



# Notes from the Field

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## EPA Asks Supreme Court to Dismiss Massachusetts's Global Warming Lawsuit

~ Jonathan L. Clark, Esq.

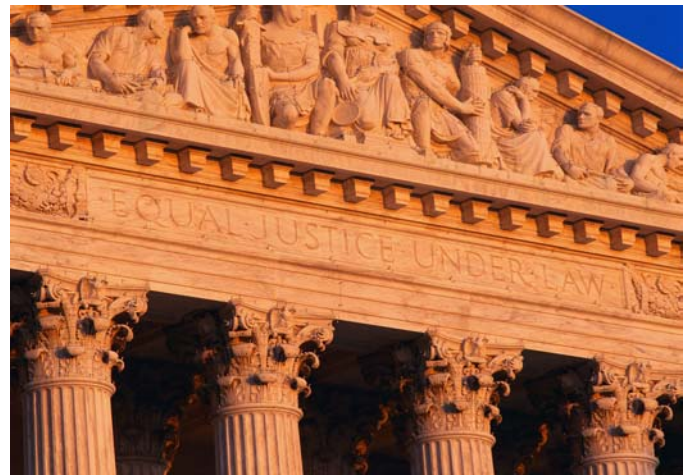
EPA's brief in the Supreme Court global warming case argues that Massachusetts has no right to be in federal court challenging EPA's decision not to regulate greenhouse gas emissions from new motor vehicles within the United States.

Massachusetts is concerned that global warming will cause sea levels to rise and storms to surge, damaging and perhaps even inundating portions of its coast. It has joined with several other parties to sue EPA for its controversial decision not to regulate automobile emissions. Having lost its case in a lower federal court, Massachusetts is now asking the Supreme Court to require EPA to regulate such emissions. EPA has argued that the Court should dismiss Massachusetts's lawsuit because the state lacks standing to sue.

Anyone who files a lawsuit in a federal court must establish that they have standing to do so. In order to establish standing, one must prove three things: (1) that one has sustained or is likely to sustain an injury; (2) that the injury is caused by the actions—or, in this case, the inactions—of the party one has sued (i.e., the defendant); and (3) that a court ruling requiring the defendant to do what one wants will redress the injury. According to EPA, Massachusetts lacks standing because it has failed to establish the third requirement.

According to EPA's brief, "even assuming that the available science supports [Massachusetts's] cataclysmic predictions" of coastal damage, "that is not enough." Massachusetts must also demonstrate that this damage is "to a material extent attributable" to EPA's failure to regulate greenhouse gas emissions

from new motor vehicles. In addition, EPA argued, Massachusetts must prove that requiring EPA to regulate such emissions "is likely to have the ultimate effect of significantly alleviating that harm." EPA told the Court that Massachusetts had "failed to make those showings."



Even if EPA regulated emissions from new motor vehicles within the United States, the brief argued, this would "result in, at most, a tiny percentage reduction in worldwide greenhouse gas emissions. Nothing in the record suggests that so small a fraction of worldwide greenhouse gas emissions could materially affect the overall extent of global climate change. [Massachusetts's] declarations therefore do not establish that the regulatory action [it] seek[s], standing alone, would have any material impact on climatic or environmental conditions within Massachusetts."

EPA also rejected the notions that regulating emissions would motivate industry to create technologies that reduce emissions, and that developing countries would mandate the use of such technologies. Whether industry would create new technologies in order to comply with regulations "is at this point a matter of pure conjecture," EPA argued. And developing countries would not

necessarily adopt any technologies that were developed. EPA expressed concern “that [u]nilateral EPA regulation of motor vehicle [greenhouse gas] emissions could *weaken* U.S. efforts to persuade key developing countries to reduce the [greenhouse gas] intensity of their economies . . .” “The fact that greenhouse gases are evenly concentrated throughout the world creates a distinct obstacle to unilateral emissions regulation by any single government, since the country that imposes such limits may bear a substantial economic burden but will receive only a small share of any resulting benefit.” “Indeed, the global nature of the phenomenon at issue provides a classic situation in which countries—particularly developing countries—may seek a ‘free ride’ from expensive regulation self-imposed by other nations.” Given what it called “the significant scientific uncertainty concerning global climate change” and “the economic and political sensitivity of the regulation that [Massachusetts] seek[s] to force EPA to undertake,” EPA asked the Supreme Court to rule that Massachusetts lacks standing to sue.

The parties argued the case of *Massachusetts v. EPA* before the United States Supreme Court on November 29, 2006. We will have to wait several months for the Court’s ruling.

## What you can do?

~ Angie Luis, Dept. of Biology

Climate change is a global problem, and yet each one of us has the power to make a difference. Even small changes in our daily behavior can help prevent greenhouse gas emissions without affecting our quality of life. In fact, they can help save us money.



**Walking** is not only good for you; it helps the environment as well! But when you need to use transportation, it's important to make the right choices to save CO<sub>2</sub> emissions.

- ❖ Bike, walk, carpool or take the bus to get to work or school.
- ❖ Avoid idling. Give your engine and the climate a break by turning off your car when you aren’t moving... except in traffic or a stop light, of course. Try to cut out 10 minutes of daily idling. (Savings per year = 550 lbs of CO<sub>2</sub> )

- ❖ Keep your tires filled. Your ride will be smoother and you’ll save up to 5% on your fuel tab. (Savings per year = 275 lbs of CO<sub>2</sub> )
- ❖ Drive a hybrid or fuel efficient car. Save the environment and money by driving a car that gets at least 32 MPG. (Savings per year = 5,200 lbs of CO<sub>2</sub> )

**Conserving** resources is not only good for the environment but good for the pocket book as well.



- ❖ Consume less. Most products we buy cause greenhouse gas emissions in one way or another, (e.g. during production and distribution) and most of the home energy in this area is fossil fuel based which emits large amounts of CO<sub>2</sub> into the air.
- ❖ Turn your computer off overnight and put it into a power save mode. A standard monitor left on overnight uses enough energy to print 5,300 copies. (Savings per year = 950 lbs of CO<sub>2</sub> )
- ❖ Adjust your thermostat. Turn it down 3 degrees in the winter and up 3 degrees in the summer. (Savings per year=1,050 lbs CO<sub>2</sub>).
- ❖ Use compact fluorescent bulbs. It’s a bright idea to replace 3 incandescent bulbs with fluorescent bulbs that last up to 10 times as long and use 1/4 the energy. (Savings per year = 300 lbs of CO<sub>2</sub> )
- ❖ Choose products that come with little packaging and buy refills.



With State College’s curbside recycling program it’s easy to **recycle!**

- ❖ Recycle glass, paper, cardboard, plastic and cans. Recycling one aluminum can saves 90% of the energy needed to produce a new one - 9lbs of CO<sub>2</sub> emissions per pound of aluminum! For 1lb of recycled plastics, the saving is 1.5lbs of CO<sub>2</sub>; for 1lb of recycled glass, it is 0.3lb of CO<sub>2</sub>; and recycling 1lb of paper instead of land filling it avoids 0.9lb of CO<sub>2</sub> emissions as well as methane emissions.
- ❖ Reuse. When shopping, it saves energy and waste to use a reusable bag instead of accepting a disposable one each time. Waste not only discharges CO<sub>2</sub> and methane into the atmosphere, it can also pollute the air, groundwater and soil.

Think about the environment the next time you're **shopping** for groceries.



- ❖ Consume locally produced and seasonal food. Produce grown in artificial ecosystems or greenhouses requires a great amount of energy for temperatures to be maintained. And transporting goods by plane from one side of the world to the other generates about 1,700 times more CO<sub>2</sub> emissions than transporting them by truck over 30 miles.
- ❖ Eat your veggies! Producing meat is both CO<sub>2</sub> and methane-intensive and requires large amounts of water. In fact, ruminant animals such as cattle, sheep and goats are large producers of methane due to the way that their digestive systems process food.

## Pennsylvania Must Take Action on Global Warming

~ PennFuture, 01/11/2007, pennfuture@pennfuture.org

It's high time that Pennsylvania became part of the solution rather than adding to the problem of global warming.

Pennsylvania alone contributes one percent of the pollution that causes global warming, more than 105 developing nations combined. We are also number three in the nation, behind only California and Texas, for production of greenhouse gases.

Now is the time to act. Fortunately, bipartisan legislation is being introduced in both the Pennsylvania House and Senate to do just that. But these global warming bills need broad support from all corners of the state to turn the legislation into meaningful action.

Ask your state senator to co-sponsor the Pennsylvania Global Warming Act and ask your state representative to co-sponsor the Greenhouse Gas Reduction Act.

**TAKE ACTION!** Please act now to contact your State Senator and State Representative. Ask them to co-sponsor bipartisan legislation that creates a global warming strategy in Pennsylvania to protect our state's heritage, our health, and our economy.

## 2007 EGSO (Ecology Graduate Student Organization) Officers:

President - J.B. Moon  
Vice President/Treasure - Kevin Mueller  
Secretary - Kristen Granger  
Program Committee Rep. - Randa Jabbour  
Curriculum Representative - Marc Goebel  
Social Chair - Anna Staroyotov  
Web Master - Leah Wasser

**Thanks to the 2006 officers for a great year!**

**January 24<sup>th</sup>** EGSO meeting in 401 Life Sciences Building @ 5.30 pm.

**January 27<sup>th</sup>** Winter party/potluck at Black Moshannon State Park. Dinner starts at 5pm. Snow activities before dinner. Contact Ruscena for details: rpw143@psu.edu.

## Interested in Teaching Experience?

~ Emily Rauschert, Post-doc in Dept. of Crop and Soil Science

The Graduate School Teaching Certificate program is an opportunity for students with a strong interest in teaching to expand their teaching skills and document a strong interest in teaching. Basically, it involves attending an orientation workshop, participating in a teaching class (not for credit), completing two semesters of supervised teaching experience, and making a website. You can complete these requirements whenever you want – I finished just a few weeks before I graduated!

I really enjoyed working on this certificate. During the teaching class, I especially enjoyed getting together with other people interested in teaching and discussing our experiences. I also got an opportunity to write and give lectures in a larger class, as part of my supervised teaching experience. I would highly recommend this program for anyone interesting in focusing on teaching in their career.

For more information please go to:  
<http://www.gradsch.psu.edu/current/tacert.html>.

**We are always looking for news and stories! Please send submissions for the next newsletter to JB Moon at: [jbm162@psu.edu](mailto:jbm162@psu.edu)**



# Ecology and Climate Change

**Mondays 3:35-4:35 in 101 Agricultural Sciences and Industries Building**

**January 21<sup>st</sup> Al Gore's "An Inconvenient Truth"**

Showing will be held at 2 pm in the Schlow Centre Regional Library Community Room. Limited seating is available. This movie is also available for checkout with a library card.

**January 22<sup>nd</sup> Richard Alley** Pennsylvania State University

*Climate change: Why is it coming, what it might mean*

**January 29<sup>th</sup> Lewis Ziska** United States Department of Agriculture

*Climate change and weed ecology*

**February 5<sup>th</sup> John Magnuson** University of Wisconsin

*Freshwater ecosystems and climate change: Impacts on lake ice, fishes, and hydrology*

**February 12<sup>th</sup> Allison Thomson** Joint Global Change Research Institute

*Climate change and agriculture: Impacts, adaptation and mitigation*

**February 26<sup>th</sup> Patrick Megonigal** Smithsonian Environmental Research Center

*Priming the microbial pump: Enhanced soil organic matter decomposition at elevated CO<sub>2</sub>*

**March 19<sup>th</sup> Eric Davidson** Woods Hole Research Center

*The temperature sensitivity of decomposition of soil organic matter: Moving beyond Q<sub>10</sub>*

**April 2<sup>nd</sup> Mark Bush** Florida Institute of Technology

*Ecological and evolutionary implications of past and future Amazonian climate change*

**April 9<sup>th</sup> Paul Moorcroft** Harvard University

*How close are we to a predictive science of the biosphere?*

**April 16<sup>th</sup> Julio Betancourt** United States Geological Survey

*Patterns, sources and ecological impacts of decadal-to-multidecadal climate variability*

**April 26<sup>th</sup> Terry Root** Stanford University (4:00 – 5:00 in 101 ASI)

*Global change in plants and animals: A fingerprint for warming & evidence of cause*

**April 27<sup>th</sup> Stephen Schneider** Stanford University (1:25 – 2:25, location TBA)

*Can we define, let alone fix, "dangerous" climate change?*

This series is co-sponsored by the Penn State Institutes of the Environment, the Environmental and Natural Resources Institute, the Earth and Environment Systems Institute, the Center for Advanced Carbon-Cycle Research and Education, the Earth System Science Center, and The Dorothy Foehr Huck and J. Lloyd Huck Institutes of the Life Sciences.

The Pennsylvania State University

Ecology IDGP Spring Seminar Series 2007

