

ENVIRONMENTAL SERVICES *Newsletter*

A NEWSLETTER FROM THE DEPARTMENT OF PUBLIC WORKS - ENVIRONMENTAL SERVICES

INSIDE

Eco-Driving: An Everyday Way We Can Reduce Our Oil Dependence

Conserving Our Green Resources At Home

Top 10 EZ Green Tips

Milwaukee's Bicycle Master Plan

Making the City Fleet Green

Invasion of the Emerald Ash Borer

ECO-DRIVING: AN EVERYDAY WAY WE CAN REDUCE OUR OIL DEPENDENCE

Francis X. Vogel Executive Director Wisconsin Clean Cities - Southeast Area



Global warming and oil dependence are on the front burner for good, and for good reason. The U.S. transportation sector is responsible for about 30 percent of the nation's greenhouse gas emissions, and is still almost totally dependent on oil, despite the buzz over alternative fuels. Meanwhile, some 60 percent of our oil comes from foreign sources. What to do? Most alternative fuels – or their infrastructure – are not ready for prime time, and hybrid-electric vehicles cost more than their gas-operated counterparts.

There is something we can all do, whether we drive the latest advanced-technology vehicle or a junkyard-bound hooptie. It's called eco-driving,

continued on page 4

Department of Public Works Environmental Services Communications Committee Members

- Preston Cole
- David Sivyer
- Wanda Booker
- Cecilia Gilbert
- Ronald Melanz
- Shannon Davis
- Tamara Schneider
- Marvece Sandles
- Jeffrey Kluslow
- Najjar Abdullah



Contact Information: (414) 286-CITY (2489)

Room 619 Zeidler Municipal Building • 841 N. Broadway • Milwaukee, WI 53202



1. Lower your thermostats. Heat your house to 68°F in winter and cool it to 75°F in summer. On the water heater, try 120°F.
2. Buy compact fluorescent light bulbs and look for the Energy Star label on home appliances and products. You'll find more on energy-efficient products and practices at Energy Star.
3. Recycle your newspapers, aluminum and plastics. Take batteries to a recycling center. Recycle your technology. Many computer manufacturers offer recycling programs.
4. Turn off lights and electronics when you leave the room. Unplug your cell phone charger from the wall when not using it. Turn off energy strips and surge protectors when not in use (especially overnight).
5. Go paperless at home and at work. Consider reading your newspaper and magazine subscriptions online. Switch to electronic banking and credit card payment, too. Distribute company information and post company material online.
6. If you use plastic grocery bags, recycle them for doggie poop bags or for small trash can liners. Better yet, bring your own bags to the grocery store.
7. Reuse. Plastic food containers make good crayon and marker holders. Use padded envelopes more than once. Buy your clothes from a thrift shop and give away those that don't fit to friends. Goodwill or the Salvation Army can help.
8. Get off junk mail lists. GreenDimes can get you started. They'll even plant a tree for you! For no fee, the EcoLogical Mail Coalition will eliminate the junk that former employees receive at work.
9. Car pool. Connect with other commuters at eRideShare. Buy a fuel-efficient car or a hybrid.
10. Get a baseline on your current carbon footprint using the reliable online calculators at either safeclimate.net or lowimpactliving.com. Set a goal to reduce your impact over the next year. 10 percent is a good start. The Conservation Fund's Carbon Zero Calculator can measure and then offset your carbon dioxide emissions by planting trees.

For more information, <http://www.divinecaroline.com/article/22355/28177-50-green-tips-earth-day>.



CONSERVING OUR GREEN RESOURCES AT HOME

We all recycle our bottles, cans and newspapers at home (it's the law, you know). The next step to having a "green house" is home composting. Green conservation can be taken further by composting at home.

Home composting of kitchen scraps will further reduce waste and provide an excellent soil amendment for your lawn and garden. Home composting can be as simple as a loose pile of grass and leaves to a multi-bin system where materials are moved from station to station to accelerate the composting process. (City ordinances prescribe a solid bin smaller than 5' tall with a hood that will allow the ventilation of gasses but inhibit the entrance of rodents and other pests. Bins cannot be placed in front yards or within 20' of any habitable structure.)

Here are some guidelines to remember for home-composting;

- Turn or turn or vent the pile frequently to provide for aeration, (compost that goes "anaerobic" from lack of oxygen will produce foul odors)
- Add just enough moisture to make the compost damp
- Chop wood trimmings to under ½" diameter
- Mix equal parts of "greens" (grass clippings flower stalks or weeds) and "browns" (fall leaves, dead plants or brush.)
- Bury food scraps in the middle of the pile to make them less accessible to vermin
- Do not place oil, grease, dairy or meat in a compost pile.

If these rules are followed, good compost will be ready for your garden within 2 to 4 months and the taxpayer cost of landfilling these materials will be saved. (And you won't have to buy your "turfbuilder" back from the company that took the leaves from the city in the first place.)

Michael Englebart

Eco-Driving (continued from page 1)

a relaxed driving style that improves fuel efficiency and reduces emissions. Easy acceleration, observing the speed limit, smooth braking, trip planning (or “tripchaining”) and tire pressure monitoring are prime examples of actions that, taken together, constitute eco-driving. Widely-practiced in western Europe and Canada, eco-driving remains novel in the United States.

A current project initiated by the Wisconsin Department of Natural Resources (DNR), Fleet Training on Eco-Driving, is looking to change all that. The project, a two-year driver education initiative, is a partnership with Wisconsin Clean Cities – Southeast Area, a Milwaukee-based nonprofit organization. Wisconsin Clean Cities contracted with Wisconsin DNR to create and implement a fleet training course on eco-driving in southeastern Wisconsin.

Aided by Milwaukee Area Technical College (MATC), Wisconsin Clean Cities developed and is delivering the training to two local fleets. The City of Milwaukee Department of Public Works was selected as the first fleet to receive classroom instruction, behind-the-wheel training, pre- and post-testing and a Fleet Training Manual for ongoing use. Benefits will likely include:

- Fuel savings: The Department of Energy’s www.fueleconomy.gov site notes that aggressive driving (e.g., speeding, rapid acceleration and braking) reduces fuel economy 33 percent on the highway and 5 percent around town. These 5 – 33 percent savings are significant. Oil, gasoline and diesel prices could again return to an all-time high.
- Lower maintenance and repair costs
- Safety: the incidence and severity of on-the-road accidents tend to decline. Enhanced safety is related to lower death, injury and insurance premium rates.

Preliminary project results are encouraging, with a final behind-the-wheel test slated for May. In the interim, eco-driving is an everyday solution for everyone to cut fuel costs and improve air quality. Forget Sammy Hagar. You can drive 55 on the highway and otherwise modify your behavior, for your own good and for the planet.

EDITORIAL

Along the Potomac River, there has been discovered a native dumpsite that consists of over 30 acres of oyster shells, averaging ten feet deep. Even in the early years of mankind, dumpsites have been maintained to dispose of humanity’s unwanted.

We Americans are the top of the trash heap, so to speak, producing over 1600 pounds per person per year. As developing nations become more sophisticated consumers, their trash output will also increase. In twenty years the Chinese will likely triple their per person refuse output.

Modern times have produced many things that are difficult to dispose of properly. The unknowing consumer may simply throw items containing heavy metals, hazardous chemicals and toxic compounds into their garbage. These items end up in landfills, little time bombs ticking away. Even the simple foodstuff rubbish is hazardous, creating one of more potent greenhouse gases, methane, as it decomposes.

All is not lost. There are entrepreneurs pursuing plans to turn trash into electricity, fertilizer and/or fuel. Recycling is becoming more commonly accepted (it’s the law in Wisconsin). Green-niks dream of a world where nothing is wasted.

At the core of this disposal proposal should be government, at all levels, from national to local. Policies are all over the road, with no consistency. Believe it or not, landfills have more stringent rules than toxic dumpsites.

Reducing refuse per capita has several proponents, with ideas ranging from collection rates based on household and business output to requiring manufacturers to take back and recycle their old products.

All this will come with a cost. Voters say they are worried about the ecosystem but the consumer in them hates to pay for trash disposal. The days of just throwing your oyster shells into a pit are gone.

Ron Melanz





In 2002, an exotic insect was found destroying ash trees in Michigan. The culprit was Emerald Ash Borer (EAB). The insect, which is indigenous to eastern Russia, northern China, Japan and Korea, arrived in the United States on infested wood packaging crates in the mid 1990's.

Since the initial discovery in Michigan, EAB has spread to 10 states and two Canadian provinces. An estimated 40 million ash trees have been killed by EAB in the U.S. The insect typically moves about a half mile a year naturally. However, researchers have found isolated pockets of EAB due to the movement of infested firewood, nursery stock and other wood products. This puts the entire Midwest ash population at risk.

The City of Milwaukee is working to proactively protect and manage the 36,000 ash trees lining municipal streets. The larva feed underneath the bark disrupting the vascular (plumbing) system of the tree. After a couple years, the tree cannot transport water and nutrients effectively, ultimately resulting in death.

This spring Forestry will begin chemical injection of half the ash street trees. This procedure distributes *Tree-age* (*Emamectin benzoate*) throughout the tree. This is a chemical that is fatal to EAB when ingested. Tree-age remains in the tree for about 2 years, so every year half the ash population will be treated.

Our goal is to preserve the street tree canopy and its associated benefits by slowing the tide of destruction by the insect. The tree injections will provide the City time to diversify the street tree population by replacing infested and/or declining ash with different species over a period of many years.

For further info check out <http://www.emeraldashborer.info>

Jeff Kluslow

MAKING THE CITY FLEET A GREEN FLEET

For many years, Fleet Services has been involved in many activities and have policies that are directed to reducing petroleum consumption and minimizing waste and emissions. Additionally, they are involved in a large recycling project. It is the recycling of municipal waste products. Below are some of the programs in use:

Tires - Recapped 885 tires – 2007 - 65.3 tons of tires recycled – 2007
 Nitrogen filled tires (pilot program) - Tires run cooler and hold pressure longer
 Batteries - 624 used batteries recycled by vendor (Batteries contain Lead)
 Oil Coolant/Filters (new program) Filter crushing machine – November 2008
 Vehicle Wash Chemicals - 30% Biodegradable Chemicals (increase to 60% in 2009)
 Salvage Old Catalytic Converters (program just initiated) - To recycle platinum and palladium
 Used Oil - Sold to recycle vendor - Portion of used oil is used on site for boiler as supplement heat
 Reduce Frequency of Oil Changes – 2009 - Increase use of synthetic oil - Oil testing of regular oil to reduce oil changes
 On Site Oil Changes - No Shuttling vehicles to other locations

Below are suggestions for reducing petroleum consumption (think money) and minimizing waste and emissions. They apply to both city vehicles as well as personal vehicles:

- **DRIVE GENTLY:** Avoid sudden acceleration and jerky stop-and-go. Anticipate the traffic patterns ahead of you and adjust your speed gradually and well in advance. Observe speed limits.
- **LIMIT IDLE TIME:** Shut off the engine while waiting or working in the field. A large truck uses a half-gallon of fuel for each hour of idling, and adds 40 miles of engine wear and tear to the engine.
- **PLAN TRIPS:** Look at your schedule and activities and try to consolidate your daily trips. Some trips may be unnecessary. Plan your work to accomplish your task without multiple trips for tools and supplies.
- **ENGINE PERFORMANCE:** A well maintained engine operates more efficiently and will get better fuel mileage. Check your oil and fluids daily. Bring in your vehicle for regular service when due, or when it is running poorly.
- **CARGO:** Daily remove debris and excess items from the vehicle that add weight such as unnecessary tools and equipment. Less weight means better fuel economy. In a pickup truck, 200 pounds of excess weight reduces fuel economy by 1 MPG.
- **TIRE PRESSURE:** Drivers should make sure their vehicle tires are properly inflated. Tires under-inflated by 4-5 psi will increase fuel consumption by at least 10%.
- **WARM-UPS:** Today's modern vehicles are designed to warm up much quicker. Forget about those long warm-ups in the morning unless you're driving a large diesel vehicle and even then three minutes will suffice.

For more in-depth information, see the Fleet reports and other documents on the DPW site. <http://www.mpw.net/fleetproceduremanuals/>

Michael O'Donnell, Quality Assurance Coordinator, Fleet Services

Milwaukee's Bicycle Master Plan



Recent investments in improved infrastructure for cyclists are paying dividends in more people cycling to work and riding for recreation. This information was discovered as part of the process of updating the City of Milwaukee's Bicycle Master Plan. The growth in Milwaukee occurred after the City added 30 additional miles of striped bike lanes in 2005.

According to an analysis of the US Census data, our citizens cycling to work increased by 15% in 2006 and 29% in 2007 compared to only 6% annual increases nationally. Furthermore, a 2008 random phone survey conducted by UW-M found 49% of Milwaukeeans ride bicycles for recreation compared to 43% nationally. Even though more people are riding bikes, the number of crashes involving cyclists has decreased.

Using a transportation grant, DPW is working with the Bicycle Federation to update the 1993 Bicycle Master Plan to include modern traffic engineering standards and current traffic demands.

The City's goal is to adopt and adapt ways to increase cycling and improve safety. The new plan is scheduled to be finished by the end of this year. For more information or to provide input on the new bike plan, check out the planning page at www.milwaukeebybike.org.

Dave Schlabowske, Bicycle and Pedestrian Coordinator

GRASSCYCLING

How many of you are still raking your lawn and tossing out the clippings? In this day of mulching mowers I doubt if many of us are still bagging. It's a wasted effort that robs your lawn of mulch containing valuable nutrients and takes away an insulating layer against moisture evaporation. Instead we are now "Grass-cycling", simply leaving clippings on the lawn after mowing. We do need to mow more often, (every 5 to 7 days during peak growing season) and make sure we have a sharp blade. A mulching mower is not entirely necessary. A side discharge mower used by circling from the perimeter to the center of the lawn will continuously cut the clippings into a fine mulch that easily decomposes. Grasscycling can replace 20% of the annual fertilizer need of your lawn and help make turf tougher and more resistant to common turf diseases.



Fall mulching of leaves and garden debris and subsequently placing this on your lawn or garden will reduce what the city has to collect, saving tax dollars, as well as benefiting your soil. Mulch suppresses the germination of weed seeds and makes weeds easier to pull, helps roots stay cool in summer while protecting the plant crowns from winter cold. It also prevents soil compaction and erosion and adds nutrients to the soil as the organic materials decompose.



The boys at the Forestry Shop try out the new push-mower, a compact Russian model called the OMIGOD.



Got a question, comment, or suggestion? Let us know about it.
Email us at ESfeedback@dpw.net

Contact Information: **(414) 286-CITY (2489)**

Room 619 Zeidler Municipal Building • 841 N. Broadway • Milwaukee, WI 53202