December 2011

Vol 4 Issue 4

THE EPIB TRAIL

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From Your Editor

As another semester writing for the Trail draws to a close, so does my time here at Rutgers. Writing for the Trail has been a truly rewarding experience and most definitely my favorite part of being an undergraduate. I have learned so much along the way from my fellow writers and from the Human Ecology staff. The only thing I would change is that my time as a writer and editor last a little bit longer. But, I know that I can take the skills I have acquired and the friendships I have made from my time working on this newsletter far into the future. I hope that you have enjoyed the Trail this semester, and in previous semesters, as much as I have. I am confident in the Trail’s upcoming and continuing writers and the students who will take my place once I move on.

As always, we rely on your feedback and support. As a purely student run newsletter, we try our very best to strive for a quality paper that we hope our readers will appreciate and enjoy. Please don’t hesitate to contact us with any questions or comments. Good luck to students and faculty during these hectic weeks of finals and we wish everyone a safe, healthy, and happy holiday season and new year! Lastly, a warm ‘thank you’ to those who helped the Human Ecology Department and Rutgers Against Hunger’s Adopt-a-Family campaign. With the donations we’ve received from everyone, we were able to make a positive impact on the lives of a mother and son this holiday season, so again, thank you!

Happy Trails! Dara

Pumping Gas

By: Jillian Drabik

Usually, pumping is a process that removes natural resources from the ground. However, the latest attempt to mitigate the effects of climate change involves trying the process in reverse.

Scientists are now attempting to capture atmospheric carbon dioxide and pump one million tons of the gas underground. This new attempt to alleviate climate change is taking place at the Midwest Geological Sequestration Consortium (MGSC) and is considered the most ambitious attempt to sequester carbon to date. The Illinois State Geological Survey (ISGS) is leading the Consortium, but the MGSC is one of the seven regional partnerships designed to advance technology for capturing and storing greenhouse gases.

In addition to advancing technological research, the state of Illinois is confident that this research will bring green businesses to their state and create a more environmentally-responsible society. The Consortium has been collecting data since 2003, and is confident that carbon dioxide can be safely pumped more than a mile underneath Mount Simon Sandstone at Decatur. As an environmentally-conscious individual, I’m slightly skeptical to consider this innovative technology as a panacea for climate change. Pumping gas into the ground (also known as geological sequestration) sounds dangerous, especially since the process can alter the interactions of plate tectonics and increase the risk of earthquakes and gas leaks. Carbon dioxide is pumped into the ground as a liquid, which facilitates the pumping process and allows for permanent storage. However, the liquid could contaminate groundwater and may kill plants or animals that live underground. Also, the sites for geological sequestration must be constantly monitored and managed to ensure that pumping wells are safely secured. Are we ready for the long-term responsibilities that are required for this risky process? Making a mistake with this technology could have consequences and would endanger the earth’s air, land, and water resources.

Undoubtedly, there is risks associated with this new technology, but it doesn’t mean that this technology should be abandoned. Even though geological sequestration requires people to actively monitor and manage pumping sites, many current environmental management practices require similar attention. Admittedly, people have had a questionable track record with maintaining environmental resources and monitoring their technology. However, if the effects of climate change become severe in the coming years, irresponsible management and maintenance practices may become too costly to be a viable option. ISGS has been very cautious about gathering data before acting on their technology, adhering to requirements from the EPA and the state of Illinois. Also, ISGS is confident that the Mt. Simon Sandstone is an ideal place to test this new technology, since the geological characteristics are favorable for carbon storage. With new technology, there is almost always a risk. Carbon sequestration is a technology that could be a beneficial advancement to reduce the effects of climate change; however, it is new ground that should be tread very carefully and will require us to do our homework.

Eco Fact: Switching just one incandescent light bulb with an efficient compact fluorescent light bulb prevents about 100 pounds of carbon dioxide from entering the atmosphere.

Faculty Spotlight: Dr. Mary Nucci

This issue of the EPIB Trail will be featuring Dr. Mary Nucci! We welcomed Dr. Nucci as a Research Assistant Professor to our department this past August. Dr. Nucci received an AB degree in Biological Sciences from Mount Holyoke College. Following that she obtained her master’s degree in Zoology, and a PhD in Media Studies from Rutgers. In addition, she has taken a lead in various research projects at the Food Policy Institute at the University. If you have the chance, don’t pass up the opportunity to take a course with her (maybe you’ll be lucky enough to meet one of her Seeing-Eye puppies!)

Where were you before you came to Rutgers? I was the Thematic Director of the Health Floor at Liberty Science Center, after a career as a lab-bench scientist when I returned to Rutgers to get my Ph.D. in Media Studies in 2010. Geographically, I have lived in New Jersey on a farm in Hunterdon County for the past 27 years: we raise chickens and ducks, and have bred and raised German Shepherds.

How long have you been here at Rutgers? In my first go-around, I was a graduate student in the Zoology Department on Busch campus in the early 1980’s. I have been here since 2001 in various positions: graduate student at the School of Communication and Information on College Ave, graduate assistant and then Research Associate at the Food Policy Institute. I joined the Human Ecology Department in August this year as a Research Assistant Professor!

What research projects have you been a part of? At Food Policy I have worked on grant projects looking at public perceptions of genetically modified food, biotechnology, nanotechnology and Qualified Health Claims. My research focuses on media coverage of controversial science.

What is your favorite thing about teaching on the Cook Campus? There are so many things: I like being around the students and faculty, I like the proximity to the library, and I particularly like the fact that the farm makes me feel like I am at home. I also enjoy that I am close to the Seeing Eye Puppy Raisers- Club Bark Yard, so that I can take my Seeing Eye puppy to play.

Which courses do you enjoy teaching the most, and why? Every course I am teaching is my favorite at the time, and I like them all as they each deal in a different way with my obsessions in communicating science.

Is there any advice you’d want to give past, current, and future students? Don’t assume you know today what you want to do tomorrow, so be open to any opportunities. Learning is not discrete—you should be inquisitive and thoughtful and see that you can apply knowledge from one field to another.

When you were younger, what did you want to “be when you grew up”? When I was in kindergarten I wanted to be a mouse, but was quickly disabused of that possibility. I was always interested in science and wanted to be a veterinarian.

What do you like to do in your spare time? I love to be outside gardening, hiking, running. I love to read (science, science fiction, history), work with my Seeing Eye puppy and my own dogs, travel and spend time with family. I have a son who was an EPIB major and a daughter who is a junior at James Madison in Virginia.

If you could travel anywhere in the world, where would you go first? Galapagos Islands.

What is your favorite animal? That’s tough. Domesticated: dogs, horses. Non-domesticated: wolves, bears, birds (I know, that isn’t a single animal, but the best I can do).

If a meteor hit the Earth, giving everyone the choice of one super power- what would you choose? Gah, do you have to ask such tough questions! How about time turning, so I can turn the clock back to save the planet!

By Samantha Gross
Our EPIB New Year Resolutions

Kate Gardella, Part Time Lecturer— I want to make a bunch of small “green” changes next year and also do more yoga!

Ariele Baker, T.A.— To go Salsa Dancing!

Dayna Bertola, staff writer— Take LSATs and start preparing my application for law school.

Marc Knowlton, Systems Administrator— To be more prompt with my resolutions.

Katie Fudacz, Staff Writer: I want to be more loving and selfless to those who are outside of my comfort zone. I want to make all people feel celebrated and cherished because I believe everyone is beautiful and awesome. Some just need reassurance and encouragement.

DR. PETER GUARNACCIA, PROFESSOR— To start aging backwards.

Samantha Gross, Staff Writer— To get a job working in a zoo after successfully moving to Florida.

Chelsea Kahn, Staff Advisor: Travel to a new continent and make a difference while I am there.

Arati Patek, Staff Writer: Start purchasing vegetables and fruits from a local market and eat healthier.

Dara Zaleski, Editor in Chief— To find a job!

Kyle Walsh, Staff Writer— To stop driving between campuses and start walking or using the bus.

Jillian Drabick, Staff Writer— Take the time to see the world from a different perspective!
Our EPIB New Year Resolutions

Scott Sincoff, Staff Writer
To organize myself and to become more confident in myself. Happy Christmahananukwanzaakah!

Rachael Shwom, Professor
Publish more, facebook less.

Justine DiBlasio
Administrative Assistant
Make more time for myself.

Caron Chess, Curriculum Coordinator
To enjoy my time off and trip to Antarctica.

Eva Pena, Staff Writer
To be more involved in society I want to reach a higher goal of volunteering that I do. Another one of my goals is to be proactive about caring for the environment by trying to achieve a higher level of an eco-friendly lifestyle; wanting to aid the health of the marine animals, oceans and the environment. GO EARTH!

Fred Giliberi
Respond the Chelsea’s voicemails.

Julia Harenberg, Staff Writer
I want to lose 15 pounds by spring finals and be more fit.

Kimber Ray, Staff Writer
To refrain from dwelling on small things and creating illogical conclusions.

George Clark, Instructor
To be better about being on time.

Arielle Wortzel, Staff Writer
Finally stop biting my nails.
Welcoming Winter and Holiday Highlights

Giving the Gift of Life
A Socially Responsible Holiday Gift
By: Samantha Gross

Are you having a hard time trying to figure out what to get your family members for the holidays this year? Or do you just want to be a good EPIBer and give an environmentally AND socially responsible gift? Well, Heifer International has got just what you’re looking for! Instead of giving a simple monetary donation to a charity or buying an ugly sweater that will go straight to the bottom of a drawer, Heifer International takes a different approach to gift giving.

Amongst the different “gifts” are farm animals such as hens to start an egg business or you could send the necessary educational tools for success in the name of the recipient. This type of gift is not merely a one-time present, but allows the recipient to gain the resources to provide for future gifts. By educating recipients, they can then go and teach their neighbors, therefore acting as a “pay it forward” type system. It’s a gift that keeps on giving. Additionally, Heifer International ensures safety and efficiency by educating the communities in animal well-being methods, environmentally-conscious grazing methods, and the importance of long-term solutions. Heifer International seeks to help end world hunger issues and promote self-reliance and sustainability.

If you’re interested in contributing to this continuous cycle of gift-giving and life-changing organization, you can log on to www.heifer.org for more information.

Ways to Welcome Winter
Winterize an and Eco-Friendly Manner
By Scott Sincoff

Even though we’ve already had a taste of snow, the real heart of winter isn’t coming for another month or so. As we prepare for the ice and slush, here are some tips to help you take on Jack Frost’s wrath in an environmentally-friendly way.

When Jack Frost gives us icy driveways, there is a way to fight back! Most people use rock salt to de-ice their driveways. This is actually bad for the environment because when combined with water, the salt can leach into the waterways and damage plant and animal life. The University of Michigan says that de-icing chemicals like Magnesium Chloride and Calcium Chloride are safe and environmentally-friendly to use because the chemicals are not harmful to animals, but the university’s Department of Plant Operations advises to use the chemicals sparingly. Also, according to the North Dakota Department of Transportation and the University of Maryland, organic substances made out of sugared beet juice or sugared beet molasses are also environmentally-friendly ways to de-ice your driveway.

Another thing people worry about during the winter months is keeping warm at a lower cost. Electric and gas heating from the power company can get really expensive for the average household. The U.S. Department of Energy recommends scheduling a check-up for your heating system with a licensed contractor if you have heating equipment that is more than 10 years old. This will make sure that everything is running properly. They also recommend that you check out the heating system’s filter every month and change it every three months. People also look for ways to dress warm without spending a fortune during this time of year. Try to avoid big, expensive department stores and shop at a thrift store instead. Most thrift stores, like the Salvation Army and Goodwill, have a large variety of warm clothes for a low cost and some of the profits go to charity. When you go to a thrift store, you’re recycling clothes which help both the environment and your wallet.

A lot of people also spend more time in their cars during the winter months because people are less likely to walk in colder and snowy conditions. According to the American Automobile Association (AAA), oil tends to thicken and then stick to your car’s engine in the colder months. The group says that an easy way to prevent this from happening is to check the oil on a weekly basis.

The winter season is known for throwing a lot of curveballs our way. In case Mother Nature gives one to us on the road, we have to be prepared for any situation. Have a fully-stocked emergency kit in your car during the winter months. Some important items to have in the kit is extra gas, jumper cables, flares, a tool kit, blankets, canned food, and bottled water. You can find other examples of what you should put in your personal emergency kits from the Red Cross, AAA, or other safety-based organizations. These items will definitely come in handy because you never know when you’ll need them most.

Taking these easy precautions could help you save a considerable amount of money, all while helping the environment this winter!
Welcoming Winter and Holiday Highlights

It’s the Most Wonderful Time of the Year, Especially When You Recycle!

By Katie Fudacz

As education ambassadors, it is important that Rutgers students and affiliates teach their families, friends, and communities about the importance of the three Rs: reduce, reuse, and recycle! Many actions can be taken to practice good environmental stewardship while consumption increases during this season of festivities. A daunting environmental debate people undergo is whether or not to use a Pine tree or an artificial tree for Christmas. Each side poses benefits that contribute to environmental conservation as well as disadvantages in terms of recycling the tree. Reusing an artificial Christmas tree each year protects one tree from being cut down; inherently providing cleaner air to breathe (since trees are principal greenhouse gas sinks)! Artificial trees do not require maintenance; they do not shed needles nor do they emit pine scent that some individuals are allergic to. Unfortunately though, there is not an eco-friendly way of recycling artificial Christmas trees. According to the Christmas Tree Association, artificial Christmas trees are chiefly made of polyvinyl chloride (PVC), a petroleum-based plastic that emits harmful carcinogens such as vinyl chloride, dioxin, and ethylene dichloride when disposed of. Even worse, lead-based additives and carcinogens can cause harm to human and animal health. Young children and pets are most susceptible to potential health issues due to their curiosity of that tall tree all of sudden in the living room.

Pine Christmas trees require more maintenance and of course, it is more economically strenuous to purchase a new tree each year as opposed to reusing a plastic one. According to the Christmas Tree Association, improvements in tree farming such as sustainable logging, forest regeneration, enhancing soil fertility/preventing erosion, and churning biodegradable nutrients from trees into mulch are some positive benefits of using Pine trees for Christmas. It is up to the individual to weigh the costs and benefits of Pine trees versus artificial trees when choosing a Christmas tree. In terms of recycling, Pine trees contribute multiple environmental benefits. In terms of reusing, artificial trees are the way to go.

It is important not to forget about recycling other holiday items such as wrapping paper, bows, ornaments, decorations, containers, boxes, food cans, etc. Donating unwanted gifts and items is another way to contribute to holiday recycling. Lastly, when decorating your Christmas tree, front lawn, porches, and windows, set decorative lights to a timer not only to reduce light pollution but to cut the costs of your electricity bill as well!

SUPPORTING LOCAL CHRISTMAS TREE FARMS!

By Arati Patel

A special part of the holiday season that is enjoyed by many people is putting up a Christmas tree. The pine tree has been a symbol of Christmas that brings the family together during the holiday. It is a time for families to share memories decorating the tree with ornaments and lights. As we know, there are two ways of purchasing a real Christmas tree (information on whether it is better to purchase a real or fake tree can be found above in Katie’s article!). Families can go to a local Christmas tree farm and cut their own tree or they can choose to purchase their tree from a store.

Supporting local Christmas tree farms is a great way to give back to the community. Farmers look forward to this time of year due to the large influx of families supporting their businesses. By purchasing a tree from a local Christmas tree farm, it helps farmers acquire the profits they need to continue running their business. Not only does purchasing a tree from a Christmas tree farm support the farmers, but it also benefits you. It provides the community with the opportunity to experience what it means to be on a farm and the amount of work and energy that goes into it. Purchasing a tree from a local Christmas tree farm builds a connection between the buyer and the seller. Connecting community members with the services local businesses provide is a great way to be more environmentally conscious. By buying trees from local farmers, you could also be cutting down on travel miles it requires for businesses to transport trees to the stores they want to sell them from.

If this year you decide to cut down your own Christmas tree, you can check out Allen’s Christmas Tree Farm, Bryant Nursery, or Habib Farms just to name a few in the area. You can also check out http://pickyourownchristmastree.org/NJxmastrees.php for a list of local Christmas tree farms, tree lots, sleigh rides, and other winter fun that can be had on a farm nearest you! By carrying through the same mentality of picking your own fruits and vegetables in the summer and fall months to the winter holiday season, we can continue to lend a hand to local farmers while still maintaining our holiday traditions!
Here’s A Bright Idea: Switch Your Lights
By Dara Zaleski

Not only should holiday lights be set to a timer to reduce the amount of energy used as Katie has mentiones in her article on page 6, but homeowners should look to replace incandescent string lights with LED lights, or light emitting diodes. (For the science behind LEDs, check out: electronics.howstuffworks.com/led.htm.) LED lights are the more environmentally friendly way to illuminate our homes during the holidays. According to Energy Star, LEDs “use nearly 90 percent less energy than incandescent bulbs resulting in much lower energy consumption, and that means fewer greenhouse gas emissions and cash in your pocket over the long run.” Consumer Reports also explains that LED bulbs are more durable. Their comparison between incandescent and LEDs showed that LED bulbs continue to work even after 4,000+ hours of use “while each string of incandescent had one more bulbs burn out before 2,000 hours.” Not only is this good for your pocket, but its good for the landfills. By purchasing LED lights that will last 10x longer than incandescent according to greenyour.org, less strings of lights will end up as trash once they stop working. And even if one LED bulb blows out, it wouldn’t cost you the whole string as it would with incandescent string lights. Lastly, LED lights are much safer than incandescent lights. LED bulbs are plastic while incandescent bulbs are glass so they are less likely to break. Also, Consumer Reports explains how there are about 300 Christmas tree fires each year resulting in the death of 14 people. LED bulbs don’t burn as hot so there is less of a chance of catching fire. Now you can rest easy knowing not only are you being more environmentally conscious, but your homes and wallets are safe as well!

Although LED bulbs seem to be the all around better choice, Consumer Reports notes that incandescent light bulbs are brighter than LED bulbs. In fact, they were 6 to 7 times brighter than LEDs. And, although LED bulbs will save you money, “it’s apt to take more than one holiday season for the savings to kick in, and you might not realize any savings if payback takes more than three 90-day seasons.”
Op Ed: My All Natural Way to Perfection
By: Julia Harenberg

Have you ever wondered what the foods and herbs in your kitchen, garden, and local food store can do for you? (Besides making a delicious meal, of course.) Many different foods and herbs can be used for skin, hair, and overall well being, and they can have wondrous results! Now girls, you may think this article is aimed at you, and well, it kind of is because let’s face it, we’re obsessed with making ourselves as flawless as possible, but guys, you can use this stuff too! I promise I won’t tell. We all have our imperfections that we wish we could change (I know I sure do); from acne prone skin to a dry scalp to oily skin and so on, there’s an herbal product that can alleviate any ailment out there!

For starters, skin skin skin! For those of you with perfectly toned, not too dry, not too oily, and pimple-free skin, well lucky you, but the rest of us, like myself, weren’t born so fortunate. Don’t worry though guys and gals, I have lots of solutions. If you have sensitive skin, you of course want to use a skin care routine that won’t make your skin burn. Try using aloe vera or honey on your face; you can mix these with yogurt to make a creamy mask. Oily skin occurs because the pores are enlarged, so mash up some tomato and cucumber and apply them to the skin to help reduce pore size. To get rid of that dry, flakey skin, mix up some banana, avocado, and add in some wheat germ or almond to put the essential oils back into the skin. According to David Winston, Herbalist AHG, the herbalist at Herbalist and Alchemist located in Washington, NJ, Burdock seed can be used for dry, itchy, scaly, and crusty skin conditions and is taken internally rather than used as a topical solution. My mom works at Herbalist and Alchemist so I know this stuff works. Now comes the big one, acne. Something we all wish would just go away forever, I know I sure do. For individual breakouts, try applying raw garlic to the area. Sounds smelly I know, but garlic is an all natural antiseptic. For severe, large, and painful pimples, Red Alder bark or Tag Alder bark can be used. Winston suggests mixing lavender oil with tea tree oil and applying it to the face for pimples. Make sure to dilute these oils in water first, though, because they are strong. Lavender oil and tea tree oil are antibacterial agents and many of the all natural skin solutions in stores today include these oils. I, myself, have switched entirely to an all natural skin care routine that uses tea tree oil and lavender oil and, although my skin isn’t perfect, I have definitely seen improvements. Now enough of all this skin talk, moving on.

Hair too oily? Scalp too dry? (Now keep in mind that all of the different solutions I am going to tell you are to be mixed with castile soap. Castile soap can be found in stores like Target and it is an all natural environmentally friendly soap that is most commonly used for making homemade shampoo.) For dandruff or an itchy scalp, use tea tree oil and Jojoba oil. For an oily scalp, simply just use some lavender oil. For dry, color treated hair, mix in some avocado and coconut oil. Just to add some shine to your hair, add some olive oil. To dry up really oily hair, maybe on a day where you just decided to skip a shower for the day, sprinkle half of a cup of cornstarch onto your hair, let it absorb for a few minutes, then brush it out. I’ve tried this myself a few times, because I am one of those people that tend to skip a shower every once... and awhile... and it is nice to know I have a way to cover it up so the rest of the world won’t know I skipped a shower! Want some extra volume in your hair? Take ¼ cup of any brand of beer (yes, I said beer) and boil it down to ¼ cup, and then simply mix it into any kind of inexpensive shampoo. I am so excited to start making my own shampoo. The possibilities are endless!

Of course, with every good comes some bad. Most of the products that I discussed were to be used externally, but if you decide to explore further about different herbal supplements, be aware that there can be adverse affects. According to familydoctor.org there are many health conditions that can be worsened by taking herbal supplements. Some examples are psychiatric problems, diabetes, and high blood pressure. Also, herbal supplements can cause problems with anesthesia and bleeding during surgeries, so if a surgery is in the near future, taking herbal supplements would be greatly discouraged. Other than internal supplements, there have not been any major adverse health effects reported by using herbal topical treatments. Some herbs can be quite expensive which is always a downer and of course, when using an herb you’ve never heard of before you never know what you may be allergic to.

Whether you think natural remedies are cool or you think it’s just a load of “hippie dippie” talk, I hope something in here can help you in some way, even if it’s just using some aloe gel to cure your sun burn next summer.


COP17 Ends with Minimal Advances in Climate Change Policy
by Kyle Walsh

During the past two weeks close to 200 nations met in Durban, South Africa for the seventeenth meeting of the Conference of the Parties (COP17). The conference is part of ongoing annual discussions on climate change policy to the United Nations Framework Convention on Climate Change (UNFCCC). The value of the conference is still up for debate, but there were still some interesting outcomes from the Durban talks.

COP17 has ended with both positive and negative results. The world is still left without a comprehensive, binding agreement to curb climate change. U.N. chief Ban Ki-moon was quoted stating, “The ultimate goal for a comprehensive and binding climate change agreement may be beyond our reach for now.” The European nations were unsuccessful in convincing large polluters, including India, China, and the United States, to get on board with specific actions to limit global warming to 2°C or less. Furthermore, a realistic successor to the Kyoto Protocol may not exist until 2015, and will likely not go into effect until 2020.

One interesting and potentially beneficial outcome of the Durban conference is the Green Climate Fund. This fund, first proposed in 2009, is designed to provide $100 billion dollars to aid less developed nations in reducing emissions. It has been argued that curbing global warming in developing and less-developed nations is essential to mitigating climate change. Details for the fund were agreed upon in Durban this year, but it is still unclear where the money will come from. A drive is planned to begin next week to initiate funding.

At the very least, the Durban Conference agreed that a binding international law is the only way to mitigate the impacts of climate change. Agreements have been made to allow future negotiations of the Conference of the Parties. This is imperative for the future of international climate change policies.

Grappling the Climate Debate

By: Kimber Ray

Climate Change has become a popular topic amongst environmentalists, academics, and the general public. Recently, some Republican candidates are denying the impact of climate change and numerous other environmental issues. Several Republican candidates, including Michele Bachmann, Mitt Romney, and Newt Gingrich, have even suggested eliminating the Environmental Protection Agency. The debate surges on, with uncertainties regarding climate change clashing at the forefront.

One recent study drawing the attention of both climate skeptics and believers is Andreas Schmittner’s “Climate Sensitivity Estimated from Temperature Reconstructions of the Latest Glacial Maximum,” published in the November issue of Science Magazine. Schmittner’s controversial new study has led some to suggest that “Apocalyptic predictions about climate change are likely to be wrong,” and others to caution that “...people should still expect to see ‘drastic changes’ in climate worldwide, but that the risk was a little less imminent."

Schmittner’s research team analyzed climate sensitivity, which is a measure of temperature rise associated with doubling CO2 concentrations. The results found that more dire forecasts of temperatures rising up to 10 degrees Celsius were highly unlikely - if not impossible - and that a rise between 1.7 and 2.6 degrees Celsius is far more likely. Therefore, many are arguing that the effect of CO2 on climate is far less than was previously thought, as with students given an extension on their papers, some interpret this as an opportunity to continue work on essential environmental solutions, while others see it as an excuse to put climate worries on the back burner.

Although Schmittner’s study has roused debate on the impact of climate change, even Schmittner himself notes that climate change is still a serious issue that governments need to work on addressing. This support is bufferred by cautions from the EPA that “Human-induced climate change has the potential to alter the prevalence and severity of extremes such as heat waves, cold waves, storms, floods and droughts.” Such extreme weather has certainly been a popular point of conversation, with events including the groundhog day blizzard, Hurricane Irene, tornadoes, and drought-fueled wildfires in Texas, New Mexico and Arizona. However, regardless of to what extent these events are associated with climate change or unchecked population growth and poor planning, people are suffering and the time has come to work out plans for avoiding future environmental catastrophes.

The idea of wholly discrediting the importance of climate change or eliminating the Environmental Protection Agency runs the risk of endangering our communities. The importance of environmental protection should not hinge on the imminence of an apocalyptic disaster. Many human and environmental health tragedies are slow to evolve, but nonetheless devastating to all involved. The recent debate over Schmittner’s paper demonstrates the importance of approaching these issues with a shrewd and honest voice that lends trust and credibility in future debates. However, no matter which way the wheel turns on climate change, the manifestation of consequences is still headed in one direction which retains that environmental protection is a critical security for our future.

Eco-Friendly Cars

By: Samantha Gross

I was watching TV one day when I saw a commercial for one of the new electric cars on the market and I was curious about how it compares to other “environmentally-friendly” cars. Here, I compare the new Toyota Prius, Chevrolet Volt, and Nissan Leaf to see how each differs in various categories (not including cosmetic traits, i.e. audio capabilities).

1. Toyota Prius III
   Cost: starts at $32,000
   MPG: 50 miles per gallon (EPA estimated 51 mpg in city, 48 mpg on highway)
   Unique Traits: combination of 1.8 liter gasoline engine and electric motor provides more efficient driving, can run on either gasoline or battery power alone 1.31 kw-hr (NI metal hydride battery)
   Pros: has won several awards, including America’s Best Selling Hybrid, the first hybrid vehicle on the market, low carbon emissions
   Cons: the loudest noise-making vehicle on this list, still has carbon emissions

2. Chevrolet Volt
   Cost: MSRP* of $39,145 but qualifies for up to $7,500 federal rebate + price of electricity to charge up + price of gas
   MPG: 36-38 miles in EV range
   Unique Traits: combination of 1.4 liter engine with 16.0 kw-hr lithium-ion battery with 3-clutch system
   Pros: if you run out of battery life- the car automatically switches into gas mode without telling you, great combination of both electric and gas vehicle, can go longer periods of time without needing to refill on gas, battery warranty for 8 years or 100,000 miles, low carbon emissions
   Cons: takes about 4 hours to charge plus the time spent filling up at gas stations, the car is not entirely electric powered and does require the engine power to achieve normal commutes (estimated 15,000 miles per year), still has carbon emissions

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**Op Ed: My Experience with Occupy Food Democracy’s Farmer’s March**

Last week on December 4th, I had the opportunity to join farmers, community gardeners, and other activists at the Occupy Wall Street’s Farmer’s March. I went to the march with no expectations, only the excitement of being part of and experiencing a monumental movement that would go down as a milestone in our nation’s history.

The Occupy Wall Street movement strives to change the unjust system of our society: people representing the movement feel too much power and influence of our economic and political system lies with corporations and the wealthy elite. The movement wishes to take power away from the corporation and put it back in the hands of the everyday person in order to create a true democracy. The term and movement “Occupy Wall Street” has become iconic for our generation and is applicable to multiple social and environmental issues that concern our nation. One issue in particular that coincides with the initiatives and goals set forth by this movement is our country’s fight for food justice.

The Farmer’s March began at the Cultural Community Garden where a panel discussion took place. Here, we heard from a mix of organic family farmers from across the country in addition to people speaking as founders/members of grassroots programs and various foods’ rights related organizations. They all came for a main purpose, to share the frustration they have with large scale agricultural monopolies. They feel that their lives (as family farmers) and we (the everyday consumer) are directly subjected to the monopolistic agricultural impact on our food supply and their continual existence due to the support received from big businesses and elected government officials.

Farmers expressed that we, the people should have the right to decide what we eat, and the right to have access to a variety of healthy foods in our community. Their central message was the need to restore the power and rights back to family farmers so we can create a food system that functions sustainably, unlike the corporate-run system we have today. The speakers were personable and spoke with passion. Applause erupted from the crowd in agreement to what the speakers had to say. After the panel discussion, the peaceful march to Zuccotti Park began. People accompanied the march with music, song, and colorful signs with meaningful messages for all to see. As we marched, the movement grew! People saw what it was we were marching for and joined us on our walk to Wall Street. The crowd was energizing and the feel of their dedication was prominent. The reaction from people we marched by was nothing but respect and admiration for the cause we represented. All in all, the movement was very powerful and a success. Once the march came to an end at Zuccotti Park, a circle of solidarity seed swap took place, and an abundant assortment of freshly grown food from the farmers themselves awaited us! I feel a place in my heart for those who spoke, and I was given hope when I saw those who joined the march for our cause. The want and need for a food sovereignty is there, it’s just a matter of being heard by the right people!


Speakers in particular: Karen Washington, Jim Gerritsen, Jalal Sabur, Mike Callicrate, Andrew Faust

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**Eco-Friendly Cars cnt.**

<table>
<thead>
<tr>
<th>Model</th>
<th>Cost</th>
<th>Unique Traits</th>
<th>Pros</th>
<th>Cons</th>
<th>Mileage Hybrid, the Wonder Plug</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Tesla Model S</strong></td>
<td><strong>MSRP $70,500</strong></td>
<td>no engine but instead a 170 kW-hr lithium-ion battery, the car can navigate you to the nearest charging station, if someone unplugs your car unexpectedly</td>
<td>if you forget to charge it you may get stuck somewhere if travelling longer distances, the mile-gage may not be entirely accurate at all times, takes about 1½ hours to charge</td>
<td>no carbon emissions, no gas station stops necessary, very quiet while driving, battery warranty for 8 years or 100,000 miles</td>
<td>up to 526 city miles, 270 highway miles.</td>
</tr>
<tr>
<td><strong>2. Chevrolet Volt</strong></td>
<td><strong>MSRP $37,500</strong></td>
<td>no engine but instead a 111 kW-hr lithium-ion battery, the car can navigate you to the nearest charging station, if someone unplugs your car unexpectedly</td>
<td>if you forget to charge it you may get stuck somewhere if travelling longer distances, the mile-gage may not be entirely accurate at all times, takes about 1½ hours to charge</td>
<td>no carbon emissions, no gas station stops necessary, very quiet while driving, battery warranty for 8 years or 100,000 miles</td>
<td>up to 379 city miles, 275 highway miles.</td>
</tr>
<tr>
<td><strong>3. Nissan Leaf SL</strong></td>
<td><strong>MSRP $35,200 but qualifies for a federal rebate of up to $7,500 ($5,000 additional rebate for the state of California)</strong></td>
<td>no engine but instead a 24.0 kW-hr lithium-ion battery, the car can navigate you to the nearest charging station, if someone unplugs your car unexpectedly</td>
<td>if you forget to charge it you may get stuck somewhere if travelling longer distances, the mile-gage may not be entirely accurate at all times, takes about 1½ hours to charge</td>
<td>no carbon emissions, no gas station stops necessary, very quiet while driving, battery warranty for 8 years or 100,000 miles</td>
<td>up to 106 city miles, 92 highway miles.</td>
</tr>
</tbody>
</table>

It is important to note, however, that these vehicles are not a perfect solution to improving methods of transportation to create a more “environmentally-friendly” world. This article is not meant to say which vehicle is best or even to say that any of these vehicles is better than a non-electric or non-hybrid car. Rather, this is just a comparative list of information to hopefully give a little insight into this quickly-growing industry.

*Manufacturer’s Suggested Retail Price*

There is a threat much bigger than climate change, increasing population, food production and the poor economy. It is something most people fail to consider and is the underlying problem to all the issues mentioned above. Scientific illiteracy is a crisis. As environmental threats increase, there has been a lack of solutions proposed due to policy makers’ current knowledge of the issues—or lack there of.

Last month, Congressman Rush Holt came to speak to Rutgers about the epidemic of science illiteracy and the effect it has on policy making and society. Holt is the only physicist in Congress and was the assistant director of the Princeton Plasma Physics Laboratory before he ran for Congress in 1996. In an interview with New Jersey Monthly, Holt said it frustrates him that society is “going through a period of anti-intellectualism that pervades both the general public and Washington” and that other members of Congress often approach him with questions regarding scientific issues. Although it is flattering that they seek his opinion, it is also disheartening that the members make little to no effort to understand the science behind the issues on their own. During his lecture at Rutgers, he spoke about his experience during the infamous anthrax letter scare that occurred in 2001, where letters were sent to media offices that contained anthrax spores. He mentioned how everyone instantly came to him with many questions because they knew him as the “scientist,” even though anthrax has little to do with physics.

However, it’s not just members of Congress who are suffering from lack of science knowledge. U.S. schools rank lower in science proficiency than international schools and a survey conducted by the Harris Interactive showed that 41% of adults believe that the earliest humans lived at the same time as dinosaurs. This lack of basic knowledge will only have detrimental effects when it comes to implementing change in policies, as well as, societal norms. There are some people who do not believe global climate change exists, and some people who simply do not understand the facts. The Harris Interactive survey also showed that “40% of U.S. adults say they are not at all knowledgeable about sustainability.” It is alarming when almost half of the country’s adults do not understand sustainability, especially since sustainable practices may be part of the overall solution to most of our environmental problems.

The biggest challenge we face is more complicated than finding solutions to environmental threats. First we need to begin with educating the public so they understand what the problems are so that they could learn ways to prevent them from reoccurring or getting worse. By having basic knowledge on why these issues occur, it will make finding solutions easier.

**Australia Leads The Fight**

By Evangelina Pena

Australia is taking a big step to preserve the world’s oceans by designating a large part of the Coral Sea off the country’s northeast coast as the world’s largest marine park. As you may know, coral reefs are essential for the life cycle of many larvae and eggs as shelter. Even though coral reefs live below the surface and are stationary, they play important roles such as preventing sediment erosion, protecting coastlines, and using up CO2 (1). Global warming is having an impact on these species. For example, many are experiencing severe bleaching, which is when the coral dies, due to anthropogenic contaminants. They are also dying from increasing sea temperatures because they can only live in temperature ranges from 61 and 86 degrees Fahrenheit (2). These organisms support the most biologically diverse ecosystems on Earth and attract a quarter of the world’s species in the magical underwater world (3).

Australia’s newest marine park will cover 1 million square kilometers, which is equal to the total area of France and Germany combined (4). This protected site will flourish with healthier organisms and it will be a great spot for scuba divers to appreciate and respect the underwater fauna. But not only will scuba divers have a protected place to enjoy the coral reef, but they can check out the many sunken ships located in the area. The location of the new marine park was the site of multiple naval battles during World War II. Finalizations will be made within the upcoming months to decide on exact limits.

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1. [http://geography.about.com/od/waterandice/a/coralreefs.htm](http://geography.about.com/od/waterandice/a/coralreefs.htm)

**References:**


Employees at the dump yard in Pompano Beach, Fla., gave Brian McGuinn zero chance of ever finding the custom-designed ring he had given his wife but had accidentally tossed in his trash at home on Oct. 30. Facing nine tons of 10-foot-high rotten eggs, dirty diapers and other garbage (which made him vomit), he found the ring within 30 minutes.

Sarah Deming of Keego Harbor, Mich., filed a lawsuit in September against the distributor of the movie "Drive" (starring Ryan Gosling) because its trailers promised fast-driving scenes (like those in the "Fast and Furious" series), but delivered mostly just drama.

West Virginia roadkill-cooking activist David Cain told Bloomberg News in October that he generally supported Volvo's new driver-safety technology that warns of objects ahead in the road. Cain pointed out that it was just a warning, that the driver "could still choose to run over something that's good for eating."

Thank you to all those who contributed to our Adopt-A-Family gift drive this year. We filled four large boxes of items with some great gifts including: An Ipod, ties, a basket ball, CDs, make up and more!