Dear all City employees,

Hello. My name is Erica Black and I am the intern in the Planning Dept. working on the Natural Step for Communities and sustainability initiative for the City and the County. As you may know, both the City and the County have passed resolutions to become an eco-municipality. We have been researching some of the aspects of the City and County, such as transportation, energy use, purchasing, etc., and have a pretty extensive list of initiatives already in place, and also ideas of ways to make the La Crosse area more "green." I will be sending out a newsletter on a regular basis. Each week will be a topic, and the newsletters will include what the City and County are already doing, what we can strive for, and what the average person can do to help the cause. It is important that everyone in the City and County embrace the eco-municipality idea, as public support is what is truly needed to make this work. I hope you will all take the time to read the newsletters, and I am always available for any questions. Thanks everyone!

Sincerely,
Erica Black

Sustainability Newsletter Week 1: Aug. 13-17, 2007

Weekly Topic: Transportation

Some background information:

-In 1990, 69.1% of all City commuter work trips were by private automobile.
-In 2000, 75.6% of all City commuter work trips were by private automobile.
-In 1990, 74.2% of all County commuter work trips were by private automobile.
-In 2000, 89.9% of all County commuter work trips were by private automobile.

This means that more and more people have been driving to work instead of taking a bus, riding a bicycle, or walking.

The Municipal Transit Utility (MTU) has however seen an increase in the number of passengers recently. Total rider ship between 2004 and 2006 increased by 3.5%, or about 32,757 passenger trips. UPass allows university students to ride the bus for free.

MTU staff has looked into the possibility of using biodiesel fuel. This would also be dependent upon the installation of a biodiesel filling area within the County, among other things.

What is biodiesel?

-Biodiesel is made of mono-alkyl esters of fatty acids derived from vegetable oils or animal fats, which are then blended with petrodiesel. The additives are usually made from soybeans in the U.S., and from rapeseed in Europe. Other sources, such as canola oil, recycled cooking oil, and animal fat can be used. Glycerol is a byproduct.
-Biodiesel is capable of being used in compression ignition engines.
-Biodiesel is biodegradable and non-toxic.
-Drawbacks include: 5-7% less energy per gallon, low temperature operability, microbial growth, and filter plugging.

La Crosse County also has 101 miles bicycle and pedestrian trails, including the Great River State Trail, La Crosse River State Trail, Elroy-Sparta, 400 State Trail, and the Omaha Trail.

What others are doing:

Gundersen Lutheran has 4 hybrid vehicles that are used as couriers between hospital facilities and campuses.

La Crosse County has also recently purchased hybrid vehicles for use in their fleet.

Fun Fact: Due to its vegetable oil content, Biodiesel exhaust does not smell like regular petroleum diesel---it smells of French fries or donuts!

Coming Friday in the next newsletter: Sustainable transportation in other cities, web links, and things you can do!

Sustainability Newsletter Week 1, Part 2

Topic: Transportation

Some other cities' sustainable transportation initiatives:

-Minnesota—Last year a mandate was approved by the legislature requiring all on-road diesel sold statewide to be a minimum of 2% biodiesel (98% diesel, 2% vegetable/animal oils). However, the feasibility of the mandate is being questioned since biodiesel is hard to use at low temperatures.

-Michigan—St. John's public schools switched their buses to B20 (20% biodiesel) in 2002. They have had no adverse effects, and saved about $1,800 their first year.

Links to related sustainable transportation programs:

-Porous pavement in Madison: http://wkow.madison.com/News/index.php?ID=13816

-1,000 Friends transportation projects in Madison: http://www.1kfriends.org/Transportation/WI_Transportation_Projects_/WI_Transportation_Projects.htm

-Minnesota mandate for 2% biodiesel: http://www.newrules.org/agri/biodieselmn.html

-Portland, Oregon Transportation Sustainability Program: http://www.portlandonline.com/transportation/index.cfm?c=35728

Did you know???

-Highway vehicles are responsible for 63% of carbon monoxide emissions, 36% of nitrogen oxides, and 29% of hydrocarbon emissions in the U.S. These pollutants are what cause smog and health problems (Source: Fuel Economy http://www.fueleconomy.gov/feg/airpoll.shtml).
-Transportation systems are also contributing to water pollution. Runoff containing salts, dirt, pesticides, antifreeze, gasoline, fertilizers, oil, and litter can all end up in aquifers, lakes, streams, rivers, and oceans (Source: Transportation Choices http://www.transportationchoices.org/facts-environmental.asp).
-At least 123 million car trips made per day in the U.S. are short enough to be made on foot! (Source: Surface Transportation Policy Project http://www.transact.org/library/factsheets/health.asp).

What can you do???

-Make sure your car is well-tuned and the tires are properly inflated. Both improve gas mileage and cut pollution.
-Walk or bicycle whenever possible. Not only will you save on gas, but you will improve your health, too. (I ride my bike *everywhere*, it's pretty easy!)
-Carpool or take the bus to work or the store.
-Consider investing in an alternative-fueled car, a hybrid, or a more fuel-efficient model.
-Bundle errands together so that you make fewer car trips.

Coming next week: **Energy!** Have a good weekend everyone!

Sustainability Newsletter Week 2: Aug. 20-24, 2007

Topic: Energy

Some background information:

-La Crosse's natural gas and electricity is supplied by Xcel Energy (Northern States Power Company).

-In 2005, the La Crosse area's sources of energy were composed of: 51.8% coal, 26.8% nuclear, 11.7% hydropower, 4.6% gas, 2.7% wind, 1.4% solid waste incineration, 0.7% fuel oil, and 0.3% biomass. (These forms are what go into the "grid" La Crosse is connected to. At any time, power could be coming from more of one form or another).
-That said, La Crosse generally does get about 20% of its electricity from the French Island waste-to-energy facility. The remaining 80% is imported, mainly from Minnesota.
-La Crosse County has about 39,000 electric meters and about 31,000 natural gas meters.
-The percentage breakdown for the area's Xcel electricity customers are: 32% residential, 23% small and medium commercial/industrial, and 45% large commercial/industrial.

City energy usage:
-When comparing the City's electric and natural gas usage between the month of May 2006 and the month of May 2007, this year's net usage was higher for both utilities. The net increase in natural gas usage for one month between May 2006 and May 2007 was 495 therms (1.2% increase). For electricity, the net increase in usage for one month between May 2006 and May 2007 was 102,139 kWh (6.0% increase).

French Island waste-to-energy plant:
-The facility is owned by Xcel energy, and is composed of two units. One produces 143 megawatts, and the other 14 megawatts. There are also two alternative combustion turbines burning low sulfur #2 fuel oil from a 5 million gallon storage tank. Each turbine can produce 72 megawatts in the summer and 100 megawatts in the winter. The fuel sources of the plant are waste wood, railroad ties, and refuse-derived fuel (municipal solid waste). A heat source turns water into steam and drives the turbine. The plant processes more than 100,000 tons of municipal solid waste per year from the counties of La Crosse, Buffalo, Houston, and parts of Trempealeau and Wabasha.

What others are doing:

-Gundersen Lutheran is in the works for some green energy projects:
-Harnessing methane from the City Brewery waste water treatment facility for energy (which is currently just burned off).
-Installing two wind turbines for off-site electric generation credits.
-LEED (Leadership in Energy and Environmental Design) certified new clinics and new parking ramp being constructed at the corner of 7th Street and South Avenue.
-Two solar panels to light and ventilate their new parking structure.
-Researching alternate energy sources, such as geothermal, plasma gasification, and anaerobic digesters.

-Kerm King (of the La Crosse School District) decided to focus on conserving energy in school buildings, then work on efficiency. His initiatives have been:

-Urging employees to simply not use utilities unless they need them.

-Turning off lights when not in use.
-Keeping doors closed when heating or air conditioning is running.
-Turning off exhaust fans during unoccupied hours.
-Turning off all office machines (including computers) when not in use.
-Pulling shades down on hot, sunny days.
-Programming PCs with "energy saver" modes.
-Keeping temperatures at a reasonable level.

-By the end of the year, Kerm estimates the school district will have saved about $2 million on their energy bills since late 2002.

Coming later this week: Part 2—Energy facts, links, and what you can do!

Sustainability Newsletter Week 2 Continued: Aug. 20-24, 2007

Topic: Energy

Energy related links:

-Department of Energy: All forms of energy and alternative energy information: http://www.energy.gov/energysources/index.htm
-Midwest Renewable Energy Association: Fact sheets about renewable energy and home solutions: http://www.the-mrea.org/fact_sheets.php
-French Island waste-to-energy facility emissions statement: http://www.xcelenergy.com/XLWEB/CDA/0,3080,1-1-1_41137_39664_42326-4061-11_338_539-0,00.html

Other Midwest alternative energy initiatives:

-Cofrin Hall at UW-Green Bay was built using solar paneling and energy efficient techniques. It is estimated to offset about 42,000 pounds of coal use per year! Source: http://www.focusonenergy.com/data/common/dmsFiles/W_RS_MKCS_UW%20Green%20Bay%20case%20study.pdf
-The Sauk County Landfill uses 24 C30 Capstone MicroTurbines to capture its methane. The electricity produced is sold back to the utility, and is enough to provide power for over 300 homes! Source: http://www.capstoneturbine.com/_docs/CaseStudySaukCounty.pdf
-Carleton College in Minnesota erected a 1.65 MW wind turbine in 2004. The power generated is sold back to Xcel, and offsets 40% of the university's electricity needs. Source: http://www.windustry.org/newsletter/2006SummerNews.htm

Interesting facts:

-The carbon dioxide emissions for a gallon of gasoline are 19.4 pounds/gallon. For diesel, the emissions are 22.2 pounds/gallon. Source: EPA http://www.epa.gov/otaq/climate/420f05001.pdf
-Electricity generation accounts for about 40% of U.S. greenhouse gas emissions. Source: EPA
-Producing new paper, glass, and metal products from recycled items can save 70-90% of the energy and pollution that would result if the product were made of virgin materials. Source: IL Inst. Of Technology http://www.iit.edu/~chupnic/actions7.html
-Seventeen 660 kW wind turbines can generate enough electricity for 3,000 homes for a year. Source: MGE http://www.mge.com/environment/wind/
-The average home in the U.S. uses the energy equivalent of 1,253 gallons of oil per year. Source: Oberlin College http://www.oberlin.edu/recycle/facts.html
-Turning down the heat by one degree saves 3% of the energy needed to heat a space. Source: Oberlin College http://www.oberlin.edu/recycle/facts.html

What can you do???

-Turn off lights, TVs, and computers when you leave a room or won't be using them for a while.
-Unplug appliances when not in use—believe it or not, they sap energy.
-Replace incandescent light bulbs with compact fluorescents. They use ¼ the electricity and last 10 times longer!
-Make sure your home is properly insulated and sealed to reduce heat loss.
-Adjust thermostats to 72°F or higher in the summe r, and 68°F or lower in the winter.
-Replace old appliances with ENERGY STAR® ones, or more efficient models.
-Reduce, reuse, and recycle whenever possible. This cuts down on consumption, which leads to less production, causing a decrease in materials and energy use.
-Wash laundry in cold water when practical.

Next week's topic: Recycling and waste!

Have a stupendous weekend everyone!

Sustainability Newsletter Week 3: Aug. 27-31, 2007

Topic: Recycling and Waste

Some background information:

-The City of La Crosse currently accepts clear, green, and brown glass, aluminum, tin, steel, and newspapers for recycling.

-Yard wastes can be left by the curb in a proper open bin, or dropped off at either West Copeland Park or Isle La Plume.
-Brush can be dropped off at Isle La Plume. See http://www.cityoflacrosse.org/DocumentView.asp?DID=551 for more information.
-The UW-L recycling program includes plastics #1 and #2 in addition to the materials the city recycles.
-Garbage is taken to the La Crosse County Landfill site in La Crosse. The La Crosse disposal system serves La Crosse County, Houston County, Buffalo County, and parts of Wabasha and Trempealeau Counties. A process at the landfill separates some of the trash to become refuse-derived fuel (RDF) at the French Island plant.
-Large items are also placed in the landfill, such as furniture, bicycles, TVs, carpet, etc.
-The Household Hazardous Wastes Facility accepts pesticides, paint, oil, fluorescent light bulbs, batteries, old medicines, etc.
-The City of La Crosse also hosts an annual Mississippi River clean up. In 2006, 243 volunteers were able to recycle 61 tires, 220 plastic barrels, and 4,760 pounds of metal from the river. They were also able to landfill 15,460 pounds of debris. 2007 marked the 15th anniversary of the clean up.

The role of the French Island waste-to-energy plant:

-La Crosse County has a contract with Northern States Power Company (Xcel) requiring the facility to burn a minimum of 73,000 tons of waste per year.
-The facility can process up to 104,000 tons of solid waste per year.

Habitat for Humanity ReStore:

-Accepts donations of new or used materials, and then either resells the items or uses them in building Habitat for Humanity homes.
-Items are resold for between 30-70% off the retail value.
-Accepted materials include: cabinets, countertops, hardware, doors, windows, kitchen and bath fixtures, lumber, drywall, furniture, tools, fencing, shingles, new carpet, electrical fixtures, flooring, masonry products, and cash donations. Donations are tax deductible.
-From October 2006-June 2007, about 60 tons of materials have been diverted from the landfill through this program.

Did you know???
-54 billion aluminum cans were recycled last year, which saved the energy equivalent to 15 million barrels of crude oil! (Source: La Crosse recycling brochure).

Coming later this week: Links, what you can do, and helpful statistics.
Correction: Residential trash is taken to the French Island plant and burned to make energy. Large items go to the landfill. Yard wastes are placed where your trash usually goes, not

necessarily the curb. Also, the yard waste bins picked up by Harters should have a green sticker on them.

Sustainability Newsletter Week 3: Aug. 27-31, 2007
Topic: Recycling and Waste

Some helpful related links:

-Habitat ReStore: http://www.habitatlacrosse.org/restore.html
-La Crosse County Solid Waste: http://www.co.la-crosse.wi.us/SolidWaste/index.htm
-To recycle old cell phones for charity: http://www.collectivegood.com/
-DNR site to discourage burn barrels:
http://www.dnr.state.wi.us/environmentprotect/ob/

Some neat things Minnesota is doing:

-Wayzata, MN has a source separated organics program in which residents put their food and paper scraps in separate bags and set it out with the regular trash. The material is collected and composted over 18 months and then either sold, used in city landscaping, or used in road construction projects. www.wayzata.org
-The Twin Cities also has an "It's in the Bag!" program that recycles many kinds of bags, including cereal bags, Ziplock bags (without the zipping mechanism), retail bags, and plastic wrap from packaged goods. Materials are dropped off and collected at local grocery stores.
http://www.mnchamber.com/about/ww_itsinthebag.cfm

Interesting facts:

-17 trees can be saved by recycling one ton of paper. (Source: CO Dept. of Labor and Employment http://www.coworkforce.com/GreeningCDLE/paperfacts.asp)
-An aluminum can that is recycled can be back on the shelf in 60 days as a new can. (Source:
http://www.aluminum.org/Content/NavigationMenu/The_Industry/Packaging_Consumer_Product_Market/Can/TheAluminumCan.htm).
-If you were to buy enough store brand 12-pack ½ liter bottles of water to supply you for a year, it would cost about $430. If you bought a reusable metal/plastic water bottle, a Britta filter pitcher, and a filter, it would cost about $45. Not only is that a cost savings of $385, but you would divert about 1,095 bottles from the landfill or incinerator. (Source: My calculations based on groceries).

-Each ton of recycled paper can save 17 trees, 380 gallons of oil, 4,000 kW of energy, 7,000 gallons of water, and three cubic yards of landfill space. (Source: CO Dept. of Labor and Employment
http://www.coworkforce.com/GreeningCDLE/paperfacts.asp).

What can you do???

-Reduce, reuse, and recycle as much as possible.
-Utilize the Habitat ReStore for slightly used or new materials.
-Buy items with less packaging.
-DON'T LITTER EVER!! (Even those little cigarette butts are harmful…and gross!)
-Never use a burn barrel. Dispose of trash properly.
-If you receive catalogs you don't want, contact the company and have them take you off their mailing list.
-Bring a reusable tote to the grocery store instead of using plastic or paper bags every time. Reuse the plastic bags you already have for small trash bin liners.
-Buy in bulk—small portion sizes are good for dieters, but use a lot more resources and take up more landfill space.
-Bring a Tupperware to restaurants for leftovers instead of getting a Styrofoam container. (Which won't biodegrade for 100s of years!)
-Make a compost pile to collect organic wastes, and use it to fertilize your garden.
-Use rags or washable towels for spills and cleaning instead of paper towels.

Finally, I have received a few good questions over the last couple weeks, so I will share those with all in case anyone else wondered about these ideas.

Q: What appliances sap the most electricity? **A:** I would image larger items, such as TVs, refrigerators, computers, etc. would sap the most. When I said to unplug appliances I meant ones that aren't used on a regular/daily basis, such as coffeemakers, radios, unused lamps, cell phone chargers, power strips not in use, etc. Unplugging major appliances would also be a good idea if you are going to be on an extended vacation.

Q: How can I cut energy costs of a major facility? **A:** I would first of all say to hire an energy auditor. They can assess where you are losing energy, and where you can improve efficiency. As for right now, you could change lights to compact fluorescents, change exit signs to LEDs (light-emitting diodes), turn off machines and electronics at the end of the day, etc. I also learned from Nick Nichols of Gundersen Lutheran that he unplugged the lights in the body of the vending machines, and is saving a ton of wattage and money.

Q: Why doesn't La Crosse recycle plastics? **A:** La Crosse "recycles" plastics in the form of waste-to-energy. However, the reason that plastics aren't recycled in the traditional sense is partly because the City and County have a contract with Xcel to burn a certain amount of trash per year. If plastics were removed, the annual tonnage of trash could be decreased and possibly not make the quota. Another factor is that it would cost about $0.07/month/household for a private company to collect plastics #1 and #2, which is about an extra $13,000.

Next Week: Sustainable Agriculture

Have a great 3-day weekend everyone

Sustainability Newsletter Week 4: Sept. 3-7, 2007

Topic: Sustainable Agriculture

A few definitions:

-Sustainable Agriculture: A way of raising food that is healthy for consumers and animals, is humane and fair for workers and animals, does not harm the environment, is profitable, and supports local communities. Source: http://www.sarep.ucdavis.edu/concept.htm

-Community-supported agriculture (CSA): A farmer sells shares to household members for an annual fee in exchange for fresh produce, dairy, or meat products throughout the season. Source: http://www.localharvest.org/csa/

-Organic: A way of farming or raising animals that complies with local, state, and federal health standards: no genetically modified organisms, antibiotics, or pesticides. Animal feed must also be organic for the animal to be considered organic. Source: http://www.peoplesfoodcoop.com/orglabels.HTM

-Pesticide: Any substance or mixture of substances intended for preventing, destroying, repelling, or lessening the damage of any pest (EPA).
-Why are they harmful?? Pesticides have been linked to certain health risks including developmental disabilities, cancers, asthma, and the inability to have children. Environmental risks include death to wildlife, insects gaining resistance to chemicals, residues on crops, and water pollution.

Some things the area is doing:

-There are a few sustainable farms located in neighboring Vernon County, and their products can be purchased at farmer's markets and co-ops in the area. (See http://www.pfc.coop/TOUR1.HTM for Local Foods Brochure).
-There are six local community-supported agriculture farms in the area (in La Farge, Viroqua, Stoddard, and Viola). See link above.
-The People's Food Co-op offers many local, natural, and organic products. www.peoplesfoodcoop.com
-Farmer's markets—Wednesdays: Bridgeview Plaza, 2500 Rose St., 8am-1pm; Fridays: Cameron Park, 4pm-8pm; Saturdays: La Crosse County parking lot on 4th and Vine Streets, 6am; Sundays: Onalaska Festival Foods lot, 8am-1pm. All the vendors are local.

-Gundersen Lutheran is looking to partner with Organic Valley and others to provide local and organic foods in their cafeteria. Source: Nick Nichols, environmental coordinator.

List of the top most pesticide-residue-prevalent produce—score out of 100 (worst):

Peaches: 100
Apples: 96
Sweet bell peppers: 86
Celery: 85
Nectarines: 84
Strawberries: 83
Cherries: 75
Lettuce: 69
Imported grapes: 68
Pears: 65
Spinach: 60
Potatoes: 58
Carrots: 57
Green beans: 55

Source: www.foodnews.org

Did you know??? In the U.S., a piece of food travels an average of 1,300 miles to get to our plate! Source: *The Natural Step for Communities.*

Coming later this week: links, fun facts, and what you can do!

Sustainability Newsletter Week 4, Sept. 3-7, 2007

Topic: Sustainable Agriculture

Helpful related links:

-The People's Food Co-op: www.peoplesfoodcoop.com
-Sustainable Table—lots of info to educate people about healthy food choices: http://www.sustainabletable.org/
-Article on industrial livestock operations: http://www.nrdc.org/water/pollution/nspills.asp
-Local Harvest—you can find local farms, CSA's, restaurants, and more: www.localharvest.org

Did you know???

-A head of lettuce shipped from California to Washington, D.C. is estimated to require 36 times more fossil fuel energy in transport as the lettuce actually provides in food energy. (Source: http://www.worldwatch.org/node/4132)
-Factory farms not only contribute to environmental pollution, they practice inhumane treatment of animals. Gestating sows often are in such confined pens that they cannot even turn around! (Source: http://www.worldwatch.org/node/1495)

-Pesticide use in agriculture grew from 400 million pounds to 700 million pounds between 1964 and 1996, yet the amount of crops lost to pests has increased 6%! (Source: *The Natural Step for Communities*)
-One teaspoon of agricultural pesticide poured into a drain could contaminate the drinking water of 200,000 people for a day. (Source: UK Pesticide Action Network: http://www.pan-uk.org/Projects/Food/PAN%20UK%20food%20poster%2006.pdf)
-Atrazine, an herbicide, can cause frogs to change their sex. It has also shown to be possibly linked to certain cancers in humans. (Source: NRDC http://www.nrdc.org/health/pesticides/natrazine.asp)
-Of the 330,000 tons of insecticide used in the developing world per year, half is applied to cotton. (Source: http://www.sierraclub.org/sierra/200501/green.asp)
-About 24 million pounds of antibiotics (70% of the U.S. total used) are added to livestock feed to increase growth and treat diseases due to crowded conditions. This has contributed to the increase in resistant bacteria, which makes it more difficult to treat human illnesses. (Source: NRDC: http://www.nrdc.org/water/pollution/ffarms.asp)
-Over 70 million acres of genetically modified crops are currently being cultivated in the U.S. (Source: http://www.thegreenguide.org/article/food/genetic)
-Michael Pollan's book, *The Omnivore's Dilemma*, tells of how corn is the basis of many American meals—the standard chicken nugget is composed of corn-fed chicken, corn starch, corn flour, the corn oil that it's fried in, lecithin, mono-, di-, and triglycerides, coloring, and citric acid (all derived from corn)! The Introduction and Chapter 1 are worth a read: http://michaelpollan.com/omnivore_excerpt.pdf

What can you do???

-Buy local and/or as many natural and organic products as possible.
-Shop the local farmer's markets.
-Wash fruits and vegetables thoroughly before eating.
-Purchase foods that are "antibiotic free", "free-range", "all natural", and "organic."
-Attempt to consume less meat and choose meats that most likely did not come from a factory farm (usually organic, free-range, or small local farm meats are best bets).
-For those of you who like to imbibe: Look for organic/eco-friendly beers. Some good companies: Sierra Nevada Brewing Co., New Belgium Brewing Co., and Great Lakes Brewing Co. Good Wisconsin (but not necessarily organic) wineries: Door County, Wollersheim Winery, and Vernon Vineyards.

Question asked earlier this week:

Q: What is the latest best remedy for eating the produce listed as having the most pesticide residues? Peeling? What is the best way to wash them if they aren't peeled?
A: According to www.foodnews.org, the best thing to do is to wash produce thoroughly, peel if necessary, and buy organic as much as possible. Bananas and oranges have to be peeled, but contaminants on an unwashed fruit can transfer from your hand to the edible portion easily. Also, keep in mind that some

fruits and vegetables lose many of their important nutrients when the skin is peeled. Therefore, the best remedy would be to first buy organic, and then washing all produce before peeling and/or consuming. There are a lot of "fruit sprays" that claim to clean residues off produce, but I would probably just stick to a mild dish soap and water (www.bettertimesinfo.org suggests one tsp. soap and one gallon of water mixed).

Coming next week: Habitat!

Sustainability Newsletter Week 5: Sept. 10-14, 2007

Topic: Habitat

What's going on in the area now:

-The City of La Crosse has over 40 parks and open spaces, covering over 1,300 acres.
-The Bluffland Protection Program, shared by the City and the Mississippi Valley Conservancy, has protected over 4,000 acres of important lands.
-The Myrick Hixon EcoPark plan is underway, hopefully to be completed in 2008. The project combines the Hixon Forest Nature Center with the Myrick Park Zoo. The zoo will be populated with native Wisconsin animal species, and will provide environmental education to people of all ages.
-There is currently an ordinance to fix four boulevards this year. Areas that have already been repaired and planted with trees are near Lincoln Middle School, the Three Rivers Waldorf School, and the Fire Fighter's Credit Union.

Some interesting facts about the area's habitats:

-The wetlands of La Crosse serve many important functions—provide habitat for native and migrating species; filter, clean, and store water; collect and hold floodwaters; and provide places of recreation.
-The Mississippi River and its tributaries provide an important migration corridor for roughly 60% of all bird species in North America, many of which pass through La Crosse. Some bird species migrating in the Midwest are arriving 60 days earlier than they did in 1960. Global warming?? (Source: The Nature Conservancy and Sierra Club).

Did you know???

-There are two species of rattlesnakes that live in the bluff region of La Crosse—the Timber rattlesnake and the Eastern Massasauga (Wisconsin's most endangered reptile). Although only one fatal rattlesnake bite has been documented in Wisconsin since 1900, you should still keep your distance if you happen upon one. Source: WI DNR.

A link that was recommended to me last week: The UW-Extension's Farm Fresh Atlas for Western Wisconsin site includes more local producers than the ones listed with the People's Food Co-op: www.wifarmfresh.org

Coming later this week: Links, more related facts, and what you can do!

Sustainability Newsletter Week 5: Sept. 10-14, 2007

Topic: Habitat

Some helpful links:

-Myrick EcoPark: http://www.myrickecopark.com/
-Mississippi Valley Conservancy: www.mississippivalleyconservancy.org
-Knowles-Nelson Stewardship Program: http://www.dnr.state.wi.us/stewardship/overview.html
-WI DNR state natural areas by county: http://www.dnr.state.wi.us/org/land/er/sna/bycountylist.htm
-WI DNR invasive species public information: http://www.dnr.state.wi.us/invasives/action.htm
-Guide to buying and consuming sustainable and safe seafood: http://www.thegreenguide.com/doc/115/nofish

Some more interesting habitat-related tidbits:

-Natural areas and places near La Crosse to check out: Upper Mississippi River National Wildlife and Fish Refuge (Onalaska), Midway Railroad Prairie State Natural Area (Onalaska), Norskedalen Heritage and Nature Center (Coon Valley), Goose Island Park and Campground (La Crosse), Veterans Memorial Park (West Salem), Hixon Forest Nature Center (La Crosse), Upper Midwest Environmental Science Center (French Island), and Grandad Bluff (La Crosse). (Source: http://www.explorewisconsin.com/countypages/la_crosse.html#Midway).
-Nearly 1/3 of prehistoric, postglacial Wisconsin consisted of wetlands. Nearly half of the roughly 10 million acres of pre-settlement wetlands have been lost. (Source: Wisconsin Water Library http://aqua.wisc.edu/waterlibrary/facts.asp).
-In his essay, "Thinking Like a Mountain," Wisconsin's own Aldo Leopold shows us a good picture of how all nature is intertwined, and how man should not interfere too much: "I now suspect that just as a deer herd lives in mortal fear of its wolves, so does a mountain live in mortal fear of its deer. And perhaps with better cause, for a while a buck pulled down by wolves can be replaced in two or three years, a range pulled down by too many deer may fail of replacement in as many decades."

What can you do???

-Be respectful of all natural areas and animals.
-Teach your children the value of nature and engage them in the outdoors.
-Write to your lawmakers and urge them to keep habitat preservation a high priority.
-Shop smart: save forests by purchasing paper products with recycled content.
-Remember to "leave no trace" when at the park, on a picnic, or hiking—only leave footprints behind.
-Make sure to remove invasive species from your yard and your boat (i.e. purple loosestrife and zebra mussels). (http://dnr.wi.gov/invasives/).
-Instead of applying pesticides to your lawn, try attracting more insect-eating species, such as birds, frogs, and bats.
-Plant trees on your property. The average tree can sequester about 50 pounds of carbon a year! (Source: EPA).

Did you know???

-Ever wonder how some frogs survive the harsh Wisconsin climate? In the winter, some of the area's frog species actually freeze! They produce large amounts of glycerol in their blood and tissues which acts as an "antifreeze" to prevent ice from forming in their cells. (Source: WI DNR Amphibian Booklet).

I received an email with some information on reducing waste, especially paper waste, at home and in the office. Here are the helpful links:
-TechSoup's ways to save paper:
http://www.techsoup.org/learningcenter/internet/page5284.cfm
-EPA's document on how businesses can save money and the environment:
http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/SHSU5BNMF3/$File/businesscansave.pdf
-EPA's WasteWise website: http://www.epa.gov/wastewise/

Next week: Green building!

Have a phenomenal weekend everyone!

Sustainability Newsletter Week 6: Sept. 17-21, 2007

Topic: Green Building

Some important definitions and concepts:

-**Leadership in Energy and Environmental Design (LEED)**: a nationally accepted benchmark for the design, construction, and operation of high performance green buildings. Buildings must pass certain environmental standards, such as sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. (Source: www.usgbc.org/LEED).

-**Green roof**: includes vegetation and soil, which are planted over a waterproofing membrane. Root barriers, drainage, and irrigation systems can also be included. Green roofs provide storm water management, energy conservation, and heat island mitigation. (Source: http://www.greenroofplants.com/ and http://www.epa.gov/heatisland/strategies/greenroofs.html).
-Green buildings are not only good for the environment, but they provide savings in other aspects: lower waste disposal costs, lower utility bills, more productive living and working environments, reduced maintenance costs, preferential mortgages, and greater resale value. (Source: AIA http://www.aia.org/static/state_local_resources/adv_sustainability/).

Green building in La Crosse:

-The City of La Crosse is in the planning phase to possibly have the proposed new Transit Center be built to LEED quality standards, but most likely not have the official designation.

-Hood Park's new playground equipment is manufactured by BigToys, a company that provides EPA approved, recycled, PVC (polyvinyl chloride; a plastic that is toxic when burned) free equipment. Plans for more BigToys equipment are in the works for Hickey Park and possibly Black River Beach.

Green building in Wisconsin:

-The Aldo Leopold Legacy Center in Baraboo, WI was constructed using green building techniques. (Source: http://www.aldoleopold.org/Visit/LegacyCenterbrochure.pdf).
-The Monona Terrace Community and Convention Center in Madison just recently became LEED-EB (existing building) certified. The features include energy efficiency, green purchasing and cleaning, and increased recycling. (Source: http://www.mge.com/business/TalksBiz/2.htm).
-The Madison Environmental Group offers deconstruction services. In one deconstruction sale, more than 6.5 tons of materials were reused from a building instead of being dumped in a landfill! (Source: http://www.madisonenvironmental.com/documents/pubs_deconkit.pdf).
-The Schlitz Audubon Nature Center in Bayside was built to LEED Gold standards, and includes a geothermal heating a cooling system which is covered by a restored native prairie. (Source: http://www.wgba.org/artman/uploads/2__project_description_sanc.pdf).

Did you know???

-The financial savings of green schools are $\$70/ft^2$, which is more than 20 times as high as the actual cost of going green. (Source: http://www.cap-e.com/ewebeditpro/items/O59F9819.pdf).

Later this week: Links, Midwest case studies, and what you can do!

Sustainability Newsletter Week 6: Sept. 17-21, 2007

Topic: Green Building

Some related links:

-The Wisconsin Green Building Alliance has many links to case studies and information about green building in the state: http://www.wgba.org/
-Article about a straw bale house in the Town of Holland: http://www.lacrossetribune.com/articles/2007/07/25/news/02hayhouse.txt
-Gimme Shelter is a company that specializes in sustainable construction, as well as energy saving masonry heaters: http://www.gimmeshelteronline.com

Green building in the Midwest:

-Ann Arbor, Michigan's Big George's Home Appliance Mart was built with a green roof, and has seen energy and maintenance costs cut by 30%. (Source: *Planning Magazine* Aug/Sept. 2007).
-Chicago's Mayor Daley has created The Chicago Standard, a set of construction principles for public buildings that is derived from the LEED rating system. (Source: http://egov.cityofchicago.org/city/webportal/portalContentItemAction.do?contentOID=536910321&contenTypeName=COC_EDITORIAL&topChannelName=Dept&channelId=0&programId=0&entityName=Environment&deptMainCategoryOID=-536887205).
-The Adam Joseph Lewis Center for Environmental Studies at Oberlin College in Ohio includes a constructed meadow and wetland ecosystem. A 7,500 gallon cistern collects stormwater and decreases water impact on the city. (Source: http://www.sierraclub.org/sierra/200501/ground.asp).

What can you do???

-Replace older appliance models with ENERGY STAR models.
-If you plan to remodel, consider deconstructing and selling or donating reusable materials, and using recycled materials in the design yourself.
-For new projects, try to use materials that were harvested, extracted, or recovered in the region.
-Purchase wood products certified by the Forest Stewardship Council. These originate from sustainable, well-managed forests.
-When planning to move to a new location, consider the factors listed in this article from NRDC: http://www.nrdc.org/thisgreenlife/0705.asp.

More La Crosse green building:

-All of the houses built with the Replacement Housing Program meet ENERGY STAR standards and are built with primarily green material. The average annual heating and cooling costs of one of the homes is about $800. They are also exploring the possibility of using tank-less water heaters and other environmentally friendly items.
-The new Myrick EcoPark Nature Center is slated to be built more sustainably, using day-lighting, passive solar heating, reclaimed building materials, and cross-ventilation. The intent is to also provide a learning experience for visitors as to what kinds of environmentally-friendly practices can be incorporated into the building process.

Did you know???

-U.S. homes are on average 38% larger than they were in 1978, with fewer people per household. Statistics like this show how sprawl has become a major problem in recent years.

Coming next week: Water Usage!

Have a sublime weekend everyone!

Sustainability Newsletter Week 7: Sept. 24-28, 2007

Topic: Water Usage

Water usage in La Crosse:

-The La Crosse Water Utility serves most of the city and consists of 15 wells, a reservoir, over 220 miles of water main, and one pumping station. (Source: www.cityoflacrosse.org Water Dept.).

-The City of La Crosse's water is supplied by an aquifer about 170 feet deep. Average water production in 2006 was 10,529,466 gallons/day, which was down from about 11,500,000 gallons/day in 2005. (Source: www.cityoflacrosse.org Water Dept.). Water quality reports are also listed on this site.

-One thing the City is considering, or should strive for are more rain gardens. The Waldorf School on Rose Street is in the process of building a rain garden in their playground area to decrease storm water runoff. There is also a rain garden at the Southside Neighborhood Center. A rain garden is a planted depression with wetland and/or native plants that soaks up excess water and run-off.

Some interesting facts:

-Residents in the UK only use about 70% as much water as the most water-conserving Americans do. (Source: http://www.worldwatch.org/node/1493).
-On average, only about 2.3% of wastewater is reused. (Source: http://www.drinktap.org/consumerdnn/Home/WaterInformation/Conservation/DroughtFactSheet/tabid/199/Default.aspx).
-Keeping your shower less than 5 minutes can save up to 1,000 gallons of water a month! (Source: http://www.wateruseitwisely.com/100ways/ne.shtml).

Did you know???

-More than 2 billion pounds of nitrogen is added to Wisconsin's soil annually and 80% of that is from fertilizers, manure, and legumes. Nitrogen and phosphorous that seep into lakes and streams cause algal blooms, which choke out aquatic species. (Source: Wisc. Water Library http://aqua.wisc.edu/waterlibrary/facts.asp). Check out the Tribune's related article: http://www.lacrossetribune.com/articles/2007/09/25/newsupdate/06frogs.txt.

Also, a big "congratulations" to the La Crosse Tribune for its article about "Going Green" in Sunday's issue!! There are tons of helpful hints and interactive tools online: www.lacrossetribune.com/gogreen.

Coming later this week: Links, some facts, and what you can do.

Sustainability Newsletter Week 7 cont.: Sept. 24-28, 2007

Topic: Water Usage

Some related links:

-Information about home water savings: http://www.h2ouse.org/
-UW Water Resources Institute: http://wri.wisc.edu
-Information for farmers to decrease run-off: http://www.dnr.state.wi.us/org/water/wm/nps/pdf/ag/farmersneed.pdf

More interesting facts:

-North and Central America use water on an average of 95 gallons/person/day, whereas Africa uses about 10 gallons/person/day. (Source: www.peacecorps.gov/wws/educators/enrichment/africa/lessons/HSgeog01/Hsgeog01sup01.pdf).

-97% of the Earth's water is saltwater, a little more than 2% is in ice and groundwater, and less than 1% is freshwater. (Source: http://www.nationalgeographic.com/kidsnetwork/water/session_01.html).

-Typical household water use on a given day: 40% toilet flushing, 30% bathing, 20% laundry and dishes, 5% drinking and cooking, and 5% other. (Source: http://earthday.net/programs/currentcampaigns/waterforlife/FactsheetsFINAL/demand_factsheet_final.aspx).

What can you do???

-Take shorter and cooler showers. Ladies, shut off the water when shaving your legs.
-Don't let the tap run while you are brushing your teeth, shaving, etc.
-Install low-flow or dual-flush toilets. A family of four could save 14,000 gallons/year with a low-flow, and about 17,000 gallons/year with a dual-flush! (Source: http://www.twoflush.com/conservbody.htm).
-Purchase a rain barrel. About 40% of household water is used for lawns and gardens per year. A rain barrel can save up to 1,300 gallons of water in a summer. (Source: http://www.dnr.state.md.us/ed/rainbarrel.html).
-Fix all drain and pipe leaks in the home.
-To protect the rivers and lakes, don't litter, don't release foreign bait species, and check all boats for invasive plants and animals.
-Only water lawns during the cooler hours of the day and when it's not windy to avoid evaporation.
-Defrost food in the refrigerator or microwave instead of running hot water.
-Try a soapless carwash to prevent suds from running into waterways. Just use a large bucket of water, a rag, and a little more elbow grease. If you need soap, try a no-phosphorous kind.

Extra tidbits:
-A good rain garden website: http://www.rainkc.com/home/index.asp
-If anyone would like pictures of the Waldorf School rain garden, email Karl Green at green.karl@co.la-crosse.wi.us.
-The Midwest Renewable Energy Association's (MREA) annual Solar Home Tour is Sat. Oct. 6 from 10am-4pm. There are 4 homes in La Crosse on the tour. Check out http://www.the-mrea.org/solartour.php#WESTCENTRAL for more info.

Coming next week: Purchasing!

Have a merry Oktoberfest weekend everyone! Beifallsrufe!

Sustainability Newsletter Week 8: Oct. 1-5, 2007

Topic: Green Purchasing

Environmentally Preferable Purchasing/Green Purchasing: The acquisition of products or services that have a reduced effect on human health and the environment than traditional products. This could apply to the product's raw material extraction, production, manufacturing, packaging, distribution, and/or disposal.

Why is this important??? There have been numerous studies about the negative effects of chemicals in our environment. For example, a random blood test of Americans showed measurable amounts of over 200 chemicals that did not exist a century ago. (Source: McGinn, *Why Poison Ourselves? A Precautionary Approach to Synthetic Chemicals*, 2000). Also, the EPA claims that every U.S. citizen's fatty tissue contains at least 700 chemical contaminants. (Source: *The Natural Step for Communities*). Green Purchasing products contain less or none of these synthetic chemicals and can also improve worker safety and performance.

What the City and County are doing:

-The City Buying Group currently purchases a few products that are either certified eco-friendly, or have higher environmental benefits. These include:

-Zep Powerhouse Cleaning Spray

-Georgia Pacific Compact Coreless toilet paper, Envision Jumbo toilet paper, and Envision Singlefold paper towels

-Wausau Paper EcoSoft roll towels, and EcoSoft Controlled-use toilet paper

-General Electric's low-mercury light bulbs

-The City Buying Group is also looking into purchasing more environmentally friendly products in the near future.

What other cities and organizations have done:

-The Monona Terrace Community and Convention Center in Madison, WI recently implemented the use of Green Seal certified eco-friendly cleaning products. These products are approved by the EPA and are price comparable to the more toxic versions. (Source: http://www.ci.madison.wi.us/news/view.cfm?news_id=524).

-The City of Santa Monica, CA has been purchasing green since 1994. They have been able to replace traditional cleaners with less toxic ones in 15 of 17 product categories, save 5% on costs a year, and avoid the purchase of 1.5 tons of hazardous materials a year. (Source: http://greeninginterior.doi.gov/sustain/ch5.html).

-The Target Corporation has asked its packaging vendor to replace current packaging of products with recyclable cardboard. This is estimated to prevent about 5,000 pounds of PVC (polyvinyl chloride) from entering landfills each year. (Source: http://www.supportgreencompanies.com/companies_that_are_doing_some_greening_.html).

Coming later this week: Links, facts, and what you can do!

Sustainability Newsletter Week 8 Cont. Oct. 1-5, 2007

Topic: Green Purchasing

Some related links:

-The Minnesota government is using this brand of products in their cleaning program, which are also available to consumers: http://www.restoreproducts.com/
-Offers Environmentally Preferable Purchasing home cleaning brand and product lists: http://www.newdream.org/consumer/cleaners.php
-Greener Choices offers information to the consumer: www.greenerchoices.org
-Alternative cleaners: http://www.thegreenguide.com/doc/102/spring

More interesting Green Purchasing facts:

-Switching to safer cleaning products can reduce the instances of allergic reactions, asthma attacks, burns, cancer, and eye damage in the workplace and at home. (Source: http://www.lesstoxicguide.ca/index.asp?fetch=household).
-Some safer, eco-friendly products are more expensive than their harsher counterparts, but prices are coming down due to popularity and increased demand.
-Cleaning products are responsible for about 8% of non-vehicular volatile organic compound (VOC) emissions, which can trigger respiratory problems such as asthma, contribute to smog formation, and inhibit plant growth. (Source: http://www.greencampus.harvard.edu/greenclean/index.php).
-Each dollar spent in a local business is worth three times as much to the local economy than if it were spent in a chain store. (Source: http://sierraclub.typepad.com/greenlife/business_money/index.html).

What can you do???

-Replace more traditional products with more eco-friendly, biodegradable, non-toxic, and recycled products.
-Use cast-iron or stainless-steel pans to reduce the risk of adverse health effects from perfluorooctanoic acid (PFOA) found in some non-stick cookware.
-Create your own household cleaners with safer ingredients like soap, water, baking soda, lemon juice, vinegar, borax, etc.
-Try to purchase “certified organic” cotton clothing. It takes about ¼ pound pesticides to grow enough cotton for one T-Shirt! (Source: www.lacrossetribune.com/gogreen).
-Purchase paper products with at least some post-consumer recycled content. (Compared to virgin wood, 100% recycled content paper uses 44% less energy, produces 38% less greenhouse gas emissions, 41% less particulate emissions, 50% less wastewater, 49% less solid waste, and 100% less wood. http://www.thedailygreen.com/2007/10/02/15-facts-about-paper-industry-and-the-environment/7447/).
-Purchase furniture and home items made of natural or recycled materials.

-Buy local food from the farmer's markets, or make an effort to purchase food produced within a 100-mile radius.
-Buy in bulk—it saves energy and resources.
-Purchase volatile organic compound (VOC)-free paints to reduce indoor air pollution and toxicity.
-Instead of Glade Plug-ins, try boiling cinnamon and cloves in a pan of water.

Coming next week: Some tips on greening your life and home, rebates and incentives for going green, etc.

Have a carefree weekend everyone!

Sustainability Newsletter Week 9: Oct. 8-12, 2007

Topic: Sustainability in Your Life and Home

Greening your home:

-Consumer Reports Greener Choices information about building a green house: http://greenerchoices.org/products.cfm?product=building a new green home&pcat=homegarden

-The La Crosse Tribune's Go Green section has great information on how you can make your home more efficient at varying price levels: www.lacrossetribune.com/gogreen

-The U.S. Green Building Council now has LEED certification for homes: http://www.usgbc.org/DisplayPage.aspx?CMSPageID=147

-Madison's Green Built Home Program certifies new homes and remodeling projects that meet sustainable design standards. The site includes links to find builders, remodelers, and efficient products: http://www.greenbuilthome.org/

-Geothermal heat pumps are a good way to heat your home in the Wisconsin winters. The underground coils are installed out of sight in the backyard. Check out the Wisconsin Geothermal Association site: www.wisgeo.org You can also get information from Focus on Energy: www.focusonenergy.com .

-The Midwest Renewable Energy Association offers hands-on learning workshops around the state, which include tips on living with renewable energy and installation of actual systems: www.the-mrea.org

-Horizon Home Inspections, Inc. uses thermal imaging to see where water, heat, and cooling may be leaking or escaping in your home. They do inspections and assessments in Minnesota, Wisconsin, and Iowa. (507) 450-8740.

Tax incentives, rebates, etc.

-Focus on Energy provides many incentives for energy efficiency and renewable energy for homes, businesses, commercial sites, schools, and government institutions. Tax incentives information can be found at: http://www.focusonenergy.com/page.jsp?pageId=438. For example, cash-back rewards and tax credits can cover up to half the cost of a small solar electric system during the first year!

-A great source for federal, state, local, and utility incentives and rebates is www.dsireusa.org. Just click on Wisconsin to get a listing of all incentives in the state for renewables and efficiency.

-ENERGYSTAR also has rebates for most products, from refrigerators to light bulbs: www.energystar.gov . (I just bought some compact fluorescent bulbs at Menards, and through an instant ENERGYSTAR rebate, they cost $0.99 each!)

More easy things you can do:

-When building a new house, choose a lot where the house can be south-facing to take advantage of passive solar heating (or to install solar paneling).
-Lock windows to make a tighter seal so that heating and cooling don't escape.
-Turn the water heater down to between 120-125 degrees.
-Install low-flow aerators on faucets. They only cost $1-$5, and can save on water and water heating costs.
-When planning to move to a new location, consider the factors listed in this article: http://www.nrdc.org/thisgreenlife/0705.asp.
-Replace older appliances with ENERGYSTAR models.
-If you are going to remodel, consider deconstructing and selling reusable materials, and using other recycled materials in the design yourself. (Try utilizing the Habitat ReStore for donating and/or purchasing: http://www.habitatlacrosse.org/restore.html).
-For new projects, try to use materials that were harvested, extracted, or recovered in the region.
-Purchase wood products certified by the Forest Stewardship Council. These originate from sustainable, well-managed forests.
- www.xcelenergy.com/energysavings is a good website with tons of ways to save money and energy at home.
-See how your home energy use compares with others: www.energystar.gov/homeimprovement.

****If anyone would like a copy of any Focus on Energy handout (solar energy for the home, geothermal energy, solar water heaters, wind power, etc.) let me know, and I can send you one through City mail.****

Coming later this week: More ways to "green" your life!

Sustainability Newsletter Week 9 cont. Oct. 8-12, 2007

Topic: Sustainability in Your Life and Home

****If anyone has ideas for more newsletters, let me know. As of now, I will probably be sending just one a week or every 2 weeks. I am interested in what you all are interested in, so let me know!!****

Information on renewable energy projects:

-When considering a renewable energy project: 1) Learn about all the different types 2) Get a site assessment 3) Call an installer and get estimates 4) Check zoning, utility requirements, insurance, and other legalities 5) Secure financing; apply for Focus on Energy initiatives before purchasing or signing with an installer 6) Learn how to maintain your system safely 7) Enjoy saving money and energy! (Source: www.focusonenergy.com).

-Solar water heating: Consists of solar panels connected to a home's existing gas or electric water heating system. The components include collectors, a storage tank, and a circulation system. Solar water heaters can provide up to half of the hot water needs of a Wisconsin residence. The panels should be south-facing, able to take advantage of sunlight in all seasons, and free of obstructions. A typical two-heater panel costs about $5,000-$6,000, and can save $150-$400 per year. The return on investment is then 3-8%. (Source: FOE factsheet).

-Wind systems: There are grid-connected, non-battery; grid connected, battery-backed; and off-grid, independent. Most Wisconsin towers will be 80-120 feet, and are best placed where they are unimpeded by trees and buildings. Focus on Energy offers cash-back rewards and implementation grants for them, and wind towers are exempt from property taxes. (Source: Focus on Energy factsheet).

Related links:

-Sierra Club's list of remodeling fixes to be greener: http://www.sierraclub.org/sierra/200707/remodeling.asp
-The Department of Energy's plethora of information for making homes more energy efficient: http://www.eere.energy.gov/consumer/
-Sign up for Sierra Club's green tip a day to receive tips on easy money saving and conservation actions: https://secure2.convio.net/sierra/site/SPageServer?pagename=Signup_GreenLife
-In Seattle, this week is No Trash Week. Check out their site to learn tips about reducing the amount of trash you generate each day: http://notrashweek.com/
-Parents: check out these tips to becoming a green parent! For instance, try reusable cotton diaper wipes instead of disposables: http://www.babycenter.com/viewArticle.htm?page=1&articleId=1682233

More of what you can do!

-When in bars of pubs, consider getting taps instead of bottled beer. Using a re-fillable pint glass will decrease the demand for CO_2 emitting glass production. (Also, avoid bars that serve drinks in plastic cups!)
-Use electric hand dryers over paper towels. Although the electric dryer uses electricity, its production and use (re-use, actually) produce a lot fewer greenhouse gas emissions and generate no waste.
-Save energy in the oven! Glass and ceramic cookware conducts and retains heat better than metal. If a recipe calls for a metal container, switch to glass or ceramic and lower the oven temperature to 25^0 F.
**The following are figures according to Xcel Energy's "Save Money on Your Energy Bill" pamphlet:
-You could save up to $100 per heating season with a high-efficiency natural gas furnace.
-You can save about $100/summer by raising your thermostat's temperature from 72^0-78^0 F.
-By lowering your water heater to 1200 F or less, you can save up to $25 annually if you use an electric water heater or $18 annually if you use a gas water heater.
-Over your refrigerator's average 19-year lifespan, you can save up to $320 if it is a freezer top style.
-You can save up to $30 a year by replacing a 10-year-old dishwasher with a high-efficiency model.
-A natural gas dryer operates at half the energy costs of an electric dryer, and can save a family of four more than $50 per year.
-Keeping one regular 75-watt bulb off for one hour per day saves about $2.15 per year.
-Over the lifetime of one compact fluorescent bulb you will save about $25.
-Covering windows with plastic film in the winter can save more than $40 on your energy bill in one season.

Did you know???
-The average U.S. home creates double the greenhouse gas emissions of the average car! (Source: http://sierraclub.typepad.com/greenlife/home_and_design/index.html).

Sustainability Newsletter Week 10: Oct. 15-19, 2007

Topic: The Natural Step Framework

The Natural Step: A principal outline for building sustainable communities. It is a four step process that has been implemented in communities all over the world since its inception in Sweden. It is designed to be applicable to any size municipality in any location.

The Four Steps are A-B-C-D:

A) **Awareness--awareness of sustainability principles**

B) **Baseline Mapping--apply TNS framework principles to assess where and where not aligned**
C) **Creating a Vision--imagine product or organization as sustainable**
D) **Developing an Action Plan--utilize "back-casting" by placing one's mind in a state of future success**

The City/County is in the process of steps A and B. We are trying to make the community more aware of The Natural Step and eco-municipalities, and we are taking an inventory of sustainable practices and actions in the area already.

The Four Principles of The Natural Step Framework:

1) **Substances from the Earth's crust must not systematically increase in nature**
2) **Substances produced by society must not systematically increase in nature**
3) **The physical basis for the productivity and diversity of nature must not be systematically deteriorated**
4) **Just and efficient use of energy and other resources**

***The Natural Step for Communities: How Cities and Towns can Change to Sustainable Practices*, by Sarah James and Torbjörn Lahti has many examples of how cities in Sweden and North America have become more sustainable. The chapters are laid out as follows, with accompanying case studies:**

1) **Renewable Energy:** Falkenberg, Sweden—A city of 39,000 built a windmill farm of ten 660-watt turbines, which produce 12.5 gigawatt hours/year. This energy can heat and power 600 homes for a year. The payback is just over 9 years. The city also has a solar array that heats water for the city's district heating system.
2) **Transportation and Mobility:** Stockholm, Sweden—The city leases alternative fuel cars to municipal employees, which display stickers so others are encouraged; the city made agreements with gas stations to offer electric, biogas, and ethanol; has converted much of the city fleet to alternative fueled vehicles; and most city buses run on ethanol.
3) **Ecological Housing:** Understenshöjden, Sweden—A housing community outside of Stockholm with 180 residents living in 44 households on 8 acres. The groups of attached row-houses and condos, each about 1,000 sq. ft., are grouped together in clusters, with one unpaved parking lot. The natural vegetation was left around the development, and trails were made between clusters. Heating is provided by solar thermal paneling and a wood-pellet fired boiler. The homes were built with cellulose insulation, no VOC paint, and no products derived from fossil fuels.
4) **Green Businesses; Green Buildings:** Umeå, Sweden—McDonald's/Statoil gas station/Ford Motors building. It was built with a green roof, a grass and paver parking lot, solar panels, and even serves a

McGarden Burger! The facility uses 100% renewable energy, reuses 100% of its storm water, and reuses/recycles 100% of its waste by-products. The building is made of recycled/natural materials, with electricity being provided from a windmill 15 miles away. A geothermal heat pump is used in winter, and any heat produced in the facility is re-circulated. Terrarium air filters are used instead of HVAC, and the McDonald's frying oil is recycled to make cosmetics.

5) **Eco-Economic Development:** Lessons we can learn from Swedish cities: 1) Rediscovering local capacity—shift attitudes from hopelessness to an understanding they have the capacity to change their future. 2) Identifying and building on existing assets—provide opportunities for building new business enterprises, work opportunities, and local income generation. 3) Producing locally—become less dependent on sources of food far away and less fossil fuel intensive for transport. 4) Finding "eco-niches"—using by-products of other businesses as raw materials in other processes, or the closing of an ecological loop. 5) Meeting needs fairly and efficiently—consider the needs of all in shaping a path to sustainability.
6) **Ecological Schools; Ecological Education:** North American example: Canada—over 5,000 K-12 schools are taking part in a country-wide green schools program in which children create environmental projects. The projects are actions that enhance the environment, communicate to others about the environment, or demonstrate smart, sustainable use of resources. Schools receive awards depending on the number of projects completed. (Scary fact: 2/3 of U.S. citizens cannot pass a 12-point environmental quiz! pg. 127.)
7) **Sustainable Agriculture: Growing Healthy; Growing Locally:** Rosendal Garden, Stockholm, Sweden—An urban organic farm in the middle of the city, with vegetables, herbs, flowers, and orchards. An on-site restaurant serves fresh food from the garden, and composts all food scraps. The garden was originally the garden of the Swedish royalty, and is located in the city's 6,700 acre park, EcoPark.
8) **Dealing With Waste:** Eskilstuna, Sweden—A constructed wetland cleans 12 million gallons of sewage a day, serving about 90% of the city's 89,000 inhabitants. The 100-acre Ekeby wetland reduces discharges of nitrogen and phosphorous to nearby water bodies. Bacteria transform dissolved nitrogen into airborne nitrogen. Sedimentation reduces suspended particles, and plants absorb the sediments and nutrients. The effluent takes about a week to pass through the wetland system, and the water meets swimming standards.
9) **Natural Resources: Protecting Biodiversity:** Falkenberg, Sweden—The city decided to protect their native genetic stock of salmon, so they set up an interception station and the lower end of a dam on the River Ätran. Salmon are herded into a holding pool and transferred upstream. Before their release, the salmon are inspected, and any foreign species are captured for market.

10) Sustainable Land Use and Planning: Sala, Sweden—Used a sustainability process to form many successes in many areas, such as changing to renewable energy, greening business development, recycling, preserving biodiversity, building an ecological school, and teaching ecological gardening. The city set up training days in The Natural Step for city employees, community members, etc.

The book is available on Amazon.com for about $17.00.

Again, if anyone has ideas for topics, send them my way!

Have a fantastic fall weekend everyone!

Sustainability Newsletter Week 11: Oct. 22-26, 2007

Topic: Green and Eco-traveling

What is "green" traveling?
-According to the World Tourism Organization, green or sustainable tourism should "make optimal use of environmental resources, respect the socio-cultural authenticity of host communities, and provide socio-economic benefits to all stakeholders." (Source: http://www.newdream.org/consumer/travel.php).

What to ask when booking a hotel:
-How does the hotel cut energy consumption? Examples could be alternative energy, low-flow toilets and shower heads, or energy efficient lighting.
-Does the hotel have a recycling program?
-Does the hotel contribute to the community and environmental causes?
-Does the hotel serve local foods?

Web links for booking green trips:
-The Green Hotels Association: www.greenhotels.com
-Environmentally Friendly Hotels: www.environmentallyfriendlyhotels.com
-Green Vacation Hub: www.greenvacationhub.com
-Independent Traveler: www.independenttraveler.com
-Responsible Travel: www.responsibletravel.com
-Travel Green Wisconsin—recognizes tourism businesses that have made a commitment to reduce impacts on the environment: http://www.travelgreenwisconsin.com/
-Sustainable Travel International: http://www.sustainabletravelinternational.org/

What some hotels are doing: (All are from the source: http://www.usatoday.com/travel/news/environment/2007-07-12-eco-hotels_N.htm?csp=34).
-Four hotels are LEED certified (as of June) and 84 more are under construction in the U.S.

-Some are using pourers for sugar and cream and plates for butter and jelly instead of individual packets.
-Bicycles are being loaned or rented to guests and employees.
-Using retired sheets as cloth laundry bags.
-Floor tiling made from recycled automobile windshields.
-Using daylight as much as possible.
-Solar energy for lighting signs and for heating water.

-Motel 6's North American properties just launched a recycling program for batteries and compact fluorescents. The have also started replacing regular bulbs with compact fluorescents, using cold water in their washers, and incorporating organic food in their menus.

-Marriott International has a goal to cut hotel energy consumption by 20% between 2000 and 2010. They also provide "True Green" tips in guest rooms.

What airlines are doing:
-British Airways is aiming to recycle 50% of their waste by 2010, and are currently recycling all newspapers, office papers, glass, and magazines. (Source: http://www.britishairways.com/travel/csr-waste/public/en_gb).

What cruise lines are doing:
-Royal Caribbean: has a Save the Waves Program, recycling, no disposal at sea, and they have done away with disposable bathroom items.
-Norwegian Cruise Lines: unloads used cooking oil in Hawaii for biodiesel production, recycles used cooking grease in Miami, treats black and gray water before discharge or returns it to shore, and they recycle.
-Disney: reuses water onboard, first to use new toxic-free hull coating that increases fuel efficiency, recycles, and has onboard Environmental Officers.
-Carnival: some ships have devices that track water quality issues and report back via satellite to universities, environmental groups, and government agencies. They also recycle.
(All are from the source: http://www.independenttraveler.com/resources/article.cfm?AID=769&category=44).

Online booking:
-Orbitz.com has an eco-friendly hotels section. To qualify, hotels must:
-Use a natural source of energy (wind, solar, water, bio-fuel).
-Use environmentally-friendly and safe products (detergents, linens, shampoos, etc.).
-Contribute money from each reservation to an environmental organization.
-Use of energy conserving devices (light fixtures, motion sensors, water saving devices, air filtration, etc.).

What can you do???
-Purchase electronic travel tickets whenever possible.

-Enjoy walking tours and walk when sensible.
-Use public transportation when available.
-Utilize the hotel van instead of a rental car.
-Participate in hotel linen programs and water conservation programs.
-Turn off the lights, heat, and air conditioning when you leave the guest room.
-Avoid room service and take out. Support the local economy and enjoy a neighborhood eatery.
-Carry a container for left-overs instead of getting a Styrofoam one.
-For car trips, make sure tires are properly inflated for better fuel-efficiency.
-Take only photographs in the outdoors and not souvenirs.
-Use a digital camera instead of one that must be developed.
-Don't purchase any endangered species products, or any animal product that seems questionable.
-Rent a hybrid car. (Expedia.com offers hybrids through Fox Rent-a-Car).

Coming next week: Composting basics!

Have a spook-tacular Halloween weekend!!!

Sustainability Newsletter Week 12: Oct. 29-Nov. 2, 2007

Topic: Composting

What is composting???
-It is the use of the natural decaying process to change organic wastes into useable humus-like material.

What is a compost bin or pile???
-A place where you can put your organic materials and help the decomposition process to make soil-like material you can use. It allows you to control the water, temperature, oxygen, and food. (Source: http://www.compostguide.com/).

What can go into a compost pile???
-Most kitchen refuse except meat, meat products, bones, grease, oil, fat, and dairy products.
-Pine needles, leaves, grass clippings, wood ash, garden wastes, spoiled hay and straw, manure, paper, coffee grounds, and even dryer lint.
-You need browns and greens to get the right carbon to nitrogen ratio. (Should be 10-20:1)
-Browns=carbon: leaves, straw paper, sawdust, and animal bedding with manure.
-Greens=nitrogen: vegetable scraps, coffee grounds, grass clippings, and manure (horse, cow, hog, and poultry).
(Source: http://www.compostguide.com/).

Process:

-As you build the pile, water it to keep it damp.
-Keep turning the pile regularly.
-When the pile no longer heats after turning, allow it to stand for about 4 weeks before using the product.

Aeration: Browns help maintain good porosity, and aeration can be increased by adding sticks, stalks, or perforated pipes into the pile.

Benefits of composting:
-Supplies organic matter to the soil.
-Attracts earthworms.
-Stimulates beneficial microorganisms.
-Increases the soil's water holding capacity.
-Increases the soil's nutrient retention.
-Unlike artificial fertilizers, compost releases nutrients slowly so plants can absorb nutrients as needed, instead of receiving nutrients all at once.
(Source: http://www3.telus.net/aac/compost/facts.html).

Vermicomposting: Redworm composting for food scraps which can be done indoors. The worms transform scraps into casings quickly, which are a good fertilizer additive for gardens and potted plants. See http://www.howtocompost.org/ for more information.

Uses other than gardening:
- Some municipalities collect yard waste and/or source-separated organics for composting. The wastes are taken to a location and formed into windrows (triangular or dome-shaped rows 5-8 feet high) for as long as necessary. Turning is done usually once a month with a front-end loader. Finished compost is sold, given away, or used in public works projects. (Source: http://www.howtocompost.org/).
-Compost can be used for erosion prevention and as infill for highway construction projects. (Source: http://www3.telus.net/aac/compost/facts.html).

Composting sites:
-General composting information: http://www.howtocompost.org/
-Composting-related products: http://www.composters.com/
-Green Earth Composting—located in Holmen. If you would like a brochure, email me. Their web address: www.greenearthcompost.com .

Did you know???
-13.2 million tons of the annual U.S. waste stream is food scraps! (Source: http://www.epa.gov/reg5rcra/wptdiv/recycle/compost/).
-In 2001 and 2002, WasteCap of Wisconsin began the Food Waste Composting Project to reduce business food waste and help support food systems in the greater Milwaukee area. Over 100,000 pounds of food waste was diverted from six stores in the Waukesha area and the project helped create a cost-effective

and successful food-waste program. (Source: http://www.epa.gov/reg5rcra/wptdiv/recycle/compost/contact.htm).

Coming next week: Information on local and regional environmental organizations.

Have a gleeful weekend everyone!

Sustainability Newsletter Week 13: Nov. 5-9, 2007
Topic: Conservation Organizations

Organizations with local chapters:

Sierra Club:
http://www.sierraclub.org/
-Founded in 1892 and Wisconsin's own John Muir was elected the first president. The group's first mission was to preserve and protect the Sierra Nevada and to make it enjoyable for all through recreation, education, and conservation. The club also led many outings in the wilderness. The Sierra Club Foundation was established in 1960, and continues to fight for environmental legislation and the preservation of pristine places.
-Current initiatives: smart energy solutions and global warming, safe and healthy communities, and America's wild legacy.
-The club produces *Sierra* magazine every two months.
-There are two offices in Madison, the Midwest Office and the John Muir Chapter: http://wisconsin.sierraclub.org
-There is also the Coulee Region Sierra Club, http://wisconsin.sierraclub.org/coulee/index.htm, which has newsletters and information. There are over 600 members in the Coulee Region.

Clean Water Action:
http://www.cleanwateraction.org/
"Our water, our health, our future"
-They work on the national and state level, both alone and with other groups' collaboration.
-Issues: clean water, climate change and clean energy, toxics and chemical policy.
-Their website allows visitors to write to Congress about important issues.
-Publishes *Clean Water Action News* seasonally.
-Their Wisconsin initiative is to protect the Great Lakes.

Local chapter:
505 King St, Suite 157
La Crosse, WI 54601
(608) 782-2012
(608) 796-2180 Fax

National Audubon Society:
http://www.audubon.org/
-Named after John James Audubon, who attempted to paint and describe all the birds of America. The society began in 1905 as the National Association of Audubon Societies and helped Congress pass laws to protect migratory birds. The group became The National Audubon Society in 1940.
-Mission: to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the Earth's biological diversity.
-Issues: global warming, endangered species, Alaska issues, ecosystem restoration, population and habitat, clean water, funding conservation programs, and invasive species.
-Publishes *Audubon* magazine every two months.

Coulee Region Audubon Society:
La Crosse, WI 54602
608-483-2271
Dan Jackson, President PO Box 2573
http://www.couleeaudubon.org/ : information about birds, outings, and events in the Coulee Region.

Mississippi Valley Conservancy:
http://www.mississippivalleyconservancy.org/
-A land trust that has conserved over 5,300 acres of bluffs, prairies, streams and wetlands in the Coulee Region since 1997.
-They work with landowners and communities in Trempealeau, Buffalo, La Crosse, Vernon, Monroe, Crawford, and Grant counties through the use of conservation agreements, cooperative acquisitions, land purchases, and donations.
-Their website includes newsletters, a list of their protected lands, and an events calendar, to name a few.
Address:
201 Main St. , 10th Floor
La Crosse, WI 54601

International and National Organizations:

World Wildlife Fund:
www.worldwildlife.org, www.panda.org
-Founded in 1961, and is the largest international conservation organization in the world, serving 100 countries.
-Mission: the conservation of nature. Using the best available scientific knowledge, and advancing that knowledge where they can, they work to preserve the diversity and abundance of life on Earth and the health of ecological systems by:

-protecting natural areas and wild populations of plants and animals, including endangered species

-promoting sustainable approaches to the use of renewable natural resources

-promoting more efficient use of resources and energy and the maximum reduction of pollution. They are committed to reversing the degradation of our planet's natural environment and to building a future in which human needs are met in harmony with nature. They recognize the critical relevance of human numbers, poverty, and consumption patterns to meeting these goals.

-Accomplishments:

-Invented and pioneered the use of the debt-for-nature swap and the conservation trust fund, two of the most important mechanisms in conservation today.

-The driving force behind the international ban on ivory trading in 1990 and also helped to secure the international moratorium on commercial whaling.

-Helped to create more than 500 parks and protected areas in Africa, Latin America, and Asia, and in the past decade alone, has secured commitments to protect more than 1 billion acres of forest habitat around the world.

The Nature Conservancy:

www.nature.org

-Group began in 1951.

-Initiatives: global marine, sustainable waters, global climate change, global fire, global invasive species, and global forests.

-Protected over 117 million acres of land and 5,000 miles of rivers worldwide.

-Operate more than 100 marine conservation projects globally.

-Have more than 1 million members.

-Work in all 50 states and more than 30 countries.

-Address threats to conservation including climate change, fresh water, fire, forests, invasive species, and marine ecosystems.

-There are tons of eco-interactive features on their website.

Defenders of Wildlife:

http://www.defenders.org/index.php

-Founded in 1947.

-Mission: a national, non-profit membership organization dedicated to the protection of all native animals and plants and their natural communities.

-Goals: work to protect and restore America's native wildlife, safeguard habitat, resolve conflicts, work across international borders and educate and mobilize the public.

-Programs: wildlife conservation, habitat conservation, international conservation, policy and legislation.

-Publishes *Defenders* magazine seasonally.
-Website includes habitat fact sheets and ways to take action for environmental issues.

Coming next week: Environmentalism in the media!

Have a blissful weekend everyone!

In response to Randy's email, I would like to provide the links for more local conservation organizations. Check them out!

Ducks Unlimited: http://www.ducks.org/
-Leading waterfowl and wetlands conservation entity in North America.

Muskies Inc.: http://www.muskiesinc.org/
-Focuses on the areas of youth, fisheries, and research.
-Local La Crosse Chapter:
http://www.muskiesinc.org/default.asp?area_2=MINC%20Pages/PublicChapter/ChapterInfo&CH=30

National Wild Turkey Federation: http://www.nwtf.org/
-Supports wildlife management and has helped conserve over 13.1 million acres of habitat.
-Local chapter contacts are in La Crosse and Westby.

Clean Wisconsin: http://www.cleanwisconsin.org/
-Advocate for clean air and water in Wisconsin. They hold legislators, polluters, and regulatory agencies accountable.

North American Squirrel Association: http://www.nasasquirrel.org/index.asp
-Provides hunting, fishing, and recreational activities for the elderly disabled. They also contribute to the education of those interested in outdoor activities and conservation.

If any one else knows about local groups, feel free to email me, or email anyone on the listserve.

Thanks everyone!

Sustainability Newsletter Week 14: Nov. 12-16, 2007.

Topic: Environmental Entertainment

Environmentally-related films:

An Inconvenient Truth (2006)—a documentary about Al Gore's campaign to make the threat of global warming recognized worldwide. Gore exposes the myths and misconceptions surrounding the topic. Stars: Al Gore. http://www.imdb.com/title/tt0497116/ ; http://www.climatecrisis.net/

The 11th Hour (2007)—a look at the state of global environment, including practical solutions for restoring and saving the Earth's ecosystems. The film

presents dialogues from many renowned experts, as well as over 50 leading scientists, thinkers, and leaders. Narrator: Leonardo DiCaprio.
http://wip.warnerbros.com/11thhour/

Free Willy (1993)—a boy risks everything to save a killer whale when he learns the aquarium owners plan to kill it. Stars: Jason James Richter, Keiko the whale. Fun fact: millions of moviegoers called the number shown at the end of the film and $20 million was donated to the Save the Whales Foundation.
http://www.imdb.com/title/tt0106965/

Never Cry Wolf (1983)—a government researcher is sent to research the "menace" of wolves in the north and learns of the true positive and beneficial nature of the species. Based on a true story. Stars: Charles Martin Smith.
http://us.imdb.com/title/tt0086005/

Fern Gully: The Last Rainforest (1992)—an animated film about the magical inhabitants of a rainforest named FernGully. They fight to save their home which is threatened by logging and a polluting destructor named Hexxus. Voices: Tim Curry, Christian Slater. http://www.imdb.com/title/tt0104254/

Fly Away Home (1996)—a father and daughter decide to attempt to lead a flock of orphaned Canada geese by air on their southern migration route. Stars: Jeff Daniels, Anna Paquin. http://www.imdb.com/title/tt0116329/ Fun fact: Since 2001, The International Crane Foundation in Baraboo, WI has managed Operation Migration, where an ultralight aircraft leads whooping cranes to Florida as a conservation effort. www.savingcranes.org

March of the Penguins (2005)—a documentary of the extensive breeding habits of Emperor penguins in Antarctica. The penguins march many miles in single file through blizzards to reach their breeding grounds and ensure the survival of their species. Narrator: Morgan Freeman. http://wip.warnerbros.com/marchofthepenguins/

A Civil Action (1998)—the families of children who died sue two companies for dumping toxic waste. It is based on the true story of the case Anderson vs. Cryovac that took place in Woburn, Massachusetts in the 1980s. It was found that an industrial solvent entered the groundwater and caused fatal cases of leukemia and cancer among citizens of the town. Stars: John Travolta, Robert Duvall. http://www.imdb.com/title/tt0120633/

Day After Tomorrow (2004)—a climatologist tries to figure out a way to save the world from abrupt global warming. Massive weather events ensue. Stars: Jake Gyllenhaal, Dennis Quaid. Fun fact: the director paid $200,000 out of his own pocket to make the film "carbon-neutral,"
meaning all carbon emissions from the production of the movie were offset by planting trees and investments in renewable energy.
http://www.imdb.com/title/tt0319262/ ; http://www.foxhome.com/dayaftertomorrow/

Waterworld (1995)—in a future where the polar ice caps have melted and most of Earth is under water, a mariner helps a woman and girl find dry land. Stars: Kevin Costner. Fun fact: if the polar ice caps did melt, the ocean level would only rise a few 100 feet, not enough to flood all of civilization.

Environmentally-related television:

NBC: http://www.greenisuniversal.com/ --a posting of the network's exciting news along with green tips, green clips, and a fast-paced blog covering all the company is doing at NBC Universal and beyond.

Madison's WKOW: http://wkow.madison.com/News/downtoearth.php --"Down to Earth" has environmentally-related news stories from the Madison area.

Coming next week: Environmental and green literature!

Have an untroubled weekend everyone!!!

Sustainability Newsletter Week 15: Nov. 19-23, 2007.

Topic: Environmental Literature

***A Sand County Almanac* (1949) by Aldo Leopold:**
-A collection of essays about the natural world and conservation ideals. Leopold was a true pioneer in the fields of wildlife management and conservation. The book is a call to everyone to begin to love and respect the land and the creatures upon it. http://www.aldoleopold.org/About/almanac.htm

***The Omnivore's Dilemma—A Natural History of Four Meals* (2006) by Michael Pollan:**
-Pollan asks the question, "What should I have for dinner?" To answer this seemingly simple question, he follows the food chain of the industrial, the organic, and the self-caught meals from origin to his dinner plate. He also tries to assess which process is the healthiest for our bodies and for the environment.
http://www.michaelpollan.com/omnivore.php

***Deep Economy* (2007) by Bill McKibben:**
-The book relates how we should not consider growth as the necessary predominant economic ideal. He shows how we should strive for more locally produced goods and services. http://www.billmckibben.com/deep-economy.html

***Silent Spring* (1962) by Rachel Carson:**
-Carson exposes the threat of the pesticide DDT by citing the instances of increased deaths of birds and other animals. Her book helped contribute to the eventual banning of DDT in the United States.
http://www.nrdc.org/health/pesticides/hcarson.asp

***Walden* (1854) by Henry David Thoreau:**
-Thoreau lived in the woods near Walden Pond and wrote about his experiences. He criticizes the need for more wealth and material possessions, and believes humans should be closer to nature.
http://xroads.virginia.edu/~HYPER/WALDEN/walden.html

***The Lorax* (1971) by Dr. Seuss:**
-A children's tale about the Lorax and his mission to "speak for the trees" and save the land from industry and destruction. Eventually the last tree is cut, the industry collapses, and much pollution is left behind.
http://www.downtowntrees.com/lorax.htm

***50 Simple Things You Can Do To Save The Earth* (1989) by The Earth Works Group:**
-A book listing 50 simple solutions to save the environment and the benefits of those actions. The message is that if more consumers practiced these ideas, the Earth would be healthier. http://everything2.com/index.pl?node_id=1167112

***Plan B 2.0* (2006) by Lester Brown:**
-Plan B refers to a type of economy which includes the following points: 1) a restructuring of the global economy so that it can sustain civilization; 2) an all-out effort to eradicate poverty, stabilize population, and restore hope in order to elicit participation of the developing countries; and 3) a systematic effort to restore natural systems. http://www.earth-policy.org/Books/PB2/index.htm

***The Legacy of Luna—The Story of a Woman, a Tree, and the Struggle to Save the Redwoods* (2001) by Julia Butterfly Hill:**
-The story of how Julia lived in a redwood tree for 738 days in an effort to save it from a lumber company. She named the tree Luna, and was able to come to an agreement to preserve the tree and others around it.
http://www.circleoflifefoundation.org/inspiration/luna/

-In response to last week's newsletter, I was told that "Who Killed the Electric Car" is also a good film: http://en.wikipedia.org/wiki/Who_Killed_the_Electric_Car%3F

Have a turkey-rific Thanksgiving weekend everyone!!

Sustainability Newsletter Week 16: Nov. 26-30, 2007.

Topic: Biofuels

****Sources are the Oct. 2007 *National Geographic* and the Sept./Oct. 2007 *Sierra Magazine*****

Corn Ethanol:

-E85 (85% ethanol, 15% gasoline) as an example.
-The U.S. is expected to produce about 5.7 billion gallons in 2007, and the estimated total corn ethanol that *could* be produced in the U.S. is 11.4 billion gallons. (Meaning the U.S. in theory can produce this much if available/applicable lands were used for growing this material and producing ethanol). The production cost is $1.09/gallon. (Although E85 is often cheaper at the pump, ethanol delivers 30% fewer miles per gallon than gasoline. Therefore, a lower price is competitive with the higher mileage gasoline).
-It would take 117 million acres (Oregon and Idaho combined) to produce enough corn ethanol to replace 5% of U.S. gasoline consumption.
-Energy input to output is 1:1.3 (Meaning the fossil fuel energy used to make the fuel compared with the energy actually provided by the fuel).
-Pros: It is homegrown, and some infrastructure is already in place. The greenhouse gas emissions would be 16.2 lbs/gallon, which is 22% less than gasoline.
-Cons: It degrades soil and uses intensive fertilization and machinery. It may encourage the use of genetically modified organisms. Also, there is a concern of rising food prices and/or shortages due to crops being raised for ethanol instead of human or animal nutrition.

Sugarcane Ethanol:
-It is not available in the U.S., but is used in Brazil.
-The expected production in Brazil is 4.2 billion gallons in 2007, but it would take 41 million acres (size of Wisconsin) to produce enough to replace 5% of U.S. gasoline consumption.
-The production cost is $0.87/gallon.
-Energy input to output is 1:8
-Pros: It is the most efficient of all the biofuels, and it can be grown on marginal soils in the tropics. The greenhouse gas emissions are 9 lbs/gallon, which is 56% less than gasoline.
-Cons: The smoke from burning after harvest creates pollution. Also, there is concern that habitat may be lost due to clearing for sugarcane plantations.

Cellulostic Ethanol:
-Switchgrass, slash, municipal garbage and paper products, tree products (wood chips, paper pulps, sawdust, bark), and agricultural byproducts (stalks, husks, leaves) can be used.
-It is not commercially available yet.
-Switchgrass would take 35 million acres (size of New York) and logging slash would take 39 million acres (size of New York and Connecticut combined) to replace 5% of U.S. gasoline consumption.
-Energy input to output is 1:2-36, depending on the source.
-Pros: It offers major greenhouse gas reductions, and some grasses can even remove CO_2 from the air and store it underground. The greenhouse gas emissions are 1.9 lbs/gallon, which is 91% less than gasoline.
-Cons: Widespread utilization could displace certain plants and habitats.

Soybean Biodiesel:
-B20 (20% biodiesel, 80% diesel) for example.
-The expected U.S. production in 2007 is 292 million gallons, but the U.S. *could* make 1.4 billion gallons.
-It would take 138 million acres (size of Arizona and Colorado combined) to produce enough to replace 5% of U.S. gasoline consumption.
-Energy input to output is 1:2.5
-Pros: It burns more cleanly than regular diesel. The greenhouse gas emissions are 7.6 lbs/gallon, which is 68% less than diesel.
-Cons: It produces 10% more nitrogen oxides in combustion than regular diesel.

Cooking Grease Biodiesel:
-The estimated production for 2007 in the U.S. is 52 million gallons. Production in the U.S. *could* reach 1.4 billion gallons.
-Pros: It recycles a material that would otherwise be discarded. This mostly refers to used oil from restaurants.
-Cons: The same as soybean biodiesel.

Algae Biodiesel:
-It is not commercially available, and is currently in test production.
-Algae can make starch which can be processed into ethanol. Some algae makes droplets of oil that can make biodiesel and jet fuel.
-It would take 353,000 acres to replace 5% of U.S. gasoline production.
-Pros: Algae can use CO_2 as a food source, and can recycle up to 80% of CO_2 emitted by power plants. It doesn't require arable land, and can be harvested daily instead of annually.
-Cons: It requires a lot of water, but the water can be recycled.

A fuel related factoid: An American family will burn more fossil fuel between midnight on New Year's Eve and dinnertime on January 2 than a Tanzanian family will use in a whole year. (Source: *Deep Economy*, Bill McKibben, p. 196).

Coming next week: Green Holiday ideas!

Have a jolly weekend everyone!

Sustainability Newsletter Week 17: Dec. 3-7, 2007.

Topic: Green Holiday Ideas

Christmas Trees: Real vs. Fake

-Real: Cut trees generally come from tree farms, so no forests are being depleted. Check around to see if there is an organic tree farm nearby at www.localharvest.com , or check out the local farmer's markets. Remember to

either compost or mulch your old trees. La Crosse will pick up old trees that have had ornaments, tinsel, and bags removed. Trees should be placed where your regular yard wastes go, and will be collected in the beginning of January.
-Fake: Artificial trees are often made of plastics such as polyvinyl chloride (PVC), and some even contain lead. Also, many artificial trees are made overseas and shipped long distances reach your home. If you purchase a fake tree, be sure to get one that will last many years.
(Source: http://sierraclub.typepad.com/greenlife/).

Where to shop:
-Simply Living on Main Street in La Crosse offers many all-natural, local, and organic products, including clothing, jewelry, cleaning products, home décor, and gifts. www.simplylivingonline.com .
-The People's Food Co-op is always a good place to buy local, natural, and organic foods. Try one of their party platters or homemade pies for get-togethers. www.peoplesfoodcoop.com .
-Reware Store: Offers solar equipped backpacks and accessories that allow you to power your iPod, cell phone, and the like on the go. They also offer T-shirts and other accessories. http://rewarestore.com/about_reware.html.
-BTC Elements: Sells sustainable products including men's and women's apparel and accessories. http://btcelements.com/about.php.
-Eco-artware: An online gallery of environmentally friendly gifts available for purchase. Most gifts are handcrafted. http://www.eco-artware.com/about-eco-artware.php.
-West Paw Design: Looking for something "green" to buy your pet? This site offers dog chew toys made of recycled soda pop bottles. http://www.westpawdesign.com/catalog/dog-toys/cat_eco-friendly-dog-toys.html.
-The Green Gift Guide has links to sites that sell recycled or environmentally friendly products. www.greengiftguide.com.
-Green Nest: This site has organic and chemical-free clothing, toys, and accessories for children and babies. This is a good place to check out with all the toy recalls and lead problems. Also, Target offers some organic children's toys and clothes as well. http://www.greennest.com/index.php?cPath=86.
-Buy Green: Offers green home décor and remodeling. http://www.buygreen.com/index.asp?PageAction=VIEWCATS&Category=5.

What can you do???
-Wrap presents in old magazine pages, the Sunday comics section of the newspaper, old wrapping paper from last year, used one-sided paper, etc.
-Save any bows, bags, or gift wrap you receive on a present this year and reuse it next year.
-If you want to be more of an eco-shopper, purchase gifts that friends and family will really use, such as a gift card. (Some cards are now made out of bioplastics, which are made from all plant sources and are biodegradable). The sites listed above offer many good utile organic and natural gifts that are often price comparable.

-Purchase LED string lights this year. A Consumer Reports test found that a string of C7 incandescent lights, lit for 300 hours, would cost about $8 to light at an average electric utility rate. The same number of LED lights would cost only $0.14 for the same amount of time. The LEDs use 90% less energy. Focus on Energy is also offering $3 rebates on some 35 LED light boxes at certain stores. http://wkow.madison.com/News/index.php?ID=16939. Menards in La Crosse and Onalaska, as well as Ace Hardware in La Crosse are offering such rebates. If you choose to stick with incandescents, use smaller bulbs since they use less energy and produce less heat.
-If you have a party with too many left-overs, send some home with guests in re-usable containers, or donate the food to a shelter or pantry.
-When you go holiday gift shopping, bring your own tote or bag.
-Send E-cards to friends and family instead of snail mail holiday cards. It not only saves paper, it saves money! (The number of holiday cards sent each year in the U.S. could fill a football field 10 stories high! Source: http://www.use-less-stuff.com/ULSDAY/42ways.html).
-The EPA's guide to reducing holiday waste is also a good site for tips: http://www.epa.gov/epaoswer/osw/specials/funfacts/winter.htm.

Did you know???
-A solar energy roof will be installed on Rockefeller Plaza next year and some of the energy captured will be used to power the famous Christmas tree. The tree also is decorated with LED lights this year to conserve energy. (Source: http://www.prnewsnow.com/PR%20News%20Releases/Science%20and%20Research/Mayor%20Bloomberg%20and%20Jerry%20I.%20Speyer%20Announce%20FirstEver%20%9CGreen%9D%20Rockefeller%20Center%20Christmas%20Tree).

Have a winter wonderland of a weekend everyone!

If anyone has a question at all about nature, the environment, sustainability, renewable energy, etc., just email me. I am welcome to new ideas and questions about anything and everything. (Last week, there was an odd insect-like creature on the floor at the YMCA, and I had to go online and figure out what it was for my own interest…). So, let me know if anything is puzzling you.

Sustainability Newsletter Week 18: Dec. 10-14, 2007.
Topic: Human and Environmental Health Hazards

Herbicide Toxicity:
-Roundup is a common weed killer which is made up of a compound called glyphosate. Roundup not only can kill any kind of plant, it is harmful to certain organisms, even in low doses. One study found that male rat sperm counts decreased with increasing dosages of glyphosate (U.S. Department of Health and Human Services. Public Health Service. National Institutes of Health NTP technical report on toxicities of glyphosate. CAS No. 1071-83-6, 1992). Another study revealed that Roundup decreased the survival rate of five species of herbivorous tadpoles. (Relyea, "The Impact of Insecticides and Herbicides on the Biodiversity and Productivity of Aquatic

Communities. 2005. http://www.mindfully.org/Pesticide/2005/Roundup-Aquatic-Communities1apr05.htm).
-Atrazine, an herbicide for weeds, has been studied and found to affect both human and animal health. One study found that Atrazine lowered sperm count and viability in men who live in and/or apply the herbicide in rural areas. “Semen Quality in Relation to Biomarkers of Pesticide Exposure (2003)” is one of many studies.
(http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=ShowDetailView&TermToSearch=12948887&ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus). Other studies have also linked this compound to hermaphrodism in frog species.

Pesticide Toxicity:
-Research has shown that pesticide use over many years can lead to developmental disabilities in children. One such study, “An Anthropological Approach to the Evaluation of Preschool Children Exposed to Pesticides in Mexico (1998)” concludes that 4-5 year old children from two genetically and socially similar groups of people in the Yaqui Valley of Mexico have differing levels of development due to the presence or absence of pesticides. The children who lived on the agricultural fields where pesticides were applied showed more aggression, decreased stamina, decreased gross and fine hand-eye coordination, decreased short-term memory, and the inability to draw a person when compared to the children who lived in a group slightly up the hills. See this study for more information and for the drawings the children made. (The drawings actually made me cry in the college lecture which introduced me to this study.) (http://www.mindfully.org/Pesticide/Preschool-Exposed-Mexico-Guillette.htm).

Fertilizer Issues:
-The Dead Zone is an area in the Gulf of Mexico near the Mississippi River delta that becomes hypoxic (void of oxygen). Many organisms in this area perish due to the lack of oxygen. In 2005, the Dead Zone covered 4,564 square miles, and in some years it can reach 7,000. The Dead Zone is caused by the high run-off of nitrogen and phosphorous agricultural fertilizers into the Mississippi. The nutrients cause large algal blooms, and as the algae dies off, it decomposes and uses up the oxygen at the bottom of the river. Due to the large aquatic species die-offs, fisheries in the Gulf of Mexico have been economically affected by the Dead Zone. (Source: http://www.sierraclub.org/cleanwater/waterquality/deadzone.asp).
-Eutrophication, or the high nutrient and algal bloom problem, is also common in lakes. Large algal blooms due to agricultural run-off and lawn fertilizers can kill off fish and other aquatic organisms due to the lack of oxygen. This phenomenon decreases the lake’s biodiversity and makes recreation less appealing or impossible.

Have a joyous weekend everyone!

-Air Pollution:

-Ozone can be good or bad for human health and the environment depending on its position in the atmosphere.

-Ground-level ozone is the "bad" kind. It is created through a chemical reaction of oxides of nitrogen and volatile organic compounds in the presence of sunlight. Industrial emissions and motor vehicle exhaust release the compounds that make up ozone. Ozone is often worse on hot summer days, especially in the afternoons and early evenings.

-Atmospheric ozone is the "good" kind. It is found 10 to 30 miles above the Earth's surface, and forms a layer that shields the planet from damaging UV rays.

-Particle pollution can be bad any time of year. It can be especially bad when weather is calm because that allows air pollution to build up. Particle levels are high: near busy roads, during rush hour, and around factories. (Source: EPA).

-Smog and fine particulates in the air can increase irritation and symptoms for those with asthma. Check out www.epa.gov/airnow for the latest local air quality information.

-Chlorofluorocarbon emissions have been very detrimental to the ozone layer. The EPA has helped phase out these emissions from consumer products (such as hairsprays). Currently, there is a depletion of approximately 3 percent at Northern Hemisphere mid-latitudes and 6 percent at Southern Hemisphere mid-latitudes of the hole in the ozone layer. Because of the phaseout, CFCs are no longer accumulating in the atmosphere at an accelerating rate. CFC-11 and CFC-113 levels are decreasing, and CFC-12 levels are increasing but at a slower rate than in the past. If international agreements are adhered to, the ozone layer is expected to recover around 2050. (Source: EPA).

-Lead Poisoning:

-Lead poisoning over time is more harmful to children because it can interfere with their development. Low levels of exposure to lead can result in IQ deficits, behavioral problems, learning disabilities, stunted growth, and impaired hearing. At high levels of exposure, a child might suffer kidney damage, fall into a coma, and/or even die from lead poisoning. Lead poisoning has also been associated with an increased high-school dropout rate, as well as increases in juvenile delinquency and criminal behavior. Lead is ingested through lead-laden paint chips in the home and toys that the child puts in their mouth. Lead is found in house paint made before 1978, toys and furniture painted before 1976, some toys painted outside the U.S., plumbing, pipes, lead bullets, fishing sinkers, storage batteries, and certain paint sets, just to name a few. Be sure to check labels and be skeptical of foreign-made toys and decorations. (Sources: http://www.nlm.nih.gov/medlineplus/ency/article/002473.htm; http://www.nsc.org/issues/lead/healtheffects.htm).

-Lead levels can be decreased in the body over time if lead is removed from the environment and one eats a healthy diet.

http://children.webmd.com/news/20070815/lead-poisoning-and-kids?page=4

-Senator Mark Pryor (D-AR) introduced a bill to Congress in September, which is currently in the first stage of legislation. The bill, S. 2045 CPSC Reform Act of 2007, proposes to reform the Consumer Product Safety Commission to provide greater protection for children's products, to improve the screening of noncompliant consumer products, to improve the effectiveness of consumer product recall programs, and for other purposes. (Source: http://www.govtrack.us/congress/bill.xpd?bill=s110-2045).

-Mercury Toxicity:
-Methylmercury is formed from inorganic mercury and the action of anaerobic organisms. This is the form of mercury that builds up in bodily tissues.
-Nearly all methylmercury exposures in the U.S. occur through eating fish and shellfish.
-Microscopic organisms convert inorganic mercury into methymercury which accumulates up the food chain in fish, fish-eating animals, and people.
-The process of how mercury enters our bodies is as follows: mercury is released through the burning of wastes and fossil fuels, and other sources; wet and dry deposition from the atmosphere brings these emissions down to earth and water bodies; the mercury transforms into methylmercury in soils and water; microscopic organisms and fish ingest the mercury, which moves up the food chain to fish, other animals, and humans.
-Methylmercury bioaccumulates in the fatty tissues of animals, meaning the more that is ingested, the more that remains in those tissues. (Source: http://www.epa.gov/mercury/exposure.htm).
-Be sure to check the safe seafood guide for sustainability and harmful chemicals. See http://www.coopamerica.org/programs/livinggreen/safeseafood.cfm for more information.

Sustainability Newsletter Week 20: Dec. 24-28, 2007.

Topic: Ecological Importance, Threats to, Interesting Facts About Local Wildlife

White-tailed Deer:
-Deer play an important ecological role. They are capable of causing the loss of plant species, and erosion of the landscape due to over-browsing. Humans have created the edge habitat deer love through sprawl, and exterminated most of their natural predators. Their populations must now be kept in check by hunting to ensure the survival of native landscapes.
-Fun fact: The female's sexual maturation is dependent upon the population density of the species. If populations are low, the female can mature within her first year. If populations are normal or high, she won't mature until between her first and second year. (Source: Wikipedia).

Gray Squirrel:

-Squirrels play an important ecological role because they bury their collected seeds and nuts. A squirrel often does not eat all of the seeds and nuts it has stashed, and this allows the seeds and nuts to germinate and become trees and other plants. The loss of forestland makes collecting seeds and nuts harder for squirrels, and thus harder for a plant to proliferate.
-Fun fact: A squirrel not only can hide as many as 10,000 nuts each fall, it can also find those nuts under a foot of snow! The portion of a squirrel's brain that controls memory also grows in size by 15% in the fall, making it capable of remembering where all the nuts are buried. (Source: http://duncraft.atom5.com/squirrel-facts-1072.html).

Bald Eagle:
-The population decline of eagles and other birds of prey in the mid-1900s was due to the use of the pesticide DDT. The compound interfered with the calcium in the birds' egg shells, making them thinner and breakable during incubation. The banning of DDT in 1972 has allowed eagle populations to make a great come-back.
-Fun fact: Eagles are monogamous and mate for life. They will often return to the same nest year after year. (Source: http://www.eagles.org/moreabout.html).

Wood Frog:
-Frog species across the globe are in large decline and are suffering from mutations and abnormalities. Fertilizer and farm run-off into lakes and streams has shown to increase the persistence of a parasitic flatworm that infects frogs, causing deformities. Frogs are also environmental indicators. They easily absorb chemicals through their moist skin, and are affected at even the lowest concentrations of contaminants. (Source: http://www.reuters.com/article/scienceNews/idUSN2432027920070924?feedType=RSS&feedName=scienceNews&sp=true).
-Fun fact: The wood frog is the only frog species found north of the Arctic Circle. In the winter, up to 35-45% of the frog's body can freeze. Ice crystals form under the skin and intersperse among skeletal muscles. The freezing is achieved through specialized proteins, glucose, and accumulation of urea, which prevent intercellular freezing and dehydration. Breathing, heart beat, and blood flow cease during the freeze. (Source: Wikipedia).

Great Horned Owl:
-Great horned owls are another bird of prey that was affected by the application of DDT. Luckily, the banning of the pesticide has allowed their numbers to increase over the last few decades.
-Fun fact: When an owl eats its prey, the indigestible parts (fur, bones, feathers, teeth, claws, etc.) are formed into a pellet in the gizzard and regurgitated later. Contrary to most cartoons, an owl can only turn its head a little more than 180^0, not all the way around. This is possible because owls have twice as many vertebrae in their neck as humans do. (Source: http://www.nucleus.com/~mbak/ghorned.htm).

Timber Rattlesnake:
-Rattlesnakes prefer dense forested habitat with a thick understory for foraging. The clearing of forestland is the major threat to this endangered species. There are currently populations of this snake in the protected forests of the La Crosse area bluffs. (Source: http://www.umass.edu/nrec/snake_pit/pages/timber.html).
-Fun fact: The timber rattlesnake has facial pits on each side of its head between the eye and the nostril. The pits help the snake detect radiant heat from warm-blooded prey at night or in darkness. Only snakes that are venomous have heat-sensitive pits. Timber rattlesnakes also give live birth, unlike most other reptiles that lay eggs. (Source: http://www.ct.gov/dep/cwp/view.asp?a=2723&q=326068&depNav_GID=1655&pp=12&n=1).

Brown Bats:
-Bats are the most important natural enemies of nocturnal flying insects, and serve an important ecological role. One brown bat can catch up to 1,000 mosquitoes per hour, and large colonies of bats can protect farmers from rootworm damage. Bats are also important pollinators and seed dispersers for foods such as bananas, mangoes, cashews, dates, and figs. Large cacti in the desert also rely on nectar-feeding bats for pollination. Fruit-eating bats are important pollinators and seed dispersers in tropical rainforests. (Source: http://www.hsus.org/wildlife/a_closer_look_at_wildlife/bats/bat_facts.html).

Muskellunge:
-Muskies, like many other fish, can contain mercury, dioxins, and PCBs in their fatty tissues. These chemicals enter the air and water through the combustion of fossil fuels, where they are taken up in the food chain. The toxins are most prevalent in carnivorous fish species, such as the musky. Consumption of muskies should be limited to avoid the accumulation of toxins. (Source: http://www.seagrant.wisc.edu/greatlakesfish/fmusky.html).
-Fun fact: Due to their unwillingness to give up a fight, it can often take an angler over 100 hours to catch a legal musky. The fish have been known to break rods, manipulate hooks and lures, and thrash around in order to escape. (Source: WDNR factsheet).

Did you know???
-The New Year's Eve ball in Times Square will have 9,576 LED light bulbs this year, making it twice as bright as last year, but only using half the energy! (Source: *Sierra Magazine* Jan/Feb 2008).

Have a spectacular and happy New Year everyone!!

Sustainability Newsletter Week 21: Jan. 7-11, 2008.

Topic: Carbon Footprints and Carbon Offsetting

Carbon Footprint:
-Measured in units of carbon dioxide, a carbon footprint measures the impacts of human activity on the planet's environment in terms of the amount of greenhouse gases produced.
-One can calculate their carbon footprint on such sites as:
http://www.carbonfootprint.com/ .

Carbon Offsetting:
-Most everyday activities produce carbon emissions--whether it is driving a car, buying a packaged product, using a computer, or eating a meal from far away.
-Carbon offsetting is a way to compensate for these carbon emissions with an equal carbon savings.

How Does Carbon Offsetting Work?:
-One should first calculate their carbon footprint. This will tell how much carbon their activities generate on a daily basis, annually, or on an activity basis.
-Next, one can purchase carbon offset credits from an emissions reduction project. It doesn't matter if the reductions are carried out in the U.S. or in Asia, the total global carbon offset is the target.

How is Carbon Offset?
-There are two kinds of carbon offsets, certified carbon credits and voluntary carbon credits.
-Certified carbon credits: Also called emissions trading, these are derived from international climate exchanges and are traceable. There is usually an emissions cap in which companies and industries cannot emit more carbon or emissions than the cap level. Each company or industry can then sell or buy allowances compliant with the cap. More polluting companies can buy emissions allowances from less polluting companies to make up for their higher carbon emissions.
-Voluntary carbon credits: These usually involve the planting of trees or an investment in renewable energy. Because trees breathe in carbon dioxide and exhale oxygen, they can sequester, or store, carbon emissions in their tissues. Trees also provide habitat for wildlife and add biodiversity. Investments in clean energy (usually wind, solar, or landfill gas collection) help increase the production of renewable fuels, making the world less dependent on the burning of fossil fuels, and thus the production of CO_2 (Source: http://www.carbonfootprint.com/carbonoffset.html).
-For more information on emissions trading, go to: http://www.epa.gov/airmarkets/ .

What can you do???
-Calculate your carbon footprint at one of the sites listed below. As an example, my carbon footprint is 8.449 tons of CO_2 emitted per year. This is based on my household, driving, energy use, and airplane travel. In comparison, the average American emits about 20.1 tons of CO_2 per year.
(http://www.whatsmycarbonfootprint.com/calculate.htm ;
http://www.carbonfootprint.com/).

-Purchase carbon offset credits from third-party verified sites such as: www.carbonfund.org, www.carbonfootprint.com, www.earthlab.com, www.terrapass.org . As an example, to offset my recent flight from Minnneapolis, MN to Tampa, FL and back, I could pay $9.28 for an investment in renewable energy, or $14.37 to plant a tree in Kenya to offset the roughly 0.60 tons of CO_2 I emitted.
-As stated in many of my newsletters, do all you can to reduce your consumption of energy—drive less, use less heat/cooling, replace incandescent bulbs with CFLs, consume local foods, etc. Any little bit will reduce your carbon footprint. It has been estimated that if everyone in the world lived as the typical American, we would need 5 Earths to support us! (Source: http://www.commondreams.org/headlines06/1024-04.htm).

Did you know???
-About 0.75 tons of carbon dioxide were emitted just to transport your box of clementines from Spain to Milwaukee, plus the added emissions from the truck to get it to La Crosse!

Thanks to Cathy Van Maren for the topic idea!

Have a wondrous weekend everyone!!

Sustainability Newsletter Week 22: Jan. 14-18, 2008.

Topic: Sustainable Practices in Local Businesses and Companies

Trane:
-Joined the Clinton Climate Initiative team of business partners in a commitment to reduce greenhouse gas emissions among 40 of the world's largest cities. In 2005, Trane's toxic release inventory (TRI) emissions decreased by about 21% over 2004's, from 210.84 tons to 166.25 tons.
(Source: http://www.trane.com/Corporate/Citizenship/Environmental/cci.asp).

United Postal Service (UPS):
-Has added 306 new alternative fueled vehicles to its fleet, composed of 167 compressed natural gas (CNG) delivery trucks and 139 propane delivery trucks in North America. Also, the company plans to use biodiesel in its ground support vehicles at the UPS Worldport® air hub in Louisville. Overall, UPS's global alternative fuel fleet has 1,629 vehicles including CNG, liquefied natural gas, propane, electric, and electric hybrid vehicles, making it the largest private fleet in the transportation industry. UPS is also working with the EPA to introduce a hydraulic hybrid delivery vehicle. (Source: http://www.ups.com/pressroom/us/press_releases/press_release/0,1088,4937,00.html).

Starbucks:
-Starbucks encourages customers and employees to use reusable coffee mugs and cups. If a customer brings in their own mug, they receive a $0.10 discount on

their purchase. In 2003 alone, customers used their own mugs 13.5 million times, keeping about 586,800 pounds of paper out of landfills. (Source: http://www.starbucks.com/aboutus/reduction.asp).

Nissan:
-The company has already and is continuing to install miles per gallon (MPG) meters in some of its cars so that drivers are aware of how much gas they are using. Their prediction is that consumers will use about 10% less gas by trying to keep the meter as low as possible. (Source: http://uk.reuters.com/article/lifestyleMolt/idUKT16171120070821).

City Brewery:
-The brewery is looking to partner with Gundersen Lutheran to install a Jenbacher engine to harness and utilize the excess methane they produce (currently, it is just burned off). Heat will be generated for the Brewery and excess energy will be sold back to Xcel Energy. (Source: Presentation by Gundersen Lutheran—City Brewery's website is under construction, so I could not find out other environmental initiatives they may have.)

Target:
-Has made an effort to cut their waste by 70%. Two Target stores in Chicago and one in Michigan have received LEED certification, and they plan to add more buildings. As part of the EPA's voluntary Climate Leaders Program, Target must track and report their annual greenhouse gas emissions. Target also conserves energy in the following ways:

-Energy-efficient fluorescent lamps are used throughout their stores. They are currently changing their sales floor lighting from a three-lamp to a two-lamp fixture, which will reduce energy consumption by 22%.

-Motion-sensor lighting in stockrooms keep areas lit only when needed.

-Energy use for lighting, refrigeration equipment, heating and cooling is carefully monitored to be as efficient as possible.

-When economically feasible, energy is purchased from renewable sources.

-Target is in the process of switching their exterior neon signs to LED, which will increase energy efficiency by 78%.

-Four stores in California draw 20% of their annual electricity needs from their own rooftop solar-panel systems. In 2007, Target will retrofit 14 more California stores to operate on solar power.

-Since the early 1990s, they have used white membranes on store roofs, which reflect the sun's heat, helping to reduce the heat-island effect of the store.

(Source: http://sites.target.com/site/en/corporate/page.jsp?contentId=PRD03-001095).

Dell:
-Has made a commitment to recycle and reuse about 99% of the waste from its manufacturing facilities by 2012 (it has already achieved a 93% reduction), removing PVC and brominated flame retardants from new products by 2009, and becoming carbon neutral in 2008.
(Source: *Sierra Magazine*, Jan./Feb. 2008, pg. 31).

Wal-Mart:
-Has improved fuel efficiency by 25% by installing generators in its fleet trucks so that drivers don't have to keep the engines running in order to produce air conditioning. The company also wants to reduce packaging by 5% by 2013 and make 60,000 suppliers reduce their environmental footprint. To do this, they will use data from suppliers to measure the impact of the whole supply chain, and they will reward more sustainably-minded companies better shelf space and product placement. Wal-Mart will also only sell non-polluting, 3rd-party certified shrimp, and all these shrimp farms will be certified within the next 18 months.
(Source: *Sierra Magazine*, Jan./Feb. 2008, pg. 33).

Have a warm and cozy 3-day weekend everyone!!!

Sustainability Newsletter Week 23: Jan. 21-25, 2008.

Topic: Local Natural Areas

There are a lot of other natural areas that people of all ages can enjoy near La Crosse other than the La Crosse River Marsh…

Upper Mississippi River Wildlife and Fish Refuge:
-Established by an act of Congress in 1924 as a refuge and breeding place for migratory birds, fish, other wildlife, and plants. The area is about 240,000 acres of wooded islands, backwaters, and marshes. The north of the refuge is near Wabasha, MN and the south end is near Rock Island, IL. The public may use the refuge for hunting, fishing, wildlife observation and interpretation, and boating and camping.
Their contact is:
Refuge Manager: Don Hultman
51 East 4th Street, Room 101
Winona, MN 55987
Phone: 507-452-4232

Fax: 507-452-0851
http://www.fws.gov/midwest/uppermississippiriver/

Midway Railroad Prairie State Natural Area:
-Encompasses a total of 3 acres.
-A small dry-mesic sand prairie remnant along the Mississippi River Terrace.
-The area has over 70 species of prairie plants, including the pasque flower.
-Midway Railroad was designated a State Natural Area in 1955 and is owned by the U.S. Fish and Wildlife Service.
http://dnr.wi.gov/org/land/er/sna/sna18.htm

Norskedalen Heritage and Nature Center:

-Norskedalen (meaning the Norwegian valley) is a nature and heritage center dedicated to preserving, interpreting and sharing the natural environment and cultural heritage of the area around southwest Wisconsin. Norskedalen offers exploring the natural beauty, regional history and traditional Norwegian heritage of the region. It is rich in natural beauty and diversity, encompassing about 400 acres of scenic valley along Poplar Creek. While hiking the 5 miles of trails one can encounter an amazingly wide variety of flora and fauna. It costs just $5 for adults, $2 for school-aged children and $12 for families. Operating hours are from May 1 through October 31 we are open every day. From November 1 through April 30th, they are open every day except the 2nd and 4th Saturdays.

-Norskedalen is located on La Crosse County Highway PI, just 3 miles north of Coon Valley, WI. 608.452.3424 N455 O. Ophus Rd, Coon Valley,WI, 54623.

Goose Island Park and Campground:
-Fishing and beautiful sunsets are offered at this prime location.
-Camping sites are available from April 15th to October 30th.
-Located on Hwy. 35, 3 miles South of La Crosse.
-Their website is: http://www.co.la-crosse.wi.us/Departments/Facilities/Documents/CampgrndLocs.htm

Veterans Memorial Park:
-Located on the La Crosse River with access to the La Crosse River State Bike Trail.
-Operates on a first come, first served basis.
-Is located on Hwy. 16, 9 miles East of La Crosse or 1 mile West of West Salem.
-Contact is: 608-786-4011 and http://www.co.la-crosse.wi.us/Departments/Facilities/Documents/CampgrndLocs.htm

Hixon Forest Nature Center:
-A non-profit organization dedicated to increasing public awareness, understanding, enjoyment, and protection of local natural areas. These natural areas include forest, marsh, rare native prairies, bluffs, and rivers - all habitats of incredible numbers of wildlife.

-Located in La Crosse, Wisconsin. La Crosse is nestled between the banks of the beautiful Mississippi River and the scenic 500-foot bluffs. The Nature Center itself is tucked against the bluffs, just off the east side of Highway 16.

-Programs: many educational programs throughout the year. There are programs targeted toward specific age groups and programs for the general public. They also offer summer camps geared towards a variety of ages.

-Contact:

Open Monday - Friday, 9:00-4:00 p.m. and Saturday & Sunday, 1-4 p.m.
Hixon Forest Nature Center
2702 Quarry Road
La Crosse, WI 54601
Phone: (608) 784-0303 fax: (608) 784-0322

Upper Midwest Environmental Service Center:

-Most of their ecological research is conducted in support of Department of the Interior (DOI) issues and lands in the Upper Midwest and they connect their research closely with other U.S. Geological Survey (USGS) science centers.

-The Learning Lab is a research laboratory that is available for an up close learning environment for children of all ages, including live fish, frogs, a salamander, a turtle, and a variety of preserved fish from the Mississippi River.

-The entrance foyer of the west campus of the Upper Midwest Environmental Sciences Center is open to the public Monday through Friday from 8:00 AM to 4:00 PM. A variety of displays have been made for use by visitors of all ages. These include information on invasive species, migratory songbirds, and native freshwater mussels.

-An outdoor classroom has been constructed on the center grounds in a floodplain area of the Black River.

-Their contact is:

http://www.emtc.usgs.gov/
2630 Fanta Reed Road
La Crosse, Wisconsin 54603
Phone: (608) 783-6451

Grandad Bluff:

-Grandad Bluff, which is the tallest bluff in the area, is made of limestone rock.
-Joseph & Irene Hixon, bought the property in 1909 holding it in trust until it was donated as park to the city of La Crosse in 1912. During this time, local citizens, lead by Mrs. G. C. Hixon, raised $15,000 to purchase the property and to help build public roads. Along with this purchase was some property below the bluff which became the nucleus of Hixon Forest.
-The 600-ft high bluff overlooks the city of La Crosse. The view of the Mississippi River Valley includes the three states of Wisconsin, Minnesota and Iowa. It features a shelter house, coin-operated binoculars, and picnic areas.

**NOTE: Bliss Road is temporarily closed for repair. The alternate route from the corner of Main St and Losey Blvd is to continue south on Losey Blvd to Hwy 33. (You will see K-Mart on the left) Turn left onto Hwy 33 and travel about 5 miles. Turn left onto Cty Road F. Follow F to the Alpine Inn. Turn left again onto Grandad Bluff Road and follow it to the end for parking.

Have a snug weekend everyone!!!

Sustainability Newsletter Week 24: Jan. 28-Feb. 1, 2008.

Topic: Natural and Sustainable Materials/Textiles

Organic Cotton:
-Renewable, non-toxic, and biodegradable.
-Traditional cotton production uses tons of pesticides, so going organic is a good choice.
-Labeling of organic cotton matters: "100% organic" means the garment is produced with 100% organically grown cotton, as well as sewn with 100% organic thread. "Organic" means that 95% of the garment is made from organic cotton, and "made with organic cotton" means that 75% of the garment is made with organically produced cotton.
-The downside of organic cotton is that it is somewhat expensive. (Source: REI, http://www.rei.com/aboutrei/ecosensitive_materials.html).

Hemp:
-More durable than cotton, breathable, warm, and absorbent.
-Hemp is a fast-growing, renewable resource that only takes about 100-120 days between planting and harvest.
-Hemp is usually grown without herbicides, pesticides, or fungicides.
-The downside is that it is illegal to grow in the U.S., even though industrial hemp has no illicit uses. (Source: REI, http://www.rei.com/aboutrei/ecosensitive_materials.html).

Bamboo:
-A very fast-growing, renewable resource.
-Bamboo is breathable, absorbent, hypoallergenic, and fast-drying.
-Made from the pulp of the bamboo plant.
-Chemicals are not needed to grow the plant or process the fiber.
-The downsides are that bamboo is expensive to manufacture, and there currently are not many places in the U.S. where bamboo is grown and harvested. (Source: REI, http://www.rei.com/aboutrei/ecosensitive_materials.html).

Recycled Polyethylene Terephthalate (PET):
-It is a thermoplastic polyester.

-Can be reclaimed from used plastic water bottles and made into clothing.
-Using old plastic bottles reduces the need for raw fuel and uses less energy to manufacture than creating all new clothes.
-The downside is possible contamination in manufacturing due to the differing properties of plastic used. (Source: REI, http://www.rei.com/aboutrei/ecosensitive_materials.html).

Polylactic Acid (PLA):
-A biodegradable and recyclable polymer derived from starch-rich resources like corn.
-Comparable, or even of better quality than petroleum-based plastics.
-It biodegrades down to carbon dioxide and water in commercial composting systems.
-The downsides are that it is expensive to produce, depends on commodity prices of fuel and corn (fuel is not part of the material, but needed to produce it), and it can also support the GMO market if the corn has been genetically modified. (Source: REI, http://www.rei.com/aboutrei/ecosensitive_materials.html).

Organic Wool:
-Sheep and goats must be fed organic feed, cannot be given insecticidal treatments or synthetic hormones, no pesticides may be used on the animal's pasture, and the animals must be limited to the carrying capacity of their pasture.
-Organic wool promotes sustainable farming, is biodegradable and renewable.
-The downsides are that organic wool is expensive to produce, and limited quantities are available. (Source: REI, http://www.rei.com/aboutrei/ecosensitive_materials.html).

Soy:
-Often called "vegetable cashmere" because if its softness.
-Biodegradable and renewable.
-The soy pulp used to make textiles is a byproduct of the tofu soy oil production, which would otherwise be discarded.
-The downsides are that soy can support GMOs since some soy has been engineered for pest resistance, and fuel is used in its production.
(Source: http://www.rootedtonature.com/product/article_BenefitsofSoyClothing/SoyClothingFromBeanstoThreads.aspx).

Jute:
-Biodegradable, fast-growing, renewable plant fiber used to make burlap sacks and tote bags.
-Jute plants increase the fertility of the soil and prevent erosion.
-Very few growers use pesticides or chemicals to produce jute.
-Jute has proven to be a good alternative to wood pulp paper.
-The downsides are that carbon dioxide is released when jute is harvested (they store more carbon than trees, comparatively), and sometimes waterways could be contaminated from harvest. (Source: http://www.jute.org/environment_1.htm).

Since much of this information came from REI, it should be noted that some of their clothing is labeled with the ecoSensitive tag to denote the use of some of these materials.

*****If anyone is interested in attending, there are 2 upcoming events to check out:**
-Tonight, Friday, there is a Coulee Progressives event at the Concordia Ballroom from 5-10pm. Local progressive, sustainable groups will be represented (including the City/County) and entry is a small donation of pantry food or money.
-There will be an LECCC (Law Enforcement Center Construction Committee) meeting to determine if the new jail expansion should be LEED certified on Tuesday, Feb. 12 at 4pm in room 3220 of the County Building.***

Have a splendiferous weekend everyone!!!

Sustainability Newsletter Week 25: Feb. 4-8, 2008.

Topic: Greening Your Valentine's Day

What are some gifts you can get your sweetheart that have less of an impact on the Earth???

Flowers:
-Buying organic flowers not only helps the environment, but your honey as well. Traditional roses are grown with tons of chemicals and pesticides, harming both the environment and workers. Once they get to your home, those nasty chemicals are often still on the flowers. Who wants to be touching and smelling that?! Try www.organicbouquet.com, or www.organicboquet.com/tncvday , which will donate 10% of your purchase to The Nature Conservancy. Free Swiss chocolates are also available for a limited time. Also try local farmer's markets for seasonal, local flowers. (Sources: http://www.inhabitat.com/2007/02/14/happy-green-valentines-day/; www.nature.org). Check out this article for more information on the flower industry: http://www.audubonmagazine.org/features0801/organics.html.

Candy:
-Try organic or fair trade varieties of chocolates. The People's Food Co-op offers some different kinds of such chocolates and fudges. (Source: http://www.inhabitat.com/2007/02/14/happy-green-valentines-day/).

Cards:
-Create your own at home with recycled materials such as old cards, construction paper scraps, old one-sided paper, used wrapping paper, etc. To be even more

eco-friendly and ditch paper use entirely, send e-Valentine cards to your friends and family.
(Source: http://www.inhabitat.com/2007/02/14/happy-green-valentines-day/).
-Have fun with the kids by making cards such as the ones listed here: http://www.associatedcontent.com/article/117764/top_five_green_valentines_day_crafts.html. These seem a lot more fun, and better for the planet than those Hannah Montana ones from Wal-Mart…

Jewelry:
-Mining for jewels and ores is a very destructive process for both people and the environment. A few companies are raising the bar on worker safety and environmental stewardship by using recycled materials and practicing good ethics. Check out www.greenkarat.com for eco-friendly jewelry. You can even donate your old and unused jewelry to be recycled. Cred (http://www.credjewellery.com/pages/ourstory) also uses ethical values in producing their jewelry. The company purchases its metals and gemstones from small-scale community mines, which must meet strict environmental and human rights guidelines. (Source: http://www.inhabitat.com/2007/02/14/happy-green-valentines-day/).

Food and Dining:
-Make dinner reservations at a locally owned restaurant, or one that serves seasonal, all natural, and/or organic meals.
-Cook a romantic meal at home. Getting take-out often results in a lot of wasted to-go containers that are not recyclable.
-Take mass transit or walk to a restaurant.
-Buy organic or locally made wines to savor with your special meal. (Source: http://www.greenchoices.utah.gov/green_valentines_day.htm
).

Miscellaneous Gift Ideas:
- www.localharvest.org has many sustainable products for sale that both men and women will love—from foods to books to bath and body products.
-Some eco-friendly undergarments for the ladies (not too risqué!) are available at: http://www.thegreenloop.com/Organic_Cotton_Underwear_Bras_s/88.htm.
-A good site for recycled cards and small gifts is located at: http://www.greatgreengoods.com/category/valentines-day/.

Have a warm-hearted weekend everyone!