the more subjective aspects of what we find enjoyable, beautiful or desirable in what we do and how we live. Environmental stewardship can be a determining factor in each. Understanding environmental influences on our homes and property is a valuable part of learning how to live green.

May 2013 Green Living Installment

In the last installment of *Green Living* we explored building related illness, and the incidents of chronic illness, or causal agents, in the home that can impact our health and well-being. The bad news is there are potentially scores of potent irritants that can influence our health inside our homes. The good news is we know a great deal about what and where they are, and how to eliminate them.

Building related illness first came to the forefront of public awareness through building forensics studies in the 1970s published in scientific journals and the popular press. Sick building syndrome was largely a result of poorly understood energy conservation practices such as constructing very tight building envelopes while significantly reducing ventilation air, in combination with inherently toxic building products. This was the case in both residential and commercial construction. In the last forty years the building design and construction industries have largely eliminated the causes of building related illness through intelligent design and an abundance of benign building materials and cleaning products. Equally important is the medical profession's response to understanding the physical and emotional ramifications of how the built environment impacts building occupants, manifest in the emerging field of clinical ecology.

Healthy living starts with recognizing how to best safeguard against incidents of chronic illness in the home. In the family of ingestants, contactants and inhalants, contactant and inhalants are specific to the built environment. To make the most of our ability to be well, we need to assess our sensitivities or vulnerability to toxic inhalants and contactants in the home. It

is best to be examined by a physician specializing in clinical ecology and building related illness before undertaking any health related improvements to our homes. Proper diagnosis is extremely valuable in determining what to address, as well as in aiding our effort not to introduce anything into our homes that may potentially impact our health. The physician's Hippocratic oath of "*First, do no harm*" applies here.

For instance, if someone has multiple chemical sensitivities (MCS) aggravated by volatile organic compounds (VOCs), it is best to eliminate these things first. Formaldehyde, benzene and toluene are VOCs commonly found in building materials such as paints, adhesives, solvents, caulking compounds, oriented strand board (OSB), particleboard, insulation, wall coverings, vinyl products, sealants and a number of interior finishes. Carpeting can contain 4-phenylcyclohexene (4-PC) and styrene, VOCs that have been identified as potential irritants, especially to those with MCS. Building occupants who are exquisitely sensitive often have very low tolerance to these materials and products, and may react to very low exposure levels. This is true for new homes as very as renovation projects.

Generally the protocol for dealing with VOCs is well known. First, it is best to eliminate the irritant entirely if possible. In the case of VOCs that is accomplished but substituting a zero, or very low, VOC product. If the irritant cannot be eliminated it is best to minimize it as much as possible. That is, use as little as necessary. Lastly, if the irritant cannot be eliminated or minimized it should be encapsulated. There are non-toxic building sealants formulated to act as prophylactics, thereby reducing the exposure to potentially harmful VOCs.

Another category of causal agents in the home is micro flora, or mold. There are thousands of micro floras found in the natural environment where they perform functions critical to the ecology. Molds are essentially plants that do not have chlorophyll, the component commonly found in green plants. They need oxygen, a food source and water in any form to thrive. Only a few species are found in the home, but they can be very potent, especially if one is predisposed and sensitive to their influence. Among these are aspergillus, penicillus, and streptococcus, commonly known as "black slime." Most people react to the spores emitted from micro flora, which grow most commonly in warm, moist and dark areas of our homes.

Mold is best controlled by limiting a home's relative humidity to no more than 60%, effectively ventilating bath rooms, laundries, kitchen and other high moisture areas, and making sure there are no hidden sources of water such as leaks or damp basements. Further control is accomplished by effectively ventilating closets and storage areas that are often stagnant, but full of things molds like to eat, like fabrics, leather, paper and other organic materials. The Environmental Protection Agency recognizes mold as a potent source of building related illness and offers very comprehensive advice for testing for, identifying and remediating mold in the home. www.epa.gov

Allergy free, nontoxic design is a mature disciplined practiced competently by designers who understand the principles and practices of green architecture and human ecology. I am pleased to have been able to practice allergy free nontoxic design once 1981, when I was fortunate to meet Dr. Roy Kerry, MD, AAOA. Dr. Kerry commissioned me to design a completely allergy free and nontoxic home for his exquisitely sensitive wife, Nora Lee. We believe it was one of the first of its kind in the US. Over the course of several years he literally tutored me in the art and science of building design and construction for the chemically sensitive. I will always be grateful to Dr. Kerry and his physician colleagues who taught me how

important it is to create healthy living and working environments.

GreenEdge Supply shares your interest in making your home the energy efficient and healthy place it can be. This is particularly true if you have children, or if anyone in your home is sensitive to the influence of the built environment. If you have questions regarding healthy home design, or would like to comment on this article, please contact us at www.GreenEdgeSupply.com.

April 2013 Green Living Installment

At GreenEdge Supply our goal is to live better for less by improving comfort while reducing the costs of maintaining and operating our homes. In the last installment of Green Living we explored several ways we can make our homes more energy and resource efficient. Many of the recommendations for improving our home's exterior envelop and controlling our heating and cooling equipment more efficiently can be done as simple home improvement projects. Others require trained personnel using specialized equipment. Home energy improvements, especially simple low cost / no cost opportunities, have proven to be very cost effective. This is particularly true when the energy improvements we undertake significantly increase the value of our homes.

So, if improving our home's energy efficiency and comfort are both positive, cost effective goals, what should we be concerned about? Generally, we need to know what impact the built environment has on us as building occupants. It is important to understand energy conservation improvements that reduce infiltration can potentially lower the quality of the air in our homes. Maintaining superior air quality in our homes must be part of any home improvement effort.

It is estimated we spend between 80 and 90 percent of our time indoors. Much of that time is in our homes, including when we are asleep. The impact of the built environment on our general well-being is well established. Many of us first became aware of the consequences of the influence of spending time inside our homes and other buildings in the 1970s when the terms *sick building syndrome* and *building related illness* came to our attention. http://www.epa.gov/iaq/pdfs/sick_building_factsheet.pdf These conditions were a consequence of tightening buildings to reduce infiltration and mechanical ventilation associated with high energy consumption in response to the first OPEC oil embargo. <http://www.thedailygreen.com/living-green/definitions/Sick-Building-Syndrome> "Sick buildings" is a misnomer when you consider it is the building user or occupant who suffers the consequences of poor interior air quality, not the structure. The fact building related illness can be a consequence of inhabiting buildings that are inadequately ventilated quickly spread to the home building industry, as home builders were also concerned with how to reduce energy consumption of new and existing homes during the energy crisis. This same awareness precipitated a response from the medical industry, which engaged the science of building forensics and occupational health and safety to address the medical conditions brought on by building related illness. The National Institute of Health, <http://www.nih.gov/> along with a legion of other organizations, now serve our need to understand how the places where we live, work and play impact our health and well-being. <http://www.ereleases.com/pr/author/the-healthy-house-institute>

In order to evaluate how our homes influence our health we first need to understand how we physically interact with the built environment generally, and our homes specifically. Generally, this happens when our bodies are subject to three different types of incidents of chronic illness, or causal agents; contactants, ingestants and inhalants, or things we touch, eat and breathe.

Contactants are irritants that invade our bodies through our skin. In the home these irritants are fairly limited, but can be very serious to individuals who are sensitive to them. Common contactants include solutions used to treat the fabrics and leather http://www.ehow.com/facts_6052561_leather-allergy.html in our furniture and bedding http://www.ehow.com/list_6831303_allergies-bedding.html . They can also found in some detergents, hair dyes, cleaning products, soaps, and beauty aids.

Ingestants, or irritants caused by things we eat, are a typical cause of food allergies. Most of us do not associate building related illness with things we eat and, for the most part, that is true with one notable exception. Lead poisoning is a serious consequence of ingesting lead, often found in the home, especially in older structures. Lead poisoning is especially dangerous to children, who are most likely to chew on windowsills, old cribs, coffee tables and other household items while teething. http://www.aacap.org/cs/root/facts_for_families/lead_exposure_in_children_affects_brain_and_behavior .

But by far the category of incidents of chronic illness most common in the home environment are *inhalants*, the things we breathe. These include volatile organic compounds (VOCs) <http://www.health.state.mn.us/divs/eh/indoorair/voc/>, carbon monoxide, radon, mold and mildew (micro-flora) <http://www.epa.gov/iedmold1/moldguide.html> , and particulates - dust, dust mite fecal matter, etc., <http://www.epa.gov/pm/> among others.

Our ability to resist the physical insults caused by contactants, ingestants and inhalants found in our homes is dependent on the health of our immune systems, and the dose and duration of irritants we experience on a daily basis. If our immune systems are healthy, we are better able to ward off the influence of daily exposure to the causes of building related illness in our homes. Immune system health, and our ability to remain healthy, is a result of complex inter-relationships between a number of factors. Among these are our genetic makeup, age, diet, physical condition, and the intensity and frequency with which we are exposed to irritants in the home environment. If our immune system has been compromised, or if the intensity and duration of the irritant is too much for us to handle when healthy, we typically exhibit the symptoms associated with building related illness. Building related illness often exhibits the same symptoms as the common cold, making it difficult to differentiate between the two. These can be as common as allergic reactions, or as complex and as insomnia, acquired attention deficit disorder, hypertension or other maladies. Normally we can resist irritants in our homes with little more than temporary discomfort; a sneeze, rash or mild headache. However, if our immune systems are weakened it is not uncommon to exhibit more and more pronounced reactions to a greater number of irritants. Chronic asthma is a common symptom. If we are severely compromised we are unable to resist even small exposures an ever-increasing number of common irritants found in our homes. If we reach this stage the quality of our lives is seriously diminished and our health is at risk. If we do not eliminate or significantly reduce the causes of building related illness, it is possible other aspects of our physical and emotional well-being will be negatively influenced.

The good news is we know how to create healthy places to live, work and play. The influence of the built environment on our well-being and the importance of healthy, productive built environments is well understood by specialized sectors of the design, construction and medical

professions. Allergy free, nontoxic design and construction are largely cost neutral and easy to implement if the basics are understood and well integrated with green maintenance and cleaning regimens.

84 Lumber and GreenEdge Supply share a commitment to creating and maintaining healthy homes. Our next installment of Green Living will explore how to more fully accomplish a healthy home environment. In the meantime, if you have any questions about how to accomplish a healthy home, or why you should pursue that goal, feel free to contact us with your questions or concerns.

March 2013 Green Living Installment

In the previous installment of Green Living, we listed a number of categories that could be included in a discussion of how to be more environmentally conscience in our daily lives. All have merit, but to most of us some are more significant, useful and desirable than others. Our interest and understanding of green living opportunities varies with the individual. For instance, most people are concerned about energy consumption in the home and what can be done to control energy costs and the impact they have on the family budget. Yet, an avid gardener may feel strongly about growing organic vegetables free of fertilizers and chemicals that are petrochemical derivatives, or how composting can benefit the soil in the family garden or flower patch. We are free to rank order our green living goals and priorities, but it is good to have a general understanding about as many green living topics as possible. That is what this series is about. So, let's get started!

In my practice it is very common to work with clients who are concerned about the amount of energy they consume and what it costs. Their concerns deepen in relation to their station in life, their financial status, social conscious and what they feel they need to address; their home, transportation, food, etc. Home energy concerns are defined most often in terms of cost. That is, the amount being paid for utilities: heating, cooling, water and water heating and electricity. Environmental degradation, stressed infrastructure, decentralized power as a matter of national security and other related issues are seldom discussed. Collectively these issues can be overwhelming, especially when energy costs are stressing the ability to provide other basic necessities. Einstein said, *"Nothing is simple if you understand it."* My corollary is *"It's not complicated, you just need to be familiar with it."* When it comes to energy issues and green living, I suggest the following:

- 1) *Understand how you use energy in your home, and how to conserve it in simple terms.* The old adage, *"You can't manage what you can't measure"* applies here. A good place to start is understanding your utility bills. The customer service representative of your utility can help interpret every charge, term, line item, and definition posted on your utility bill. Every utility bill has a customer service phone number and / or web address where consumers can get help interpreting a utility bill. This can be a very enlightening exercise, and one children should participate in. Be sure to include all utilities and home services in this exercise; gas electricity, water, phone, and cable services. The more you know about what you consume and what it costs, the better chance you have of being smart, frugal and environmentally aware.
- 2) *Use your newfound knowledge and understanding of your energy use to devise a home energy conservation plan.* I suggest this be a family affair, complete with challenges and rewards. Children understand and resonate with "taking care of the planet," especially if it's fun and rewarding. In the best case it should be educational. Focus on a positive

culture of reducing waste, instead of fostering a feeling of sacrifice. Utility providers have scores of simple, cost effective ideas for reducing home energy consumption, as does the Internet. Local home energy conservation businesses and environmental not for profit organizations can assist in performing home energy audits and providing energy conservation kits. Some people can qualify for home weatherization assistance. Home energy improvements such as mechanical system and window upgrades can be tax deductible. It all starts with understanding your “energy situation.”

- 3) *Do something (anything!) green that improves the quality of your life.* Home energy improvements can range from a comprehensive, whole house weatherization project, to converting to LED Lights. You can reduce infiltration with a professional blower door test and air-sealing project, or you can weather strip your doors and windows yourself. Installing low flow showerheads and aerators in your faucets will save water and water heating costs. If needed, install a water heater insulation blanket and set your hot water temperature to no more than 110°F to save even more. Attach as many things as possible to plug strips, and *really* turn them off. Tune up your heating and cooling equipment, and get on those filters. Setting thermostats to between 65°F at night, and keeping them at 68°F during the day can reduce home heating costs by ten percent. A programmable thermostat that lowers the temperatures while the home is unoccupied can save even more.
- 4) *Track the reduction in energy consumption and reward “the team.”* The reduction in energy use will be commensurate with the number of energy conservation strategies employed. A lower utility bill deserves a spot on the (Energy Star) refrigerator or family bulletin board and a reward. A batch of cookies always make a family discussion of what to do next more fun!

If you have any questions about how to live green, or suggestions you would like to share, please reply to this blog, or contact our friends at GreenEdge Supply. We would like to hear from you!

February 2013 Green Living Installment

In our last installment of Green Living I reflected on how Henry David Thoreau used his time on Walden Pond to explore his inner self via his connection with nature. His time and experience were neither a self-inflicted hardship nor a time of social isolation. They were simply a deliberate attempt to experience what can be gained by communing with nature in a way that heightens our senses and reveals what otherwise would be lost on our life’s journey.

The first task in writing about green living is defining what it is or means so a dialog can coalesce around it. Definitions or interpretations are as varied as those discussing the subject. We are all creatures of habit and products of our life’s experience. These, in turn, are shaped by cultural influences, socio economic status and a host of other influences that inform our values. And it is what we value that typically drives our actions and behavior.

Green living can be categorized as a matter of degree. That is, to what extent are we willing and / or able to live a green life style, however we choose to define it? How do we achieve a green life style, and how do we know we have been successful in that pursuit? What is the difference between “light green” and “deep green?” and can it be measured objectively? If so, by what metrics do we do the calculus? And, ultimately, why does it matter?

The Green Living series is designed to explore a number of green living components that are recognized as such in the popular press and are often a matter of common practice by green living devotees. I won't make any attempt to prioritize them beyond what the reader assigns, and invite any and all feedback on the treatment of the subjects we cover. Our overarching concepts will include environmental stewardship, sustainability, reducing our carbon footprint, closed loops versus through puts, and maximizing energy, material and resource efficiency in our lives. These will be referenced as we explore such specific green living topics as:

- Energy efficiency and reducing our reliance on fossil fuels.
- Reducing environmental impacts associated with personal transportation
- Water conservation
- Human ecology and our relationship to the built environment
- Waste reduction
- Landscape design, maintenance, and integrated pest management
- Healthy food production and nutrition
- Recreation and eco-tourism
- Community engagement and green neighborhoods

My goal is to facilitate a discussion that explores the connections between these topics, and others, in the most comprehensive and holistic way possible. The quality of our lives is often a matter of balance and how we allocate the time and resource we have to provide for our needs and the needs of others. I will do my best to present green living as a way to maximize the investment we make in our well-being while respecting the Earth we inhabit. Your ideas, comments and suggestions are most welcome.

Best regards,

Bob

January 2013 Green Living Installment

I am delighted to be given this opportunity by GreenEdge Supply to explore the subject of green living. For me, the greatest challenge to writing articles meant to encourage a dialog is defining or distilling the subject in ways that make for clear understanding and open the door for lively debate. Like many writers, I take inspiration from a wide range of experiences and lessons learned, and trust my comments and opinions are fair and stated in a straight forward, reasoned manner. I trust that approach will find favor with readers eager to share their own points of view.

A precise definition of green living is illusive and open to a number of interpretations. Most often it is very personal and quite subjective. Conversations I have had with friends and colleagues reveal what defines green living for one individual can be similar in some ways, but very different in others. Add the related challenges of defining and pursuing sustainability, eco-living, minimum impact self-sufficiency, and a host of other terms used to describe green living and one can see how conversations about green living may have a point of departure, but no clear consensus. Discussions of what green living means, or how it is best achieved (or avoided!) often align with personal and family values, political leanings, how we earn a living, or simply our general lot in life. Interest in green living can be driven by changes in our life's trajectory, our innate curiosity, or simply a desire to investigate who we are and how we feel about things. I know people who have practiced what they define as a green life style for as long as I have

known them. I have also met people who are more curious than ever, but not yet committed. And that's OK.



When I thought about how to start this green living series, I was drawn repeatedly to how I felt when I first read *Walden; Life in the Woods* by Henry David Thoreau. It was the late 1960s. I was a young architectural student. The country was in a time of political discord, civil unrest, socio-economic uncertainty and cultural upheaval. The book, long lost to someone I shared it with, was given to me as a gift, with the suggestion it may help with some of the things I was struggling with at the time. I have since often reflected on Thoreau's experiences and writings when pondering my own values and why I do what I do. Over the years I have enjoyed debunking some of the myths and misconceptions about why Thoreau choose to live what he called his life's experiment with friends who think his time at Walden was no more than an exercise in monastic deprivation. Much of his spirit closely parallels the reasons many people today are interested in transitioning to a greener life style. I am no longer surprised by the number of people who equate green living with unacceptable sacrifice, but remain hopeful airing the issues will lead to more informed life style decisions. To that end a few of the major themes of *Walden; Life in the Woods* warrant examination here.

For starters, Thoreau was hardly deposed to the life of a hermit, disassociated from civilization or out of contact with the surrounding world. For the two years he was at Walden Pond he lived in a 10' by 15' cabin he built on a small plot owned by his friend and mentor Ralph Waldo Emerson. He bartered chores with Emerson in exchange for the right to build the cabin and develop his garden. Emerson, who described his holdings on the edge of Walden Pond as "my garden" and "the best plaything I ever had" was a regular visitor. The cabin was just outside Concord, Massachusetts, very close to Thoreau's own home. He went into town on a regular basis, and writes of how he could not escape the intrusion of train whistles, church bells and frequent visits from curious townspeople. The hundreds of ice industry workers who sent huge blocks of ice as far away as the Carolinas interrupted his tranquility in winter, and he was constantly tasked with repairs to the cabin to maintain a modicum of comfort. He was a vegan by choice and, while he chided his neighbors' reliance on conventional work and creditors, he admitted tilling his large bean field and doing the other chores it took to live independently were very much like work. And, while he loved the animals at Walden, he also put time and effort into contributing to research done at Harvard by harvesting various species and sending them to Boston for study; hardly the habit of a hermit.

Like the late 1960s and 70s, his time at Walden Pond was not without a number of disturbing national issues. He arrived at Walden Pond in July of 1845 at the age of 27. It was before the Civil war. He was visited by slaves, included some passing through to Canada, and was

arrested for not paying Federal income tax to a nation that supported slavery. He struggled with a number of social issues, and wrote extensively about his plight to find his personal worth, inward tranquility and place in the world in the midst of what he felt was a misguided society. Even as an existentialist, I think it's fair to say Thoreau was immersed in soul searching. Today I feel many who are trying to align environmental stewardship with economic opportunity are pursuing their version of green living for the same reason.

Through it all, I believe Thoreau achieved what he set out to do in his life's experiment. *Walden; Life in the Woods* went through extensive editing and re-writing before being published in 1856, many years after he left his cabin in the woods. Many parallels can be drawn between the challenges he wrote about and the rationale he used to justify his experiment, with what I will call green living. We can argue whether his pursuit would be made easier or more difficult by the society and technology we have today. Like Thoreau, those of us interested in green living need not justify it beyond our personal goals and feelings. I count *Walden; Life in the Woods* among the books that convinced me to pursue a career devoted to sustainable design and development and environmental education. Perhaps the reader can identify with the desire to pursue many of the qualities and attributes Thoreau experienced living gently on the earth, and the satisfaction he gained from it, when he famously wrote

"If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music he hears, however measured or far away."

We will be exploring many green living topics over the coming months. It will seem like different drumming to some, and an old familiar tune to others. In either case, we hope you enjoy the journey.

If there is something you would like to share or discuss, please feel free to contact us.

Best regards,

Bob