



# earthwise


News and Ideas for UCS Members and Activists

## Fuel Economy Standards Fall Short

In March, the National Highway Traffic Safety Administration (NHTSA) finalized fuel economy standards for light trucks (including SUVs and minivans) built between 2008 and 2011. This new system fails to deliver meaningful fuel savings.

The new regulatory structure will set a standard for each manufacturer based on the size of its vehicles, with smaller trucks expected to achieve higher fuel economy than larger trucks. The change addresses industry concerns that the existing uniform standards mainly affect manufacturers of larger trucks, but NHTSA squandered a golden opportunity to require significant fuel economy gains from all vehicles.

The rate of increase (0.45 mile per gallon per year) is less than what NHTSA required under its current rule, and saves less than one month's worth of our current national gasoline consumption over two decades. Furthermore, the U.S. fleet average need not reach the new mileage target if manufacturers sell more large vehicles.

UCS worked with NHTSA during the rule-making process and prevented an even worse regulatory structure from being adopted. We will continue pushing NHTSA to improve fuel economy for all vehicles. 

close to home 

## Home Efficient Home

*Stephen Young, Washington representative and senior analyst in the UCS Global Security Program, describes how he renovated his home to consume less energy.*

Two passions guide my life: reducing the chance that the world will be destroyed by nuclear weapons, and reducing my environmental impact. The latter inspired me to renovate my 1860s-era row house in Washington, DC.

The first (and easiest) step was to prevent energy from escaping by insulating the whole house, including walls and ceilings. I also replaced every window to finish creating a tight thermal blanket. And yet, I would need to make other major changes to achieve even more dramatic results.



*Stephen Young's renovations have made his home more comfortable and energy-efficient.*

### A Plan for All Seasons

My decades-old, inefficient boiler generated monthly heating bills that could reach \$500 even with the thermostat set at 59 degrees during the mild Washington winters. My new boiler cost perhaps one-quarter more than other models, but with an efficiency rating of 92.5 percent, it should pay for itself in fuel savings within three to four years.

I decided to go even further and replace my bulky radiators with radiant floor heating, a more efficient and comfortable way of providing heat. Hot water circulating through pipes under the floor essentially makes your entire floor one large radiator, heating the house gently and evenly. Installation is fairly simple, somewhat like assembling a large jigsaw puzzle: on top of a new subfloor, my contractor laid out a pattern of grooved wood panels with a thin aluminum backing (to spread the heat), then inserted long loops of plastic pipe into the grooves. We covered that with as much of the original pine flooring as we could save, and filled in the rest with beautiful 100-year-old salvaged pine boards.

*(continued on back page)*

on a personal note

# Katrina's Terrible Lesson



Since the release of our 2001 report on the impact of global warming on the Gulf Coast, UCS has been working to educate local officials about the potential for deadly weather related to climate change. But few people imagined the magnitude of catastrophes like Hurricanes Katrina and Rita arriving as suddenly as they did last summer. To see what could be learned

from these tragedies, I traveled to New Orleans in March with a group of environmental leaders. We were distressed to see that although more than six months had passed, tens of thousands of residents were still unable to return to neighborhoods strewn with rubble and contaminated by toxic waste.

We also saw how oil and gas development, shipping interests, and poorly maintained infrastructure had weakened both the natural and human-made defenses that might otherwise have lessened the damage. This is particularly troubling in light of scientific studies that predict rising sea levels and water temperatures—two factors that contribute to more powerful storms—will be pushed higher by a warming atmosphere.

Many of our coastal communities could face devastation on par with Katrina if we don't ramp up our efforts to reduce the heat-trapping emissions that contribute to global warming. Fortunately, quite a few of the local leaders, activists, and students that I met are working to restore coastal marshes (which help absorb the blow of a hurricane's storm surge) and encourage increased energy efficiency and development of renewable energy (which reduce both global warming pollution and our dependence on the Gulf's vulnerable oil and gas reserves).

Katrina and Rita awakened many influential people along the Gulf Coast to the urgency of global warming, and their experience will serve as powerful testimony in convincing leaders in other parts of the country of the need for both federal action and regional efforts to combat climate change. What I saw in New Orleans underscored for me our moral obligation to ensure that history does not repeat itself on America's shores.

KEVIN KNOBLOCH, *president*

## UCS in the news

### *Grass-fed beef and milk yield greener pastures*

A new report by Dr. Kate Clancy, senior scientist in the UCS Food and Environment Program, has found that beef and milk from animals raised entirely on pasture have higher levels of beneficial fats than conventionally raised beef and dairy cattle. *Greener Pastures: How Grass-fed Beef and Milk Contribute to Healthy Eating* is the first comprehensive survey of the nutrition, environmental, and public health benefits of grass-based farming techniques.

UCS released the report at a March 7 press conference in Chicago, the historical center of the U.S. meatpacking industry. As Clancy described in a *Chicago Tribune* article the next day, "The grass really is greener with regard to the environmental and health benefits of pasture production, including less water pollution and meat produced without antibiotics."

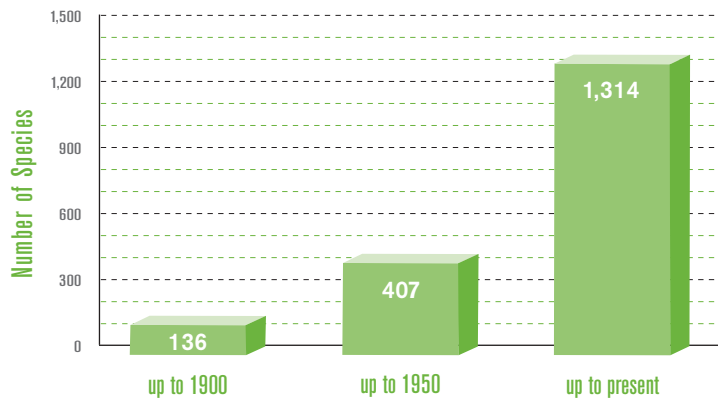
The report also garnered coverage in the *Washington Post*, *New York Times*, *Atlanta Journal-Constitution*, and *Kansas City Star*, and on more than 3,000 radio stations. 

## Double Your Impact

Until July 14, any contribution you make to our Save the Science campaign will be matched dollar for dollar! Visit [www.ucsus.org/savescience](http://www.ucsus.org/savescience) or call (800) 666-8276 for this special opportunity to double the impact of your support and help stop political interference in federally funded science.

## Urge Stronger Action on Aquatic Invaders

**Non-Native Aquatic Animals Introduced into the United States**



Source: U.S. Geological Survey

### What's at Stake

The health of aquatic ecosystems.

### How You Can Help

Ask your senators to oppose the Ballast Water Management Act.

### What's Happening

Invasive species choke our waterways, alter landscapes, threaten native species with extinction, and cost taxpayers billions of dollars in damage and control measures. Preventing further introductions should be a top priority and, to that end, the Senate is currently choosing between two bills that aim to protect U.S. waters from aquatic invaders.

The National Aquatic Invasive Species Act (NAISA; S.770) is the stronger of the two. It covers invaders in all types of aquatic habitats and lays out a thorough national program to address them, including strategies for preventing new arrivals, responding quickly to those that slip in or escape, educating the public about the problem, and providing much-needed funding for invasive species research.


The Ballast Water Management Act (S.363), on the other hand, is a weaker alternative to NAISA in many ways. It

addresses only a fraction of invasive species, delays the deadline by which shippers must strengthen their management of ballast water (a primary means by which aquatic invasive species are transported around the world), and prevents the Environmental Protection Agency from regulating aquatic invaders under the Clean Water Act. In addition, states would no longer be able to enact tougher standards

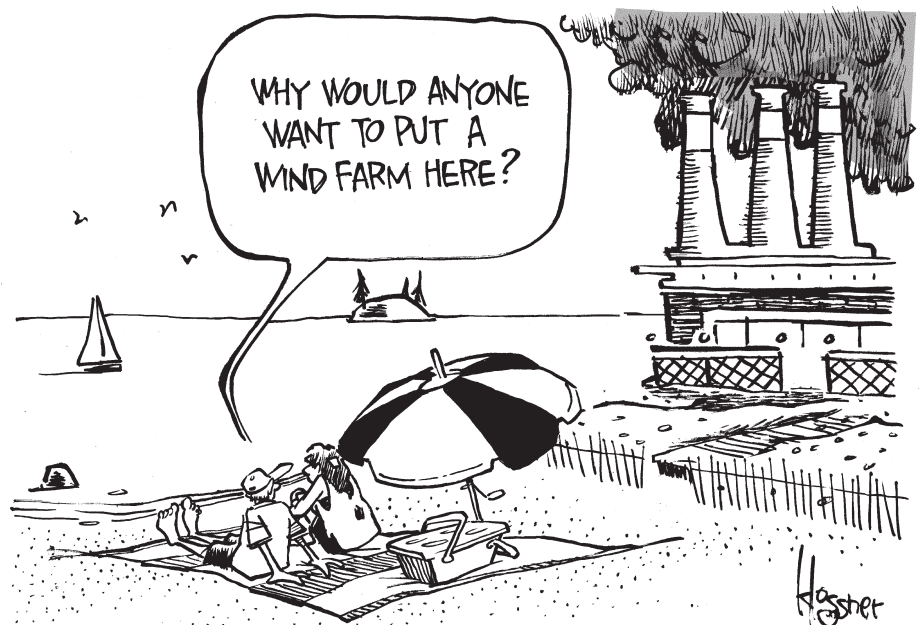
for ballast water than those established by the federal government.

Thanks in part to the efforts of UCS members and activists, NAISA has strong support in the Senate, but opponents appear determined to block its passage. A bipartisan group of legislators is therefore attempting to craft a strong compromise that would be similarly comprehensive. Passage of S.363, however, would probably doom both NAISA and any compromise bill.

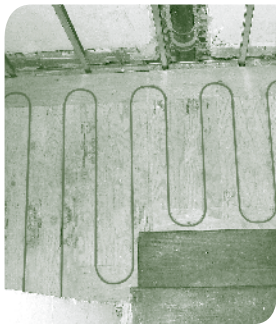
### What You Can Do

Contact your senators and urge them to oppose S.363. Tell them that the threat of invasive species demands a stronger response (such as NAISA) in order to safeguard our native ecosystems. Send an email from the online UCS Action Center at [www.ucSACTION.org](http://www.ucSACTION.org) or call the Capitol switchboard at (202) 224-3121 and ask to be connected to your senators' offices. 

## drawing conclusions



## Home Efficient Home *(continued from front page)*



*Radiant floor heating pipes*


To address the stifling heat and humidity of Washington summers in the most energy-efficient manner, I installed an advanced central air conditioning system supplemented with passive cooling strategies. This system moves air at high velocity through narrow insulated tubes that are much more efficient than the large, leaky ducts used in traditional central air systems. In my opinion, this is a great product for any renovation because it is much easier to install, draws more moisture out of

the air, and, depending on the installation, can cost roughly the same as traditional systems.

To use the air conditioning as little as possible, I increased the house's capacity for passive cooling, which relies on the thermodynamic principle that hot air rises. Ceiling fans installed in every room will get the air moving, and new transoms (hinged windows) above all the upstairs doors will work in combination with a venting skylight to allow hot air to flow out of the house.

### Saving Energy and Money

This past winter was the first test for my new heating system, and the results were outstanding. I set the thermostat at a much more comfortable 69 degrees and still managed to use about 60 percent less gas than before the renovation. With summer fast approaching, I'm looking forward to seeing how well my cooling system performs.

With the money I save on heating and cooling, my next big investment may be solar panels for the roof—but that's a whole other story. 

## UCS on the web



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**National Headquarters**  
Two Brattle Square  
Cambridge, MA 02238-9105



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## dialogue



*Could the fact that chickens in China have been treated for bird flu with human drugs affect human health?*

Yes. The H5N1 strain of avian influenza worries health professionals because the virus could mutate into a form with the potential to cause a human pandemic. Antiviral drugs, like antibiotics, represent powerful weapons in the fight against such diseases, but their widespread use can lead to the emergence of drug-resistant illnesses that are difficult to treat. Since there are only two classes of antiviral drugs approved for use in humans (adamantanes and neuraminidase inhibitors), it is important to ensure these drugs will remain effective in the event of a human pandemic.

We do not know whether U.S. poultry producers previously treated flocks with human antivirals, but it will not happen in the future. The Food and Drug Administration—at the urging of UCS and numerous public health organizations—recently prohibited chicken, duck, and turkey producers from using antiviral drugs approved for human use in the United States: amantadine, rimantadine, oseltamivir (Tamiflu), and zanamivir (Relenza).

Secretary of Agriculture Mike Johanns has said that the H5N1 strain of avian influenza will probably reach the United States eventually. Although no one can say whether this strain will mutate into a form that can cause a human pandemic, the government is monitoring poultry and wild birds for the virus and planning to destroy flocks where it is found.

To learn more about this issue, visit the Department of Health and Human Services' avian flu website, [www.pandemicflu.gov](http://www.pandemicflu.gov). 