



# The Ecology Action Center News

Fall 2008

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**9 a.m. to 5 p.m.**  
**Monday—Friday**

## America Recycles Day—November 15

-DeAnna Belz

November 15 is **National America Recycles Day**. First celebrated in Austin, TX in 1997, this is the only nationally recognized day dedicated to encouraging Americans to recycle and to buy recycled content products. Since 1994, the Ecology Action Center has actively pursued educating our local citizens about the benefits of recycling. From reducing trash and saving natural resources and energy to reducing pollution and greenhouse gas emissions, we strive to inspire people to make recycling an important part of their daily routines.

This year, the Ecology Action Center in conjunction with the Children's Discovery Museum will again host a day of celebration. We will unveil the winners of our annual calendar art contest during a special lunchtime presentation at museum and have copies of the calendar available for distribution. Special games and activities are planned from 10 am – 2 pm. Lunch will be included in the price of admission.

America Recycles day is also a good time to evaluate your own household's garbage output. Hopefully you and your family recycle, but is there more that you could be diverting from the land-fill? Have you been thinking about trying composting but just haven't got up the courage? Are you filling up your recycling bin but looking to do a little more? Looking to find a home for some items you no longer need? From getting started with composting (or even vermicomposting!) to *Freecycle* to hard-to-recycle items, we may be able to help you out. Give us a call or consult our website for ideas and information.

Remember, "*local action makes a world of difference!*"  
Hope to see you at America Recycle's Day!

## Household Hazardous Waste Update

-Michael Brown

We have just recently been notified by the Illinois EPA that McLean County was not selected as a site for a Household Hazardous Waste Collection event for this year. The fact that we have been fortunate enough to have a collection event the past three years in a row likely worked against us this time around. We will continue to try for a spring event for McLean County. If you wish to receive an email notification of the next event when it is scheduled, simply send an email to [eac-hhw-request@ecologyactioncenter.org](mailto:eac-hhw-request@ecologyactioncenter.org) with "subscribe" in the subject line.



Meanwhile, you can also consider attending a HHW collection event in another nearby county. The closest event the IEPA has scheduled this fall will be in Vermillion County on November 8. For more details, see the IEPA website at: <http://www.epa.state.il.us/land/hazardous-waste/household-haz-waste/hhwc-schedule.html>.

Finally, keep in mind that some items might actually be recyclable locally. Specifically, items like Compact Fluorescent Lamps (CFLs), latex paints, electronics (now including CDs, DVDs, VHS tapes), household batteries, motor oil and antifreeze, and pharmaceuticals all can be recycled or disposed of at local drop-offs. For more information, check out the EAC website or give us a call.

### Zip Code Update

Has your zip code changed with the addition of the new zip code in Bloomington? If so, please give us a call or send us an email to update your mailing address so you will continue to receive your quarterly EAC newsletter. Thanks!

### Members Night Open House at the EAC

Come see what the Ecology Action Center is all about! On **Wednesday, October 8** from **5pm to 8pm** is our annual open house. EAC staff and volunteers will be on hand to give you insight into our operations. The open house will feature kids activities, energy bike demonstrations, presentations on our program areas, and free refreshments. The Open House Event is open to all members and prospective members—bring your friends and neighbors!



# Fall at the EAC

## Global Warming and Climate Change (Part 1)

By EAC intern Betsy Ludwig

### EAC Staff

- Michael Brown  
Executive Director
- DeAnna Belz  
Assistant Director
- Michele Bell  
Environmental Educator

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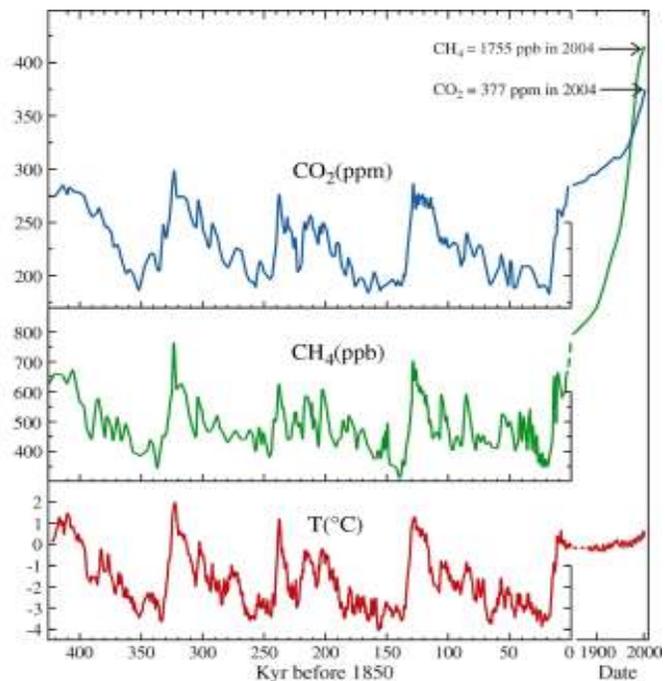
The current global climate situation is becoming dire. The Earth's temperature has experienced "rapid warming of 0.6°C [1.08°F] in the past 30 years."<sup>1</sup> This is the highest level that the global temperature has been at in the last 12,000 years. We are standing on a precipice and will likely go over, unless steps are taken to pull us back from the edge. If nothing is done, though, almost every aspect of life – human, plant, and animal – will be affected. Global freshwater supply, food resources (which along with freshwater supply are already overstretched in many developing regions), human health, industry, human settlement and society, and biodiversity could all be negatively affected as a result of climate change brought on by Global Warming.

Global Warming, essentially, is the rising of the Earth's temperature as a result of the trapping of greenhouse gases (water vapor, methane, carbon dioxide, nitrous oxide, ozone, chlorofluorocarbons) in the Earth's atmosphere. This is largely due to the increased production of greenhouse gases through the use of fossil fuels. These gases are being released into the Earth's atmosphere at a higher rate than the Earth can manage. The effects of Global Warming exacerbate the situation further through forcings and feedbacks.<sup>2</sup> Forcings and feedbacks are effects of climate change, such as the melting of snow cover and glaciers, which then worsen the conflict, such as uncovering dark land masses that absorb heat that was once reflected, further increasing the Earth's temperature. The mounting conflict is that a slight increase in the Earth's temperature due to Global Warming leads to changes in the Earth's climate which in turn further increases the Earth's temperature.

Current levels of carbon dioxide are becoming alarmingly high and must be lowered immediately. Carbon dioxide is released into the atmosphere through many different avenues. It can be released by natural processes (e.g. volcanic activity, respiration of humans and plants, decay of organic material, etc.) as well as through the burning of fossil fuels, deforestation, forest fires, etc.<sup>3</sup> Once it is released, carbon dioxide remains in the atmosphere years after it has been released. "One-third of carbon dioxide emissions remain in the atmosphere after 100 years and one-fourth remain after 500 years."<sup>4</sup> This means that carbon dioxide emissions from the Industrial Revolution are still in the atmosphere and countries currently industrializing are compounding the problem by adding more. The assumed highest level of carbon dioxide the Earth can manage is 450 parts/million (ppm)<sup>5</sup>. The preindustrial level of carbon dioxide was 280 ppm – the current level is 383 ppm, and that number is increasing by about 2 ppm/year.<sup>6</sup>

CO<sub>2</sub>, CH<sub>4</sub> and estimated global temperature (Antarctic ΔT/2 in ice core era)  
0 = 1880-1899 mean.

Source: Hansen, *Climate Change*, #8, 269, 2005.



Continued on page 3



# Climate change...what can we do about it?

*The U.S. is the number one producer of carbon dioxide emissions, producing 5,956.98 million metric tons in 2005 which was 27.8% of the global total of fossil fuel carbon dioxide emissions for that year.*

*For further reading on climate change check out the work of Dr. James Hansen, Director of the NASA Goddard Institute for Space Studies and adjunct professor in the Department of Earth and Environmental Sciences at Columbia University. Many interesting materials can be found at his website:  
<http://www.columbia.edu/~jeh1/>*

## *Climate Change and Global Warming (Part 1) continued...*

Industrialized countries created the current conflict and compound the conflict by adding more emissions in addition to countries that are currently industrializing. The United States is the number one consumer of petroleum and natural gas and is the second consumer of coal.<sup>8</sup> We are also the number one producer of carbon dioxide emissions, producing 5,956.98 million metric tons in 2005<sup>9</sup> which is 27.8% of the global total of fossil fuel carbon dioxide emissions.<sup>10</sup> The United States has refused to sign on to any treaty, such as the Kyoto Protocol, limiting its emissions. In contrast to this, the U.S. Supreme Court ruled in April of 2007 that "greenhouse gases...were air pollutants subject to federal regulation."<sup>11</sup> This ruling could result in the EPA's regulation of automotive carbon dioxide emissions.<sup>12</sup> Although minor steps have been taken to curtail this conflict, the level of carbon dioxide trapped in the atmosphere is increasing daily and shows no signs of reducing any time soon.

Global Warming is affecting the Earth's climate on many different levels. Due to the increased temperature of the Earth, its population as a whole will experience 99% probability of warmer temperatures and a reduction in cold days and nights over most land areas.<sup>13</sup> Snow cover and glaciers have shown dramatic decreases in surface area. From 1980 to 2006, glacial thickness has reduced by 10.5 m w.e. and has shown an average reduction of 869 mm w.e. per year from 2003-2006.<sup>14</sup> Precipitation is also steadily increasing in some areas and decreasing in others. Precipitation has increased over land north of 30°N and decreased over land between 10°S and 30°N.<sup>15</sup> The intensity of precipitation has been steadily increasing as well. Levels of surface waters are also changing. In some regions, surface water levels are increasing; in others, the levels are decreasing. Surface water temperature is also increasing. In addition to this, evapotranspiration (the transport of water from surfaces into the atmosphere) has shown increases in some areas. Also, drought and the expansion of dry regions is increasing throughout arid and semi-arid regions. In addition, intense tropical cyclone activity has more than a 66% chance of increasing.<sup>16</sup> Warmer oceans "provide the heat and moisture to sustain hurricane force winds."<sup>17</sup> Rising sea levels are expected to increase by the same percentage. All of these effects are direct results of Global Warming and the climate change it has begun.

Climate change is increasing every day. Humans, plant species, and animal species are all feeling the effects it entails. Global Warming has embarked down a slippery slope and will begin to pick up speed. This is not to say that nothing can be done. Any conflict can be resolved once solutions have been determined and implemented. The question is no longer whether Global Warming is real or not, but whether or not we will take action to prevent Global Warming and climate change from worsening.

*Part 2 of this article will be presented in the December issue of the Ecology Action Center News and will focus on **SOLUTIONS** to global warming. For full citations of all works consulted in this article, see <http://www.ecologyactioncenter.org/doc/EACNewsFall08citations.htm>.*

## **CFL Recycling Now Available**

You can now recycle your spent Compact Fluorescent Lamps (CFLs) in McLean County at four locations as part of a brand-new program sponsored by the McLean County Solid Waste Fund. The locations include:

**Springfield Electric:** 902 Four Seasons Road in Bloomington, CFLs accepted during regular business hours only: Monday - Friday from 7am to 5:30pm, and Saturday 8am to 3pm

**Town of Normal, Facilities Management Parking Lot:** Green receptacle in parking lot at 207 S. Linden (across from Vitesse Cycle) accessible 24 hours a day/7 days a week.

**City of Bloomington Public Service – Drop Off Facility:** Blue receptacle at Jackson Street and East Street (behind Bloomington Public Library). Hours vary seasonally; call 309-434-2220.

**Ecology Action Center:** 202 W College Avenue, CFLs accepted during regular business hours only: M-F, 9am—5pm.

*Please wrap CFLs in newspaper to help prevent breakage.*

## **Stream Clean Up Event**

Join EAC volunteers in a Stream Clean Up of Sugar Creek on Saturday, September 20. The event is part of the state-wide "It's Our River Day!" with a goal to boost awareness of our rivers. The clean up will be from 10 a.m. until 2 p.m. Volunteers should meet at Epiphany Grade School, at 1002 E College Avenue in Normal and bring a sack lunch. All volunteers must be 16 or older or be accompanied by a parent or legal guardian. Dress appropriately for dirty work; closed-toed shoes are required. For more information, call us at the EAC.

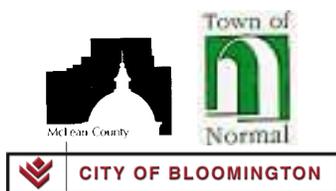
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## EAC Fall Events Calendar

**Sept 20:** Plastic Garden Pots Drop Off at the ISU Recycling Building off of Gregory Street in Normal, 8am-12pm

**Sept 20:** Stream Clean Up in Normal. 10am-2pm. Volunteers are needed. See article on page 3.

**Oct 4:** Storm drain stenciling project, 9:00am-12:00pm OR 1-4pm. Volunteers are needed; contact Michael Brown at 309-454-3169 or mbrown@ecologyactioncenter.org to sign up.

**Oct 7:** EAC Rain Barrel Workshop, 5:30 pm Registration forms at the EAC or on our website. The workshops are filling up very quickly so move fast if you are interested! Call 309-454-3169.

**Oct 8:** EAC Open House. 5pm-8pm. Come meet the EAC staff, learn more about our programs and activities, enjoy refreshments and have a good time!

**Oct 11:** EAC Rain Barrel Workshop, 10 am Registration forms at the EAC or on our website. The workshops are filling up very quickly so move fast if you are interested! Call 309-454-3169.

**Oct 11:** EAC Rain Barrel Workshop, 1 pm Registration forms at the EAC or on our website. The workshops are filling up very quickly so move fast if you are interested! Call 309-454-3169.

**Oct 18:** Plastic Garden Pots Drop Off at the ISU Recycling Building off of Gregory Street in Normal, 8am-12pm

**Nov 15:** America Recycles Day Celebration at Children's Discovery Museum, 10am-2pm. See article on page 1.