

New York Water Environment Association

Clarkson University Student Chapter

Volume 8 2007-2008 School Year

NYWEA Members Participate in Power Shift 2007

In November, student members represented Clarkson University at Power Shift 2007, a national 3day global warming summit at the University of Maryland to discuss climate change and its solutions with other college students from across the country. At the event, students attended Panel Sessions and Workshops to discuss a diverse spread of topics, ranging from the scientific background of climate change and technical aspects of its solution to associated social issues and skills training for grassroots mobilization at campus and community levels. To complement these sessions, dozens of speakers sought to engage and empower our upcoming generation through their experience, and included wellknow environmentalists such as Van Jones and Bill McKibben alongside progressive grassroots reformers and main-stream politicians like House Speaker



Nancy Pelosi and former EPA administrator Carol Browner. On the final day of the conference, attendees descended upon Washington, D.C. to make Congress take global warming and our visions of a green future seriously, with hundreds packing in to enforce youth presence at a Congressional Hearing of the Select Committee on Energy Independence & Global Warming, lobbying to their local Senators and Representatives, and

being heard at the weekend's culminating rally on the steps of the U.S. Capitol. The event, with students coming from all 50 states and every background, served as a great opportunity to unite in our goals of solving the climate crisis through massive youth organization, as well as a chance to share experience and knowledge that can be used to raise awareness and spur progress back home.

~Michael Jahne

Clarkson University's Environmental Design Team Wins Presentation Award at Competition in Las Cruces, NM.

Clarkson University's environmental design team, Clarkson University Remediation Engineers (CURE), won best oral and bench-scale presentation award in the 18th annual International Environmental Design Contest (EDC) at New Mexico State University. The team is part of the University's Student Projects for Engineering Experience and Design (SPEED) program.

The student teams design solutions for real-world problems while developing fully operational bench-scale solutions that are presented to panels of judges comprised of environmental professionals. The teams prepare four different presentations:



written, oral, poster and benchscale model. The Clarkson students competed very well in this competition of 13 teams, winning the only presentation award awarded in this task this year.

The Clarkson team's design task was to design an inland desalination process including the safe disposal of the non-hazardous waste in rural, isolated commu-

nities. The developed process would supply sufficient drinking water for a town of approximately 40,000 people in rural New Mexico at economical water rates. The team's proposed solution for the conversation of blackish (salty) water into drinking water included the use of green technologies such as the use of renewable heat source and the sale of 20 tons per day of the gypsum recovered from the brackish source water.

The EDC is hosted by the Waste-management, Education and Research Consortium (WERC), one of the three cen-

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2007-2008 Officers

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Clarkson NYWEA Members Reach Out to Local High School

This past spring, NYWEA members went along and visited Potsdam High School for our annual "Adopt-A-School" visit. The basics of this visit include not only educating the students about environmental engineering but also talking to them about college. We do this visit towards the end of the year for their Environmental Studies class. which ensures us that most of the students are interested in applying the knowledge that they have learned over the course of the year. We split up into a few different groups and gave presentations to the students.

One of the projects that we did was a small sand filter. We colored some water blue and sieved it through a small sedimentation system to show that after time, the sand will decrease the turbidity of the water significantly. Many of the students enjoyed this project and were able to see how sometimes, very simple applications worked very well. We then discussed many other forms of water treatment, such



Above: Local high school students learn about water treatment through a Gatorade Ion Exchange Lab

Below: Students and Members conduct a lab about soil permeability.



as chlorination, ultraviolet treatment and other forms of filtration.

Another project that we set up involved the removal of color using ion exchange resins. We took some regular juices and chemically separated the coloring compounds from the juices, and presented some to drink to show how the coloring doesn't do anything to change the taste. We then discussed how ion exchange is an effective method

to remove small amounts of a charged contaminant from water.

We had another station set up that had a nice lot of clay, sand and other soils in it. From this, we had more students talking about erosion and the effects that water and wind have on different types of sediments.

After the presentations were finished, one of our graduate students then gave a short presentation on his research project. The students really enjoyed hearing

about the practical ways that we are trying to cut down energy emissions. After we had a plethora of questions asked about college life in the crown of the north country, we then were led on a tour of the school's greenhouse. All in all, it was quite the lovely time.

~ Michael Guethle

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If you are interested in helping to support this student newsletter and receive advertising to both professionals in the environmental field as well as those students on their way to becoming professionals please send an email to the Chapter Adviser: grimberg@clarkson.edu

CDM Comes to Campus

Toby Topa from Camp Dresser & McKee, CDM, were invited by our NYWEA chapter to Clarkson. CDM serves public and private clients worldwide as a firm providing consulting, engineering, construction, and operations services. Kingsley is an active NYWEA member and both Kingsley and Topa are practicing environmental engineers at

CDM in Massena, NY. They came to speak at Clarkson at 6 pm on November 14th, 2007. The presentation they delivered provided the attending students with insight and perspective on professional life post graduation. Kingsley and Topa discussed past projects and the types of work they have done along with detailing the projects

they were involved with at the time. Students posed to them inquiries they had while discussing career-life at CDM. This time provided interaction between NYWEA members who are further into their careers and students looking to find the career that fits them and their interest in the environment.

~ Sarah Hunte

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Exciting News for BBL

ARNHEM, THE NETHERLANDS September 30, 2005

Blasland, Bouck & Lee, Inc. (BBL) is pleased to announce that it has merged with ARCADIS, an international consulting and engineering company.

"We have been very successful developing our environmental business in the U.S. market, but our clients are asking us to serve them more broadly at the international level. ARCADIS provides numerous growth opportunities for BBL, including the international platform that allows us to further serve our clients globally. This opens new perspectives for our staff," commented Robert Goldman, CEO of BBL. ARCADIS global CEO Harrie Noy said, "BBL brings to us a milestone opportunity in the position and growth of ARCADIS. Combined, we become one of the top 5 providers in the environmental market and a clear leader in providing environmental services to all of our clients at a global level. BBL also brings a highly successful business model that will form the basis for serving ARCADIS' multinational clients on a global scale."

Career Opportunities with Blasland, Bouck & Lee, Inc.

BBL offers new college graduates a career opportunity with unlimited potential.

We provide career growth, whether entry level or senior level, a strong-team oriented environment, and a professional yet friendly atmosphere. It is our goal to provide our employees with a flexible, affordable benefits plan that meets their needs.

We constantly strive to improve the quality of our services and products, and we recognize that one way to achieve this is by hiring the best and the brightest individuals.

What is ARCADIS?

ARCADIS is an international, publicly traded company dating back to 1888 with corporate headquarters in Arnhem, The Netherlands, and U.S. headquarters in Denver, Colorado. The company had \$1 billion in gross revenue prior to acquiring BBL. In the U.S., the ARCADIS environmental practice is equivalent in size to BBL, giving the combined companies an environmental staff of nearly 1,800 professionals and more than 100 offices located throughout the United States. Additional information can be found on the ARCADIS web site (www.arcadis-us.com).

BBL/ARCADIS at a Glance

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For More Information

For more information, please contact Human Resources in our Syracuse office at 315-446-9120. You can also visit the careers section of BBL's web site (www.bbl-inc.com).



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Clarkson Professor Bill Vitek Talks to NYWEA Members

In September of 2007, Professor William Vitek presented his talk, "Curiosity, Education, and the Still Unlovely Human Mind" to NY-WEA members. A self-titled philosopher, Vitek's presentation discussed the more human perspectives of sustainability issues; providing engineering students with a necessary complement to their often strictly technical education. Vitek's talk centered mostly on his recent book of the same title. Vitek touched on many of the issues facing the world today (most having nothing to do with engineering), including the ethical ramification of replacing food crops with energy crops (and the resulting increase in food prices and famine); global warming and CO₂ concentrations in the earth's



atmosphere, and many other topics considered "soft" to many engineers.

While not strictly engineering, the topics that were discussed are of great importance to engineers. Many times, while trying to solve smaller problems, engineers and other technical persons seem to forget to consider the larger perspective and the global consideration of their work. Vitek's work is purely putting the smaller problems into the larger perspective and then showing these problems to the world. Often simply presenting the problems without solutions, the discussions nonetheless are thought- and action-provoking: his discussion of the world's energy crisis and the mindset of the humans of today bring a new dimension to the engineering problems that are being discussed and solved by many NY-WEA members today.

~Max Martin

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NYWEA Members Appointed to Clarkson Presidential Environmental Policy Group

In April, President Michael Jahne and members Madison Quinn and Michael Guethle were appointed to the newly formed President's Environmental Policy Group, initiated by President Tony Collins to examine Clarkson's sustainability and environmental policies and practices, draft a formal declaration of commitment to environmental sustainability and stewardship for adoption by the University, and coordinate implementation of the new policies and practices. As members of this diverse, voluntary

advisory board of faculty, staff, and students, student representatives are able to participate in an ongoing discussion of the University's current standing and improvement opportunities, as well as its future direction through long-term plans to improve campus sustainability and environmental responsibility moving forward. Moreover, as these developments progress the group is charged with coordinating implementation of any new policies and practices adopted by the University, giving them a central role in actively reducing Clarkson's

environmental footprint. Under the guidance of this focus group, Clarkson aims to join the many local and national colleges and universities that have taken a leadership role in addressing climate change and sustainability issues, setting a positive precedent for greater society to follow.

~ Michael Jahne

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Clarkson Student Attend Annual NYWEA Conference

In February, several graduate students and undergraduate NYWEA officers, accompanied by advisor Dr. Stefan Grimberg, attended the 80th Annual NY-WEA Conference at the Marriot Marquis in New York City.

The conference brought together professionals from across the state for three days of seminars and presentations on the present and future quality of our water environment, and included a University forum in which one Clarkson graduate student, David Page presented his environmental research. David's research focused on modeling anaerobic digesters treating dairy manure. This research is over utmost importance for Northern New York since farming represents the predominant industry in that area. Three chapter



officers (president Michael Jahne, vice president Max Martin, treasurer Sarah Hunte) as well as two NYWEA Chapter members (Sabina Gerstenberger and Amy Wormsley) also attended the event, and discussed ideas about chapter events, membership drives, and other activities with the other student groups attending the conference. Students were also able to meet with state officers and prominent Young Professionals, providing both an excellent networking

opportunity and a chance to consider the importance of bridging the gap between the collegiate student chapters and the Young Professionals division upon graduation.

Of course, the students took full advantage of their stay in Times Square. The group enjoyed dining in The View revolving restaurant and walking the bustling city streets, and several caught a show on Broadway.

Overall, the trip was an enjoyable, productive experience, and we look forward to the opportunity to return for next year's conference.



Environmental Engineering Senior Design Competition (Cont.)

ters that make up the newly developed Institute for Energy and the Environment (IEE), and uses an interdisciplinary research agenda to address environmental sustainability. EDC is a unique event that brings together industry, government and academia in the search for improved environmental solutions. Held annually since 1991 at New Mexico State University in Las Cruces, New Mexico, the contest draws hundreds of college and high school students from throughout the United States and around the world.

The Clarkson team members that competed at New Mexico State University were Jonathan Brown, a senior engineering and management major from Canandaigua, N.Y.; Benjamin Brown-Steiner, a senior environmental engineering major from Rochester, N.Y.; Benjamin Durfee, a senior civil and environmental engineering major from Chittenango, N.Y.; lan Kuchman, a

senior civil and environmental engineering major from Rochester, N.Y.; Daniel Lupone, a junior civil engineering major from Syracuse, N.Y.; and Mark Surette, a senior civil and environmental engineering major from Herman, M.E. The supporting team members are Omobogie Amadasu, a senior civil engineering major from Lackawanna, N.Y.; Alexander Bauer, a senior environmental engineering major from Baldwinsville, N.Y.; Ryan Davies, a senior civil engineering major from Plattsburgh, N.Y.; Brodie Follman, a junior engineering and management major from Orchard Park, N.Y.; Jeremy Four, a senior engineering and management major from Eldred, N.Y.; David Hechmer, a senior civil engineering major from Potsdam, N.Y.; Kathleen Jones, a senior civil engineering major from Groton, N.Y.; Nicholas LaPlant, a business major from Ripton, V.T.; Gregory Moore, a senior civil engineering major from Camillus,



N.Y.; Jared Thisse, a senior civil engineering major from Martinsburg, N.Y.; William Toft, a senior environmental engineering major from Berkeley Heights, N.J.; Christopher Wahl, a senior engineering and management major from Oswego, N.Y.; and lan Yerdon, a junior civil engineering major from Baldwinsville, N.Y.

~ Stefan Grimberg





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VW Dieselution Tour Stops at Clarkson University

The Clarkson campus was privileged to be included in Volkswagen's Dieselution Tour in 2007 on the 4th and 5th of October. The NYWEA club on campus assisted the hosting of this interactive mobile exhibit aimed at educating the public on advances in clean diesel technology and alternative fuels. We also assisted students from surrounding middle and high schools who came to see the displays. Clarkson University's Center for the Environment accompanied this event by sponsoring a Clean Energy & Transportation Expo. The expo featured displays and poster presentations from the community and Clarkson faculty and students, including our NYWEA club's vice president Max Martin who presented a poster on his research of school bus emissions. Some of the other topics featured were sustainability of the biofuels revolution, wind energy research, biofuel performance and emissions, energy and environmental implications of fuel ethanol pro-



duction, biodiesel for school buses, and generating biogas on dairy farms.

For four-months the Dieselution Tour traveled around the United States stopping at locations and events such as auto shows and environmental and alternative fuel festivals. The main display of the tour was inside a 53-foot, double-expandable, semitrailer. Exhibits and interactive displays entailed an "Alt Fuel / Alt Film" video area, a "Dieselab" with interactive and video displays, a "Diesel Heritage" section that illustrated VW's diesel history and leader-

ship, a "Sustainability Station" with an interactive quiz and carbon footprint calculator, a "Beyond Diesel" perspective featuring SunFuels like ethanol and solar power, and a "Motorsports" display that outlined VW's recent history and success in diesel racing vehicles. The Dieselution Tour also featured a few vehicles including a 1977 Rabbit Diesel, a Polo BlueMotion, a TDI Touareg, and a 2009 Jetta TDI that is a 50-state clean diesel vehicle.

Enlightening and entertaining, Volkswagen's Dieselution Tour was a success at Clarkson University through sparking interest and fueling innovation.

~ Sarah Hunte

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grimberg@clarkson.edu

Other Activities: Planet Earth Night, Earth Day Campus Clean-up

In April, members of NYWEA and the Clarkson community gathered to watch a few episodes of the BBC's acclaimed "Planet Earth" series. Chicken wings were served on biodegradable plates made from potatoes. The episodes that we watched served to deepen our understanding of environmental issues at hand, and to gain a deeper appreciation for the miracles surrounding us in nature.

For Earth Day we organized a campus-wide clean-up which culminated in BBQ and live music.







NYWEA Student Chapter is an organization for students pursuing a career in the environmental field. Meetings take place about once a month. Meetings include information about future projects, guest speakers, and refreshments. Local chapter dues are \$5 and state dues are \$25. Joining NYWEA is a great way to meet other students in the environmental field, and professionals already in the field.

INTERESTED IN JOINING NYWEA??

EMAIL MICHAEL JAHNE AT JAHNEMA@CLARKSON.EDU TO BE PLACED ON CLARKSON'S NYWEA EMAIL AND VISIT US ON THE WEB AT:

www.clarkson.edu/~NYWEA

ADDITIONAL INFORMATION CAN BE FOUND ON THE OFFICIAL WEBSITE AT:

www.NYWEA.org



Student Membership Drive:

Each year NYWEA officers and members dedicate a great deal of time and effort into recruiting new members. We feel in order to maintain our integrity and reputability as a NYWEA Student Chapter it is vital to maintain substantial membership. Therefore, at the beginning of each semester and continuously through out the year, our officers and current members promote NYWEA whenever and wherever possible. New membership is vital to the sustainability of our Clarkson Chapter and is considered one of our top priorities. If you are interested in joining an organization that is concerned for protecting and maintaining our environment then be sure to visit our table at the Open Houses, and the Student Activities Fair.

Help Support This Student Run Newsletter!

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