Hello everybody! We hope you enjoyed your Spring Break and the beautiful weather we have been having. As finals are approaching please remember to relax, visit professors' office hours, and to think about the awesome plans you may have this summer! This month there are a lot of fun events, such as Rutgers Day, which will be held on April 28th this year. Check out our new page focusing on the Human Ecology Department’s affiliate club, Students for Environmental Awareness. Learn about what SEA is up to, upcoming events, and how to get involved. As always, we welcome your comments and suggestions and are always looking for new writers! If you are interested in writing for the Trail next semester, please feel free to email us (don’t forget you get a credit for doing so)! As a final note, thank you to our wonderful staff for all of their hard work this semester and congratulations to graduating seniors! Even though you are moving on from Rutgers, don’t forget to keep in contact with your professors. Let them know what you’re up to and keep them updated with any internship opportunities you may be able to pass on through your jobs after graduation to current EPIB majors and minors. Have a great summer & see you next semester!

Happy Trails! Dayna

Coral Restoration Foundation

The Coral Restoration Foundation Inc. (CRF) is a non-profit organization that promotes the restoration of coral and the creation of coral nurseries. CRF’s mission is to increase the health of endangered coral species, and empower others to implement those strategies in their coastal communities. CRF has created strategies on their own to grow coral and are actively researching the best ways to increase growth and survival rates. The Foundation is focusing on local corals, Elkhorn and Staghorn corals, whose populations have been severely depleted in recent years. Their plans are to grow these corals and eventually transport them and attempt to restore the original ecosystem.

One fascinating but difficult aspect of CRF’s research is that their research takes place in the open ocean where these reefs once existed. Unlike controlled environments used in most research experiments, the open ocean allows for the most natural conditions, but scientists do have to take into account different variables such as boats, animals, divers, and disease. So far the scientists have had a great deal of success in the nursery and transplanting juveniles to the reefs they’re trying to restore. For example, in Molasses Reef, Key Largo, Florida, CRF’s nursery covers more than an acre of coral.

CRF encourages community effort and divers can volunteer to help them with their daily tasks. Rutgers University’s Oceanography Club was lucky enough to take part in this conservation effort during spring break. 10 students, including myself, were able to see the underwater nursery and learn about the different strategies put into place. It was an unforgettable memory.

While we were in Key Largo, we were able to meet with Ken Nedimyer and Stephanie Roach. Ken is the Founder and current President of CRF, and CNN recently named him “CNN Hero” because of his accomplishments with CRF. In 2003, after he realized that he could grow and transport coral, he went ahead with a proposal for permission to grow and transport coral to degraded reefs. Ken’s effort began with solely 6 corals and after 8 years of restless work, he now has 3,000 successful colonies. Currently, they have about 23,000 coral colonies. Stephanie is the Science and Education Director for CRF. She taught us about the history and work that we would be contributing to; she also led my group while we were underwater. It was great to have met with Ken, Stephanie, and the rest of the CRF crew. The Coral Restoration Foundation is doing great work resulting in incredible outcomes.

For more information, check out this website:

- coralrestoration.org/CRF/index.php?option=com_content&view=category&layout=blog&id=16&Itemid=39

By: Evangelina Pena
Meet Professor McElwee

The Human Ecology Department welcomes Dr. Pam McElwee this semester as the International Environmental Policy professor. Before Rutgers, Professor McElwee was an assistant professor at Arizona State for 5 years. She has been a part of many research projects dealing with biodiversity conservation and climate change. One of her most recent projects was a study of social adaptation and vulnerability to climate change scenarios in Vietnam, one of the top 10 countries in the world projected to be most vulnerable to sea level rise this century. Right now she is working on a new project to evaluate forest carbon market policies in Vietnam, also known as reduced emissions from deforestation and degradation (REDD).

What is your favorite thing about teaching on the Cook Campus?
I like the rural, green nature of the campus. It reminds me of my childhood growing up on a farm in Kansas.

Which courses do you enjoy teaching the most, and why?
I have only taught one at Rutgers so far. I have enjoyed teaching specifically on climate change in the past at my previous jobs, as the topic is hugely important and requires multiple angles and disciplines to tackle it properly.

Is there any advice you’d want to give past, current, and future students?
Write, write, write. Learn to be a better writer – it is an invaluable skill that will stay with you forever. Everyone can improve how he or she composes words and makes arguments.

When you were younger, what did you want to “be when you grew up”?
A political operative – I used to slap campaign buttons on classmates at the tender age of 9 and get them to persuade their parents to vote for my candidate. I actually ended up working at this in my first job out of college, but I didn’t like it very much, so I switched careers to academia after that.

What do you like to do in your spare time?
Reading new authors, travelling to new places, and eating new things are always popular with me.

If you could travel anywhere in the world, where would you go first?
Someplace I’ve never been – probably the pyramids or to Petra in Jordan.

What is your favorite animal?
I find the slow loris, which I encounter in my field research in Vietnam every now and then, pretty adorable.

If a meteor hit the Earth, giving everyone the choice of one super power- what would you choose?
The ability to stop time selectively, so that I could give myself more time to finish projects at the last minute before a deadline. I’m a huge procrastinator, unfortunately.

Another fun fact about yourself?
I was a child film star – I used to make movies for educational purposes at a film studio in my hometown. One of my best pieces of work is “Safety Crossing the Street”, which used to be shown nationally in classrooms. I got paid in ice cream usually.

Where is your favorite place to eat around Rutgers Campus?
I’m afraid I haven’t been on campus long enough to have a favorite yet, but I’m open to suggestions!

Professor McElwee’s office hours are on Tuesdays from 2:30 to 3:30 in the Cook Office Building, Room 215.
Finding that First Job; the Environmental Route

By: Brad Tonoff

Its senior year and your undergraduate years are coming to an end. You know what that means; time to start job hunting. Your search begins—and then you hit a roadblock. You realize that you have just earned a degree in an environmentally related major and have no idea what type of jobs are out there for this type of education. Don’t get discouraged because you are in fact graduating at the perfect time! Environmentally related jobs are becoming widely coveted and widespread. The question most students are posed with is where to find these types of jobs. There are multiple routes to take when starting your job hunt: websites, personal contacts, and of course, there are always research companies!

When it comes to career websites, finding one with relevant jobs related to the environment is hard to find. Many sites do exist, but most of them would not hire a college senior with high hopes and good service. But don’t be discouraged—have you ever been interested in aiding an environmental program at a college or university? If you have the site for you is www.aashe.org. The Association for the Advancement of Sustainability in Higher Education is a great place for all things related to sustainability and higher education. One top feature is the website’s job search. Universities must be signed up in order to use this tool and fortunately Rutgers University is a member. Sign up using your school e-mail and you will have access to the site. Many of these jobs require a high level degree, but there is always a chance that a BA/BS will suffice.

Another helpful site is www.bcorporation.net. “B-corp” is a wonderful site because they do some of the work for you by seeking out socially responsible corporations. This site is great for people who want to work for a company that really makes a point to do good for society. CareerKnight is the old standby for Rutgers students. Keep your eyes open, these companies target Rutgers directly, which gives students a considerably higher chance of getting interviews, as opposed to sites like www.Careerbuilder.com. Then there is www.linkedin.com. Many employers will post jobs only on LinkedIn, it can be a great resource, but it can also be hard to navigate. Here are some hints: 1. When searching for jobs, if people in your network work for the companies that have jobs posted -you will be notified. If this is someone you know personally than you can contact him or her directly and ask for a referral. 2. Look at people’s past work experience. If you find someone who works for a company you like, you may also want to take a look where else they have worked. This can lead to some interesting finds and potentially more jobs.

Technology aside, personal contact can be very helpful. Keep you network handy, find out where your friends work. If they work for a company you are interested in then ask them for a referral. If you are hired, your friend may earn a referral bonus, so it is a win-win situation.

Finally, do your research. There are plenty of lists out there of great companies to work for. Take the time to research the companies that sound most appealing to you. They may have job postings on the website, if they do then apply. If they don’t, send them an e-mail explaining your interest and send over a resume. You never know, you might just get a response and request for interview just for showing initiative! Remember, you have an environmental degree and companies covet that—so utilize it.

What’s going on around campus?

All Natural Foods Fair
Brower Commons
Thursday April 26th
11:00am- 4:00 pm

Rutgers Day – formerly Ag Field Day
April 28th
Check out some of the great student groups and organizations around campus. And enjoy beautiful Cook Campus

Want your group or organization’s next event posted in the Trail?
Email us at epibtrail@gmail.com and we’d be happy to share with our readers!

RUTGERS FOOD STUDY: We are looking for volunteers between the ages of 18-24 who are full-time Rutgers? students to participate in a study about perceptions of the healthfulness of food products and how you make decisions about food purchases. The online survey, which will last approximately 15 minutes, will be conducted in written English. You must be between the ages of 18-24 and a full-time student at Rutgers University. If selected, your name will be entered into a drawing to win one (1) of 10 $25 Dunkin Donuts or Rutgers Bookstore gift card for completing the survey.
Please use the following link to take the survey:
"https://www.surveymonkey.com/s/RutgersCerealStudy"

Check out page 8 for upcoming events with S.E.A!
CAN WE ADDRESS CLIMATE CHANGE UNCERTAINTY?

By: Kyle Walsh

We had a mild winter in New Jersey this year, a trend seen in many other regions as well. While Chicago experienced eighty-degree days before April, parts of Europe saw just the opposite. From the United Kingdom to Romania, Europe faced severe cold and record snowfall during the winter, contributing to hundreds of weather-related deaths according to the New York Times (Nir & Povolod, 2/5/12). Unseasonable or extreme weather patterns have become seemingly common in parts of the world. From tornados ravaging across the South Eastern United States to record droughts in Eastern Africa and Russia, it seems as though the uncommon is becoming common.

It is tempting to blame recent extreme weather events to global climate change. This attribution is problematic because specific weather events, no matter how severe, are not climatic events. Determining the role of an individual weather event in climate change would require it to be part of a long-term aggregate set of events.

Extreme weather and climate change uncertainty was the topic of a panel discussion hosted by the Rutgers University Climate and Environmental Change Initiative and the Initiative on Climate and Society last month. The event was titled Extreme Weather and Climate Change: How Can We Address Uncertainty? It featured four prominent climate scientists from around the country, as well as, a group of Rutgers faculty from various departments. While each of the four panelists touched on a different aspect of climate change, there were many important overarching themes. Each of these scientists agreed that there is a strong consensus on the existence of global climate change. Furthermore it is becoming undoubtedly clear that humankind has, to some degree, contributed to this change.

Communication is key in the idea that climate change is happening and not a government hoax or the product of radical environmentalism. It is far more complex than simply convincing people who do not believe in climate change that it is a reality. According to Joe Witte (broadcast meteorologist turned climate communicator), at least half of the American public believes, or is willing to believe, that climate change is real. Yet these same groups of people waver either in their beliefs or in their willingness to act. It is not enough to explain the science behind climate change when addressing these people. In fact, they may already have an understanding of it. Instead, communication to this group needs to focus on how climate change will impact them personally, and what they can do as individuals to reduce their contribution to climate change.

The Rutgers event was an excellent, informative, and interesting event, as I am sure anyone else who attended would agree. It provided insight into the social and political complications of climate change. Global climate change is a phenomenon that extends far beyond the realm of the physical science used to analyze it. It follows that some degree of adaptation to a changing climate will be necessary. Communication potentially then becomes less about how to mitigate climate change and more about how to accept it and adapt to it.

Even with the knowledge that climate change is occurring and that we as individuals will need to adapt to it, will we ever act collectively to mitigate our contribution? This is rhetorical and the answer is more personal than social. For example, if we hold a panel on understanding climate change but provide bottled water, soda, and color print outs for everyone in attendance, do we fully understand how our individual behavior needs to be changed? A few cases of water or a ream of paper are in no way major offenses to the climate, but this consumption reflects the behavioral trends linked to climate change.

What I am addressing through these questions is the attitude-behavior gap. Awareness does not always predicate action, and our ability to communicate effectively as a society will determine whether we can mitigate and adapt to global climate change. Bridging this gap is a challenge for both individuals and society as a whole. Last month’s climate change colloquium armed attendees with the knowledge of how to approach the many different views toward climate change. Events like these are paramount to bridging the attitude-behavior gap and driving change in the national discussion on climate change.

To access the presentations and information used during the climate change colloquium, please visit http://climatechange.rutgers.edu/symposia.html.

What do those “eco-certifications” really mean?

<table>
<thead>
<tr>
<th>Better Cotton Initiative</th>
<th>Certified Carbon Neutral</th>
<th>Green Seal Minimal-impact</th>
<th>Energy Star</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric from growers who follow low-pesticide and economically viable cotton farming practices.</td>
<td>Businesses fund projects that reduce the same amount of emissions they produce, neutralizing their carbon footprint.</td>
<td>Minimal-impact products and services from renewable sources.</td>
<td>EPA/DEP certified products that will reduce your energy bills.</td>
</tr>
<tr>
<td>Friend of the Sea</td>
<td>Fair Trade Certified</td>
<td>Fair Trade Certified Imported foods that meet international environmental, labor, and development standards.</td>
<td></td>
</tr>
<tr>
<td>Seafood fished from stable populations using methods that don’t impact the seabed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaping Bunny</td>
<td></td>
<td></td>
<td>USDA Biobased Products with a preset amount of renewable agricultural, forestry, or marine materials.</td>
</tr>
</tbody>
</table>
Even in the making, Soil Safe’s current proposal has many issues of contention. While a normal remediation cap is 3-4 feet thick, Soil Safe is proposing to spread 2 million tons of contaminated fill over 20 acres—creating a 30-40 foot cap. Furthermore, while Soil Safe has acknowledged that the site “has not been designed to withstand the weight of the proposed fill,” they have not yet explained how they will address this concern. As for the composition of the cap, the NJDEP has a policy that states that the caps should not contain contaminants that are not currently present at the site, Soil Safe’s proposed cap will include arsenic, a new contaminant to the site.

From past violations to questionable remediation activities, Soil Safe has given the public numerous reasons to doubt the viability of their plan. However, at the following public meeting, Soil Safe still did not address these concerns. Instead, they suggested that many of those expressing opposition—including myself and those I work with—were merely being paid off by a rival recycling facility that was jealous that Soil Safe was chosen for the project. While I certainly found this idea interesting, if illegitimate, it still left the concerns of the public unaddressed. Although I had initially supported the plan, I was ultimately left wondering—will our soil be safe.

**CITATIONS**


V. Dillingham, T., Spiegel, R., DeVito, E., et.al.

New Fungus May Be Solution to Breaking Down Plastics

By: Dayna Bertola

The problem of plastic pollution has been a pressing issue with regards to the environment. Although plastic is recyclable, only 8 percent of the total plastic waste generated in 2010 was recovered for recycling. Companies have made an effort to reduce the amount of materials used to produce plastic products; yet, plastic continues to remain in landfills, oceans and on the side of highways.

A major problem with plastic is that it is photodegradable, meaning it is broken down by exposure to light. Researchers, scientists and environmentalists have been searching for an alternate solution to decompose and break down plastic at a faster rate without using much energy. Pria Anand, a former student at Yale University, was researching different types of Amazon fungi hoping to find a species that would naturally break down plastic. Upon graduating in 2010, Jonathan Russell, took over Anand’s research and was shocked to discover that Pestalotiopsis microspora breaks down polyurethane, a popular type of plastic. There have been other fungi that were also able to partially break down plastics; however, Pestalotiopsis microspora is the only one that was able to perform this function while in water and without oxygen. Scott Strobel, the biochemistry professor who advised the two students believes that due to this discovery, the future of plastic pollution has endless possibilities.

The results may look promising, however, Russell does not want the public to think this is the ultimate solution. He said, "I don't want it to be broadcast as the cure-all to pollution, but it's a modest step towards a very important goal.” The discovery of this fungus may have major benefits for the future of improving the environment, nevertheless, it is still in the early stages and requires further investigation and research. For now, recycling is still a feasible solution that remains optimal for reducing the amount of waste that ends up in landfills and can help improve the quality of our environment without a huge cost to our lifestyles.

Information taken from:


D.C. is GREEN!

Residents of Washington, D.C have access to some of the most innovative, cutting edge supply side measures that make living a green lifestyle extremely easy and affordable. In a dense, highly populated city of well educated, hard working individuals, environmental and health consciousness is pervasive. Endorsement of local goods and services, fair-trade/ethical consumption and green transportation are core values to most residents. Increased demand for green alternatives has mobilized businesses and institutions to not only comply with environmental law and regulation, but to also implement conservation measures that exceed those standards and transform supply chain expectations. For example, one of my favorite restaurants, The Founding Farmers, only purchases local produce, poultry, beef and seafood from Virginia and Washington for the meals they serve. In doing this, consumers reduce the amount of miles their food has traveled from the farm to their plate. Founding Farmers also understands that part of going green is eating seasonally. For example, shrimp is only offered when in season, just as raspberries are available in July, when they are ripe at local supplier farms. The restaurant is LEED (Leadership in Energy and Environmental Design) gold certified, exclusively uses products that are biodegradable, composes food waste, reuses oil from fryers as bio-fuel and operates carbon neutral offset credits via CarbonFund.org. Recently, Founding Farmers has chosen to only purchase poultry raised without the use of human antibiotics, as well as, BGH (Bovine Growth Hormone)- free milk from suppliers. When I first went to the Founding Farmers, I had to make a reservation three weeks in advance! Having seen the booming successes of the Founding Farmers, other restaurants are emulating this economic framework.

In addition to the changes in food consumption, upon my first adventures grocery shopping in DC, I noticed people driving Zipcars. Many individuals rent hybrid Zipcars ranging from one hour to a full day in order to carry out those day-to-day tasks that require the help of a car trunk, such as grocery shopping. The rate of renting a Zipcar is $7 per hour or $60 per day. In comparison to the cost of purchasing a car where one is not necessary in a place like D.C., Zipcars are extremely convenient and affordable. Similarly, DC bike shares allows one to rent a bike for up to 30 minutes, return the bike at the nearest station and grab a new bike to continue the journey! This amazing system allows for one to explore the city without having to worry about retrieving their bike from a far location. The metro system and bus system are accessible and allow for people to get to and from without depending on cars as well. DC is beginning to implement solar panel busses, which I hope to see grow in all cities across the U.S. in the future. Individuals who enjoy running and walking get to reconnect with nature in their daily commutes, which is so desperately needed considering the high employment of office jobs.

These few examples are some of the ways in which D.C. is trailblazing the opportunities for its residents to live an eco-friendly lifestyle.

By: Katie Fudacz
EARTH DAY: Sunday, April 22, 2012

Where it all started...

The idea came to Earth Day founder Gaylord Nelson, then a U.S. Senator from Wisconsin, after witnessing the ravages of the 1969 massive oil spill in Santa Barbara, California. Inspired by the student anti-war movement, he realized that if he could infuse that energy with an emerging public consciousness about air and water pollution, it would force environmental protection onto the national political agenda. Senator Nelson announced the idea for a “national teach-in on the environment” to the national media; persuaded Pete McCloskey, a conservation-minded Republican Congressman, to serve as his co-chair; and recruited Denis Hayes as national coordinator. Hayes built a national staff of 85 to promote events across the land.

As a result, on the 22nd of April, 20 million Americans took to the streets, parks, and auditoriums to demonstrate for a healthy, sustainable environment in massive coast-to-coast rallies. Thousands of colleges and universities organized protests against the deterioration of the environment. Groups that had been fighting against oil spills, polluting factories and power plants, raw sewage, toxic dumps, pesticides, freeways, the loss of wilderness, and the extinction of wildlife suddenly realized they shared common values.

Earth Day 1970 achieved a rare political alignment, enlisting support from Republicans and Democrats, rich and poor, city slickers and farmers, tycoons and labor leaders. The first Earth Day led to the creation of the United States Environmental Protection Agency and the passage of the Clean Air, Clean Water, and Endangered Species Acts. “It was a gamble,” Gaylord recalled, “but it worked.”

Taken from earthdaynetwork.org.

Get out and do something!

Check out nj.gov/dep/seeds/earthday/april.htm for Earth Parties, 5K runs, scavenger hunts, cleanups, and teach-ins in your area!

“Finally the masses are getting it. Now we know ‘being ecological’ is not separate from business, or health, or community. But it is a part of everything we do.”

-Corey Parker; 1970 Earth Day attendee

Earth Day Main Event:

Earth Day on the National Mall in Washington DC will be the centerpiece of Earth Day in the United States. Hundreds of thousands of environmentally-conscious people from all walks of life and all parts of the country will be joined by civic leaders and celebrities for this special event to galvanize the environmental movement.

Participants on the National Mall will be standing in solidarity with the millions of people rallying at Earth Day events around the world from Rome to Rio, Beijing to Beirut. Together, we will Mobilize The Earth and build a sustainable future.

Earth Day On the National Mall
- Free and open to the public
- Top musical talent
- Prominent speakers and celebrities
- Youth rally and voter registration
- Live news coverage, global webcast
- Renewable energy demonstrations
- Non-profit and embassy booths
- Interactive exhibits

Earth Day on the National Mall 2010 musical headliners included Sting, John Legend, Joss Stone, The Roots, Mavis Staples, Jimmy Cliff, Bob Weir and more. Speakers included James Cameron, Jesse Jackson, EPA Administrator Lisa Jackson, Denis Hayes, Billy Demong, Robert Kennedy Jr. and many others.
Campus Connections: SEA

WHAT IS SEA?

Students for Environmental Awareness (SEA) aims to raise awareness about environmental issues and act to make a difference, and we seek to do so in a way that is enjoyable for our members. With strong support from the faculty, SEA is a student-run, activist organization that motivates and inspires individuals to help protect, conserve, and clean up the environment. We are committed to creating environmental change in both Rutgers and the surrounding community by developing awareness campaigns and going above and beyond for the public and the environment.

Interested in joining? In the fall, our meetings will be every Monday at 9:00 PM in the G.H. Cook Room of the CCC. Also check us out on Facebook (group name: SEA: Students for Environmental Awareness) to stay connected and receive updates.

BRING YOUR OWN CONTAINERS

Takeout Doesn’t Always Have to be Trashy

SEA Correspondent: Mukund (Mook) Bangalore

Takeout is great. It tastes good, is open late, and can be eaten virtually anywhere. It’s fast, cool, and a staple of college culture. However, along with all its benefits, takeout has negative environmental implications. The production and transportation of takeout materials — the plastic containers, cups, and bags — result in extensive resource use. Moreover, not only do these materials use up resources, but their single use nature makes them extremely wasteful. Go to any garbage bin around the dining hall — and you will find half eaten food inside a plastic container inside a plastic bag. But takeout doesn’t have to be this way. You can still enjoy those great wings, burgers, and nachos without being trashy. How? By bringing your own containers.

Instead of using plastic containers for food, we can bring Tupperware. Instead of consuming single-use cups, we can bring re-useable bottles. And, instead of picking up plastic bags, we can bring canvas bags to carry our goodies home with us. Generally, most of us have Tupperware, reusable bottles, and canvas bags — and we should apply these items to a variety of circumstances. We don’t just have to use Tupperware when bringing food for a potluck, and we don’t just have to use canvas bags at the supermarket. By using reusable alternatives in many situations — such as takeout, the less we consume, and the more we defy our throwaway culture. We can also grab people’s interest along the way — every time I bring my own Tupperware and canvas bag to takeout, I get more stares than a hipster. Maybe next time I go to takeout someone will have brought a reusable container, too.

UPCOMING SEA EVENTS:

SEA – Earth Day

When: Thursday, April 19th, 12PM – 4PM
Where: Skelley Field
What: As part of our Earth Day Event, we will be at Skelley Field on Thursday, April 19th. We will be having a “Plastic Bag Exchange Program”, in which individuals will receive a free canvas bag for every 5 used plastic bags they trade in. We will then recycle the used plastic bags. We also have other activities and events planned, so stop by during the day to celebrate an early Earth Day!

THE ONES WHO ARE CRAZY ENOUGH TO THINK THEY CAN CHANGE THE WORLD, ARE THE ONES THAT DO
Arielle’s Food for Thought:
Campaign against GE sweet corn

March 17th was a day of action across the nation. Activists came together in front of a local Walmart demanding that they should reject Monsanto’s new line of genetically engineered (GE) sweet corn. Genetically modified organisms (GMO’s) are a growing debate both in our country and around the world. For those who don’t know, genetic engineering is the manipulation of the genetic makeup of plants or animals to create a new organism. Monsanto, a multinational agricultural biotech corporation, leads the way in producing and patenting billions of genetically engineered seeds grown and sold for live stock feed and the production of highly processed foods.

Now, new concern is unfolding as Monsanto intends to extend its GE corn from processed foods and animal feed right onto our plates in the form of canned and frozen sweet corn. This new strain of GE corn remains untested and unlabeled, leaving consumers uninformed and unaware of risks that lie in what they are consuming.

Since Walmart is one of the country’s largest grocery retailer, anything less than a national campaign would have little strength against the force of Monsanto. Activists recognized the importance of their attendance to the event and they seemed to have made a considerable impact on Walmart’s decision. Walmart currently remains undecided but will not be able to ignore the lost profits that will result from not listening to the consumers’ demands. Some grocery stores, such as Whole Foods, Trader Joes, and General Mills, have already agreed to keep the GE sweet corn off their shelves. Will the unmatched power of the country’s largest grocer be next to put their foot down and say no to Monsanto?

Where Did Winter Go?

By: Scott Sincoff

As many Rutgers students sunbathed in bikinis and boardshorts in the middle of 70-degree weather, others noticed that their peers were doing so in the usually frigid month of February. This unusual weather has been caused by the meteorological pattern called La Niña. According to the National Weather Service, La Niña occurs when sea surface temperatures across the equatorial central and eastern Pacific are below normal. The NWS also states that this causes a deeper trough in the jet stream, which leads to more extreme temperatures in many parts of North America.

According to NWS records, the high temperature in Portland, Maine on March 22, 2012 was 82 degrees Fahrenheit, while the average high would usually be around 36 degrees. The National Weather Service also noted that the warmest low temperature on record in Portland was also on March 22 of this year, when it only decreased to 67 degrees Fahrenheit. In comparison, the high temperature in San Antonio, Texas on March 22, 2012 was 77 degrees Fahrenheit. AccuWeather Meteorologist, Heather Buchanan, said that the deep trough has caused unusual temperatures and weather patterns throughout the country. She also mentioned that, “the deepened jet stream has caused weather that people are not used to for this season.”

Many people enjoy the summer-like temperatures during a time when they usually have to de-ice their cars before leaving for school. However, some people may feel that these warmer temperatures in winter may lead towards increasing support for the idea of climate change. According to the National Weather Service, these temperatures are unlikely to happen next year, but could be a sign larger temperature changes in the next ten to twenty years as more scientific research on climate change is being conducted. Some snow and ice may be back beginning December, but we may have to start getting used to warmer temperatures if La Niña decides to become a regular event.
**Eco News: Animal Corner**

**ANIMAL ACUPUNCTURE**

By: Julia Harenberg

Unfortunately, many of us have or know someone that has had to watch a beloved pet grow old or become ill. Despite providing them with the best veterinary care possible, they still suffer. Animal acupuncture has been around for hundreds of years, but its popularity has increased recently. It has been said to be beneficial to many animals with a range of different ailments.

For starters, let us look at what animal acupuncture is. The first use in animals can be traced back to the Jin dynasty of China from 136 to 265 A.D. Acupuncture is an Eastern form of medicine designed to rebalance the body’s energy, or energy flow. Sickness occurs due to imbalances in the body’s chi, or energy flow. Point stimulations can effectively alleviate many different ailments in animals. Acupuncture is used mainly for problems that involve paralysis, non infectious inflammation, and pain. Some examples of conditions that acupuncture is used for are musculoskeletal problems, respiratory problems, gastrointestinal problems and some reproductive disorders. According to the American Academy of Veterinary Acupuncture, located in Hygiene, Colorado, acupuncture can be used for conditions such as hip dysplasia and chronic degenerative joint disease. It can also be used for very athletic animals to keep them in top physical condition.

Acupuncture is completely painless for small animals and only causes slight pain or discomfort in larger animals when the needle pierces the skin. The administer of the acupuncture should be a licensed veterinarian with a certification in acupuncture. And of course, what good would an animal acupuncture article be without some stories about puppies and kitty cats? Murphy, a 17-year-old Golden Retriever (yes, I said 17!), had pain due to her osteoarthritis. She was in excellent condition except for her arthritic hips, a weak back end, and slower mobility due to her age. After receiving acupuncture, she is back to chasing rabbits in the backyard, something she hasn’t done in years, and her energy level remained consistent. She receives treatments on a monthly basis.

Snickers is a cat that suffered a severe skin condition his whole life. It was first thought to be allergies but later was identified as MRSA. However, Snickers did not respond to any of the antibiotics. A few years later, he began to vomit undigested food and had a yellowish nasal discharge when he sneezed. It was discovered that his stomach was dilated with edema and flaccid muscles. Two weeks after receiving acupuncture and a herbal formula, his vomiting decreased, his energy level rose, and his dandruff filled coat began to immensely improve. His condition only continued to increase as he received more treatments.

In general, Western medicine is designed to fix parts of the animal that are not functioning properly, while animal acupuncturists incorporate Traditional Chinese Medicine into their work in order to systematically restore the balance of the animal’s energy, thus affecting the quality of the animal’s entire body. That is not to say that Western techniques are better than Eastern medicine; they just provide different solutions to help our beloved animals.

Sources:
- Natural Awakenings magazine March 2012 issue "Animal Acupuncture: TCM is Not Just for Humans Anymore" by Dr. Jenny Taylor

---

**Conservation Efforts to Protect the Desert Tortoise**

By: Arati Patel

The desert tortoise (Gopherus agassizii) is found in the deserts of California and Nevada. It is adapted to the extreme conditions of the desert; however, recently it has been facing numerous threats. The population of the desert tortoise has decreased by 90% since the 1950’s, according to “The Defenders of Wildlife.” In the Mojave Desert, during the 1950’s, up to 100 desert tortoises were caught. In a survey conducted in 2005, about ten tortoises were caught in the same research area. This is an alarming decrease in the population, which has raised many concerns to wildlife biologists and naturalists.

During my internship for the Student Conservation Association, I had the opportunity to conduct a capture/recapture survey for the year of 2012 on the desert tortoises located within the Mojave Desert. A group of 50 individuals took part in mapping out a plot of the area where the naturalists who were working with us had designated. As a group, we slowly observed the area for any signs of tortoises, and we searched for burrows and tortoise scats. The capture/recapture method requires patience and excellent observational skills. After we had completed observing the area, we caught a total of four tortoises. Reflecting back on the 100 tortoises caught in 1950 in the same area made me realize the great amount of pressure that the tortoises are facing as the population continues to decrease.

Even though the population of desert tortoises has severely dropped, the four tortoises captured was a positive. Originally, the naturalist had predicted that we would capture less. One of the risks desert tortoises are facing is an upper respiratory infection that is exhausting the population. Natural predation is also a factor that is causing the desert tortoise population to decline. When searching for desert tortoises within the research area, we came across a lot of coyote and fox feces, as well as tortoise carcasses. These indicated signs of natural predation playing a role in decline of desert tortoises.

Many of the threats that desert tortoises are facing are caused by biological factors. Conservation efforts, such as monitoring the population of tortoises and studying effects of natural predation, can further help wildlife biologists understand the changes in population. Even if humans are not a direct cause of a decline in a species population, we can still play a critical role in their conservation efforts.

For more information on the desert turtle visit http://www.defenders.org/desert-tortoise/basic-facts also join the facebook group to receive updates on the status of desert turtles  http://www.facebook.com/pages/Save-the-Desert-Tortoise/100188360049479
Flush today, drink tomorrow

With the implementation of water recycling technology, millions of US citizens could eventually have access to clean, purified, and recycled versions of water that originally went down the drain. Treated sewage is not a new concept, perhaps there is little known about it and it is not commonly talked about for obvious reasons. Water recycling treatments are more often used for non-potable purposes. For decades the EPA has been managing several water recycling programs that use recycled water for things that can save potable water. Some examples include: agriculture, parks, cooling water for energy, toilets, construction, artificial lakes and others. Treated sewage has also been discharged into oceans and rivers for years, which eventually supplies drinking water to millions. The topic of purifying sewer water consumption has been talked about and off for many years, but is usually turned down by the general public.

While recycling water is not a new technology, the use of treated recycled water for human consumption is. There are about a dozen agencies in the United States and several more abroad that use treated sewage to replenish drinking water supplies. However, the water does not go directly into household taps. After being treated, the water is sprayed or injected into the ground where it percolates down into aquifers, for later use.

Recycled water that is to be used for human consumption goes through a process whose end result is as pure as distilled water. The sewage water arrives at a water processing plant and runs through a series of micro filters that remove solids and debris. The water then goes through reverse osmosis, where it is forced through thin, porous membranes at high pressure. The water is further cleaned with peroxide and high power ultraviolet light that breaks down any remaining pharmaceuticals and carcinogens. Minerals are added back to the water before it is discharged into the ground, lakes, and reservoirs. The process comes full cycle months later when the water ends up in household taps.

In light of climate change, the fear of water shortage has increasingly become a topic of conversation. Many have made the assertion that water will be the oil of the 21st century. According to the World Health Organization and UNICEF, 848 million people, 1 out of every 8 in the world, lack access to safe drinking water. The amount of water used has increased by more than twice the rate of the world's population growth during the last century (Chu, 2012). Our increasing population coupled with climate change results in serious questions on how to combat water shortages.

Water purification technology can be part of a solution to combat water shortages, not only in areas predisposed to drought, but everywhere. Recycling water results in less water discharged out to sea and more use for agriculture, consumption, and industry. However, wastewater reuse is controversial and public acceptance is hard to come by, which is why experts believe purifying polluted water straight into the tap instead of mixing it into a reservoir will likely take another decade or more. Also, water recycling is relatively costly. Recycled water costs 60% more than simply pumping groundwater, but costs 14% less than desalinated water, which requires 3 to 10 times more energy to generate fresh drinking water (Berringer, 2012). However, those who would be the largest users of recycled water do not have high reserves of groundwater and are already paying large sums to import water. Still, the biggest hurdle in widespread implementation of water recycling programs is not financially centered but psychological; people generally are disgusted by the prospect of drinking recycled sewage water. Many environmental groups believe that as knowledge surrounding wastewater recycling grows, so will adoption and use of the technology in the US.

By: Rebecca Noah

Information taken from:


In Part I, we discussed the impact of giant multinational agribusiness corporations on indigenous farming cultures in India and Africa, as well as their influence in shaping Iraqi agriculture post-invasion. While coming to the conclusion that genetically modified organisms (GMOs) and the seed patents used to force farmers to bend the knee to the will of these MNCs have crippled the rich agricultural history of these regions, this continued investigation takes us to the farmlands of North America. First this article will present a case study of Monsanto business practices on small farmers. Next it will examine the failure of GMO labeling to take root in the US, which will lead to a discussion of the politics of regulation in the seed economy. Finally, we will bring to light the many actions taking place now to combat the growing control over our food supply by a few corporations and what you can do to help.

The documentary, David Vs. Monsanto, (1) describes Canadian farmer Percy Schmeiser's battle with Monsanto. After discovering GMO crops created by Monsanto in his field via natural dispersal from other farmer's fields, Schmeiser was sued by Monsanto for violating its patent laws. After being dragged through years of lawsuits and court hearings, having his fields forever contaminated with GMO varieties he did not want, and losing upwards of $400,000 in legal fees, Schmeiser became another victim of the corporate agribusiness model. According to Monsanto's own website, 145 suits have been brought against farmers with more than 700 being settled outside of court with an added gag order to prevent the farmers from telling their story. As it is in India and Iraq, Monsanto seeds have infiltrated and contaminated small farmers fields and the patent law making the saving of seed illegal have forced farmers to continue to buy GMO seed from Monsanto for risk of further crippling lawsuits. Now GMO products have made it into almost all of our food supply from farmers who willingly plant these seeds to farmers who do so against their will. These contested and unregulated food products continue to evade labeling, leaving consumers widely uninformed of the nature of the products they are eating. In the documentary, The Future of Food, (2) Andrew Kimbrell, the executive director of the Center for Food Safety, details the means by which GMO producing corporations get away with not having products using the GMOs to be labeled as such. Monsanto and the like through their own testing have found GMO plants to be “substantially equivalent” to organic plants, meaning they have the same physical properties and therefore should not be regulated. According to Kimbrell, “Substantial equivalency is obviously nonsense. These at the cellular level, these foods have bacteria, viruses, new genetic constructs that no other food’s ever had in history.” Buying Monsanto’s claims the FDA placed GMO products in the Generally Recognized as Safe (GRAS) category and therefore need not be labeled or regulated. Monsanto, according to its website, (3) claims, “Requiring labeling for ingredients that don’t pose a health issue would undermine both our labeling laws and consumer confidence.” They have continued to use massive amounts of lobbying money to make sure consumers stay in the dark about GMO products, and as part of an industry wide campaign, shelled out 4.6 million dollars in ads to defeat a 2002 measure in Oregon to require such labeling. Furthermore, Monsanto places the onus of the FDA to oversee such food labeling. The question then becomes, why won’t the FDA require labeling? For that answer we must dig deeper.

The premise of the “revolving door” between industry and government centers on the fact that many high profile policy or regulatory positions, throughout the government, are held by previous employees of the corporations either being directly regulated or affected by new policy initiatives. Many of these government officials then go back to these same corporations after having seen to the maintenance of the corporate interests. A high profile case draws criticism to this day as former vice president of Monsanto, Michael Taylor, currently serves as an Obama appointed senior advisor to the FDA. Petitions have been signed as recently as January asking for the removal of Taylor due to his conflict of interest and his work with Monsanto that has helped lead to many of the farming problems affecting the continent today. (4)

Within the last few months there has been cause for hope. On March 12th in a bicausal letter from Congress, 55 members appealed to the FDA to label GMO foods. (5) In addition, February saw a bi-partisan effort from the New Jersey legislature to force GMO foods to be labeled as such. Senators Robert Singer R-Monmouth/Ocean and Joseph Vitale D-Middlesex introduced a bill forcing GMO foods to be labeled. (6) Furthermore the campaign, “Just Label It,” has drawn over one million signatures. (7) If GMOs can be labeled as 90% of Americans wish, consumers can begin to make informed choices about the foods they buy and the market for GMOs would suffer. The MNCs realize this, which is why companies, like Monsanto, have spent over $30 million in lobbying since 2008, mostly in attempts to stop labeling. The purity of agriculture can be restored and this is one step towards that end.

Information taken from:
2. http://www.youtube.com/watch?v=QTz3rSxQj2Y
Drill, Baby, Drill: U.S. Rep. Louie Gohmert of Texas may have been joking, but according to a February Washington Post story, he seemed serious when searching for yet more reasons why the U.S. should support oil drilling in Alaska. Caribou, he said, are fond of the warmth of the Alaskan pipeline. “So when they want to go on a date, they invite each other to head over to the pipeline.” That mating ritual, Rep. Gohmert concluded, is surely responsible for a recent tenfold increase in the local caribou population. [Washington Post, 2-7-2012]

In assigning a bail of only $20,000, the judge in Ellisville, Miss., seemed torn about whether to believe that Harold Hadley is a terrorist -- that is, did Hadley plant a bomb at Jones County Junior College? In February, investigators told WDAM-TV that the evidence against Hadley included a note on toilet paper on which he had written in effect, “I passed a bomb in the library.” However, no bomb was found, and a relative of Hadley’s told the judge that Hadley often speaks of breaking wind as “passing a bomb.” The case is continuing. [WDAM-TV (Hattiesburg, Miss.), 2-8-2012]

John Hughes, 55, was fined $1,000 in February in Butte, Mont., after pleading guilty to reckless driving for leading police on a 100-mph-plus chase starting at 3:25 a.m. After police deflated his tires and arrested him, an officer asked why he had taken off. Said Hughes, “I just always wanted to do that.” [Montana Standard, 2-4-2012]

Comments, questions, or concerns? Email us at EPIBtrial@gmail.com
We’d LOVE to hear from you!

Congratulations to our graduating seniors!
Good luck in all of your future endeavors!

You’re off to great places,
Today is your day!
Your mountain is waiting,
So... get on your way!

It’s spring fever.
That is what the name of it is.
And when you’ve got it, you want -- oh, you don’t quite know what it is you do want, but it just fairly makes your heart ache, you want it so!

~Mark Twain