A GREEN LIGHT FOR TRANSPORTATION

Perhaps you’ve been in a mountain storm at night; the next morning, you notice the sky is somewhat clearer. The smog has cleared and the air pollution from cities is now in the ground. It is not just what comes out of a tailpipe that pollutes. Rubber wear, brake wear, and other parts produce harmful emissions. NC State has innovations up in the future, but officials are taking steps for more immediate solutions. The transportation department wants everyone to know the options alone carry about 14,000 people a day. By using public transit, cleaner diesel engines, and brake wear, we are already reducing emissions and meeting the 2007 EPA standards. Current options make it easy to meet new standards. The transportation department provides the U-pass, which allows NC State students and staff to ride any Raleigh transports. Carpool programs exist as well. Each of these options benefit both the environment and the users.

New programs promise to make traveling even easier. Online carpool programs are in progress. The bus routes are becoming more effective, and a reverse shuttle will soon make campus travel faster. New routes are also being worked to take people around the triangle. One new exciting program is the zip-car or flex-car program that provides rental cars for needy students. Officials, engineers, and researchers all aim at cleaner methods.

As students we can help, by knowing the options. Try to walk, bike, or ride the bus. Transportation has started bicycle awareness programs with new traffic signs on campus and provides a campus walking map. For long distance travel, don’t forget the Amtrak. By changing our attitude toward transportation, we can help the environment. For more information, visit the transportation department’s website, www.ncsu.edu/transportation.

--ANDREW LYDA, Information Team

Eco-Friend... or Eco-Foe?

Greener vehicles meet their enemies head-on in annual ratings by the Environmental Protection Agency on impact on air pollution, greenhouse gases, and amount of fuel use.

- Last year, 30 vehicles made the list, and 8 are gas-electric hybrids.
- The only SUVs that made the list were Forc Hybrid, Lexus RX 400h, Mercury Mariner Hybrid, and Toyota Highlander Hybrid. No pickup trucks or minivans were considered environmentally friendly.
- Only two vehicles that J.D. Power considers luxury models made the list—the Lexus RX 400h and Acura RSX.
- Among automakers, Ford, Honda, and Toyota had the most environmentally friendly on the list.

--KRISTIN ZELLMER, Information Team

Trees Just got a little Greener

New York’s famous Rockefeller Center Christmas tree has just gotten greener. Although cutting down a fully mature Norway Spruce each year, stringing it with 5 miles of lights, and lighting it up for a month and a half isn’t the most eco-friendly activity, Rockefeller Center making efforts to be more environmentally conscious. This year the tree will be lit with 30,000 energy efficient light emitting diodes, saving enough electricity to power a 2000 square foot home for a month. These efficient bulbs will be powered in part by Rockefeller Center’s 365 solar panels. This conglomeration of solar panels, the largest installation in New York City, is capable of generating 70 kilowatts. In addition to making the Christmas tree a bit greener, Rockefeller Center also has a green roof and an ice chiller plant in progress to go green.


Chevrolet Volt by 2010?

The General Motors Corporation an electric car, the Chevrolet Volt, by the end of 2010. The Volt is going to be a plug-in hybrid, designed for short trips powered entirely by an electric motor with rechargeable battery. There will still be an on-board gasoline engine as a backup for when the car must go beyond 40 miles. The biggest challenge facing makers of electric cars, and the reason for the short travel distance, is the limited power storage capacity and cost of lithium-ion batteries. Scientists at GM are already researching new battery technology, but still have room for more investment. And the reason GM has finally decided to think greener? According to GM’s Bob Lutz, the iconic brand of Toyota is the Prius, but for GM, the iconic brand is the Hummer. Lutz believes that perception needs to change.

http://www.reuters.com/article/environmentNews/idUSPAR14983920071122

--MIKE WARREN, Information Team

Helping the Environment

1. Walk or bicycle, if possible, instead of driving Carpool as much as possible
2. Use mass transit
3. Drive sensibly, combine errands
4. When driving long distances, use cruise control
5. Average savings: 7% (highest 14%)
6. Go the speed limit or drive 5mph, the most fuel efficient speed Average savings: 12% (highest: 14%)
7. Keep your vehicle maintained with proper fluids and tire pressure
8. Do not idle your vehicle
9. Use the override feature if available

--GABBY FLANARY, Information Team

Transportation Links and Resources

NC State Transportation 
NCSU Transportation Trails.com
Carolina Tarwheels
TriangleMTB

Matthew Peterson, Information Team
**Environmental Concerns**

We all have toughed out the gas prices and our fuel economy hasn't made anyone feel better. The technology for cleaner cars has been over a decade now and U.S. automakers still are far behind world automakers. The question is soon becoming one of whether we and our environment can afford this ignorance.

The last time carmakers were forced to change was in the 1970s. Since then, the fuel economy of cars has barely changed and our cars continue to gulp down gas. The rest of the world has kept up, but U.S. automakers have been the last ones to act. Our cars are now, on average, the dirtiest cars in the world. Other countries have adopted new standards for emissions, which has actually caused some U.S. car models to be banned from entry in their country. Our failure to adopt new standards and new engines has left us with dirty cars and dirty car companies.

Some car companies have actually come up with engines that emit nearly no emissions. Called Partial Zero Emissions Vehicles (PZEV), they can emit fewer emissions in 2,000 miles than your mower does after cutting the lawn. Unfortunately, these cars are illegal in North Carolina. Under terms of the Clean Air Act, dealers and automakers can be fined for selling PZEVs outside of designated states such as California, New York, and a couple others. In these states, citizens can buy an extra clean car from Toyota, Honda, Subaru, Ford, GM, VW, and Volvo for a mere extra $100. The only downfall is that fuel economy is not improved--only the emissions—but for the environment that is all that matters, and it is illegal for us to help the environment here.

As it always turns out, money drives all of this. With all the policies and tax breaks in place, automakers are provided ways to make money and still meet standards. One way is to produce a flex-fuel car; it brings up the fleet average. The assumption is that drivers will go and use E85, but there are not used that way for it, and about 99 percent of people end up using gasoline only. The 1988 Alternative Motor Fuels Act gives extra credit for these flex-fuel cars, even though they are not used that way either. Automakers love it because it is cheaper. Flex-fuel cars are only about fifty dollars extra, where a more efficient car costs much more. If companies still don't meet standards they simply go out and buy credits from new start ups. New companies that have brought out more efficient means of transportation build up credit. The only way they make their cars affordable to the public is because large companies are subsidizing them by buying those credits. To rise above all of this we need research and even this is being bogged down. New standards are being set for energy creation but due to politics and such, your funding can be stopped if your solution isn’t profitable enough or aligned with the right people.

Capitalist America has grown wealthy and lazy. No longer are we the innovators of the environment and the innovation has taken a side seat too. What’s scary is car companies are not the only ones. Airlines have quietly been creating clouds of emissions. Only recently have some come under fire for empty flights racing over our Oceans because of bad scheduling. Maybe if we yell loud enough and stand behind our dollars, these fines will start recommending a change like we saw in the 70s.

—ANDREW LYDA, Information Team

**Mission: Conservation**

The Sea Otter

*Enhydra lutris*

Off the western coast of the United States, afloat in the choppy, icy waters of the Pacific Ocean, swims the sea otter. This cuddly predator sports exceptionally thick fur to survive the freezing cold of the Pacific, rather than a thick outer layer of fat beneath the skin. The sea otter is considered a “keystone” species, as it preys upon multiple species of marine invertebrates, thus keeping those populations in balance to prevent ecological disaster. These otters possess relatively large lungs that allow them to stay underwater for longer periods of time than river-dwelling otters.

The sea otter historically has always been under threatening circumstances; due to its luxuriously thick fur, it has been hunted for centuries. More recently, the threat of oil spills has also been a major contributor to the loss of otter habitat and population. Though the hunting of sea otters has been forbidden by international law for decades, the population was reduced so much that recovery of a more stable population would take a great amount of time. Coupled with historical destruction of otter populations, any modern threat should still be given attention and avoided at all costs. Without the maintenance of the sea otter population, coastal areas once known for these creatures could suffer irreparable damage to the entire marine ecosystem associated with these sea otters.

—MATT PETERSON, Information Team Co-Leader

**Leaflet – Alternative Transportation – Volume 1, Issue 2 – Saturday, December 1st, 2007**

**Green-It-Yourself projects**

**PROJECT:** recycled magazine box

**COST:** cheap

**TIME:** 1 hour

**SUPPLIES:**
- glue, scissors, unwanted magazines

1) Take a page from an old magazine and start folding the page at about a quarter inch thickness until it has a little bit to it. (You may not want to use the whole page—it gets pretty thick.)

2) Glue the edge and cut off the remaining page. You now have your first strip. Roll it into a circle like you are making the base of a coil pot.

3) Continue making strips and rolling them until you reach the desired size for your box. (You may want to now dip them so the glue can dry without unravelling.)

4) Roll a strip that is about an inch thick (or whatever works best for your box). Glue it to your roll. You’ll now have what looks like a lid. To give your lid more support, make thinner strips and glue them to the outside of the thicker strip.

5) Make another roll for the bottom. Be sure to make it slightly smaller so the lid will fit on the bottom. Don’t put the thinner strips all the way to the top so it creates a ledge for the lid to rest on. WHY?: Use as a storage box for jewelry or other items, give as a gift, or just for a fun craft project.

**FOR HELP:** View the step-by-step picture tutorial at flikk.com or try making elegant gift boxes made out of cereal boxes at eco-artware.com

—CATHERINE FROCK, Information Team
Power Shift, the first annual youth climate change summit, was held November 2-5 in College Park, Maryland. 5,500 students from all over the country came together for this social and economic movement to address global warming and climate change through this clean energy revolution. Over the course of four days, students took advantage of panels full of distinguished leaders, workshops packed with critical skill development, visionary keynote speakers, and a career fair packed with hundreds of environmental job opportunities. Perhaps the most valuable experience was being able to communicate ideas with the nation’s most passionate students on how to confront climate change and how to promote environmental sustainability on campuses across the country. “The Role of Campuses in the Climate Movement” and “How to Get Average Students to Care About Global Warming” are just a couple of over 100 workshops that were offered during this energetic, proactive weekend near the nation’s capital. The Year of Energy is looking promising for NC State; as WESA members walked away from this experience ready to engage students all over campus in finding clean energy solutions while creating a sustainable campus for generations of Wolfpack to come.

--KELLY PEELE, Finance Co-Team Leader

November 2nd-5th POWER SHIFT 2007
College Park, Maryland

WESA’s Pawprints...
This semester’s awards and activities to remember:
- Won $1000 at the Keen Sustainability Fair.
- Sent delegates to Power Shift.
- Raised $1200 for the Lifestraw Project, and are sponsoring a village in the Congo.
- Created the NCSU “Contract with the Environment”.
- Held a campus-wide bike scavenger hunt, a race which involved knowledge of the campus coupled with the deciphering of clues. Prize was a free bike tune-up.
- Gained over 200 members into its ranks.
- WESA’s Information Team launched a monthly newsletter, The Leaflet.
- Placed representatives into other organizations, such as CEST, Agrilife Council, Generating Resident Environmental Education Now, College of Natural Resources Council, and the Learning and Living Village.
- Painted the Free Expression Tunnel.
- Supported the $10 NC State Sustainability Fee.
- Participated in Cates Crawl and the Pre-Convocation Organization Fair.

Upcoming Events....

December 19 - Deadline for Fellowships for Undergraduate Environmental Study

December 31 - Deadline for KEEN contest entries

January 15 - The Year of Energy kickoff with the opening of the photovoltaic system

January 31 - Focus the Nation national symposia

April 21-25 - NCSU and WESA celebrate Earth Day with a whole week of environmental activities out on the Brickyard.

For details about these events, see the WESA calendar.

--KELLY PEELE, Finance Co-Team Leader