October/November Edition

By Allie George, External Vice President

We apologize for our absence in October, but be assured that it was not for lack of things to talk about! There’s been a lot going on over the past two months, and even more planned for the upcoming break. Check out what we’ve been up to lately!

Travel

The end of the semester doesn’t mean the end of work for our international projects. Both our Cameroon and Uganda programs are set to travel over the break, with the Cameroon team heading out shortly after Christmas, and the Uganda team departing immediately after exams. We wish both projects the best of luck, and look forward to hearing from them upon their return!

Year-End Campaign

As some of you probably know, we are in the midst of EWB-USA’s annual fundraising push. During the Year-End Campaign, EWB-USA has pledged to match all donations that are received through their established donation sites. Half of these matched funds will go back to support EWB-USA and the work they do to make projects like ours happen, and half will go directly back to the projects themselves. This is a great way to make your donations (or your employer’s donations) go even farther! For more information or to make a donation, please visit our EWB-GT fundraising site at: https://ssl.charityweb.net/ewbusa/opf/ewbgtyearendcampaign.htm. We hope that you will join us in supporting our cause!

Advisory Board

We appreciate those of you who were able to take time out of your day to either join us in person or remotely for our advisory board meeting. If you missed out, we will be meeting again in the spring, so hopefully we will see you then!

Staying Involved

Hoping to work more closely with our group? We can find a way to facilitate that! If you are in the Atlanta area and are interested in attending a meeting (or working with a particular project), please do not hesitate to let me know! You can reach me at allie.george@gatech.edu, or check out our website (ewb-gt.org) for meeting times.

Fall Showcase

Each semester, EWB-GT takes time to share its work with its many stakeholders, investors, mentors, and friends. This event had always been fun, informative, and enjoyable to all parties involved. Hear more about how it went in our next newsletter.

Uganda Assessment Trip

On December 13th, our Uganda team will board their flight halfway around the world. The project will be featured in our next project spotlight, and we are looking forward to seeing what all they accomplish. Best of luck to the travel team members!
Spring Break in the Navajo Nation

By Heena Dani and Larissa Ruckl

In March 2013, five students from the Georgia Tech Engineers Without Borders chapter and a mentor visited the Navajo Nation reservation in Arizona on an assessment trip. Navajo Nation was one of the few projects chosen to be in EWB-USA’s new domestic pilot program. The Georgia Tech team was excited to meet with Forgotten People, the partner non-governmental organization (NGO) that they had been working with all year, as well as visit the five households that the NGO has been working with. They stayed with Marsha, the leader of the NGO, and drove out to one or two households each day.

The students had done much research about the governmental ban called the Bennett Freeze, which was put in place in 1966 to settle a land dispute between the Hopi and the Navajo tribes. The Bennett Freeze was lifted by Obama in 2009, after more than 40 years. This ban restricted any development in the area, including repairs, and left the people with severely outdated and dilapidated infrastructure. While the team had been aware of the governmental ban and the situation at hand, they were not prepared for the overwhelming amount of housing reconstruction that this area needed.

The households had no running water or plumbing systems, limited access to clean, treated water, little to no electricity, and pit latrines, along with other concerns. Forgotten People specifically contacted the Georgia Tech chapter for assistance with the water issue. They previously built tank stands for water tanks to provide gravity-fed running water into a few houses; however, these designs did not survive or were unable to function through the winter. The Georgia Tech team’s main objectives were to serve as consultants to Forgotten People in troubleshooting the current tank apparatus design, to test the water sources for arsenic and other toxic contaminants, and to discuss the concerns and needs of the families and individuals involved with Forgotten People. While visiting each household, the students were able to take measurements of the current water tank system, sample the soil and nearest water source, measure tank and pit latrine distances from the households, obtain exact coordinates for each location, and get to know the native Navajo inhabitants. After each visit, the data was compiled and the water tests were completed. In between the work, the students also got to experience some Navajo culture, and even learned how to make Navajo flatbreads. After returning from the trip, the Navajo Nation project group decided to broaden the scope of the project due to the desires of the families they spoke to and the observations they made. They are now working on designing a new toilet and a heated shower, in addition to redesigning the tank stand for increased safety and resilience. They plan to have tangible designs by the end of spring 2014, and hope to make another assessment trip to Navajo Nation that summer.
During the first weekend of October, our chapter hosted the 2013 Engineers Without Borders Southeast Regional Conference, which brought together over 150 students and professionals for a weekend of knowledge sharing and networking. The focus of the weekend was a series of different breakout sessions, which encompassed a wide array of topics. Sessions ranged from a technical introduction to a water distribution modeling software called EPANET, presented by members of our Uganda program, to a session about how to anticipate and minimize hazards associated with projects in rural communities. The keynote speakers for the conference were internationally known individuals from the Water Sanitation and Health (WaSH) sector. Cathy Leslie, the Executive Director of EWB-USA, spoke on Saturday morning about the current state of EWB-USA, and Susan Davis, Executive Director of Improve International and GT alumna (also the first female Buzz!), spoke on Sunday morning about what is necessary to implement sustainable WaSH projects. Throughout the conference there was also a noticeable emphasis on not only better project management and technical execution, but also better chapter management through better recruitment and retention techniques. Other notable parts of the weekend were the Welcome Reception and Networking Session co-hosted by the Department of Civil & Environmental Engineering on Friday night on the roof of the new Clough Undergraduate Learning Center, and the cornhole tournament at Rocky Mountain Pizza on Saturday night. We hope that every attendee came away with new ideas to improve their projects and their chapters, and new contacts and friends within the region that they can reach out to for support.
Half the world’s population cooks on inefficient, air-polluting stoves, and household air pollution was recently ranked as the 4th leading health risk worldwide. EWB-GT’s Clean Cookstoves group works to connect communities suffering from prolonged smoke exposure with cleaner burning cookstoves.

In mid-November, we held a stoves demo outside the Georgia Tech Student Center to increase on-campus awareness of cookstove issues. We also sold marshmallows for passersby to roast over our stoves in order to raise funds for air quality testing equipment. Students and faculty were drawn to the aroma of toasted marshmallows and the warmth of our fires (which were especially inviting on such a cold and blustery day). We ended up raising over $100 in donations and s’mores sales. The stoves demo bake sale was so well received that we have decided to make the event an annual fall tradition.

This semester we took a deeper look at methodologies for collecting cookstoves data and performing air quality assessments. Analyzing the air quality of biomass-fueled fires requires the examination of two central emissions: carbon monoxide and particulate matter. A carbon monoxide meter was donated to our group last semester, and this semester we were able to purchase our first particle counter. We were excited to try out the new particle counter during our most recent stoves test. We were even more excited to see that the particulate results looked great; numbers indicated that the tested stove had performed at safe levels according to EPA standards. We will continue to analyze air quality and improve our testing techniques in preparation for our upcoming implementation trip in May 2014.

Cookstoves on Campus

By Heidi Vreeland, Cookstoves Extraordinaire
Meet the Executive Board (Continued)

Internal Vice President – Reut Koren

My name is Reut Koren, I'm a third year Industrial Engineering student and Internal Vice President of Engineers Without Borders. I got involved with EWB my first year and I have enjoyed all the amazing experiences I have had the opportunity to be a part of through EWB. I have been active in planning the general meetings which include organizing an activity or discussion, as well as getting speakers to present.

I have recruited new members during each semester as Internal Vice President and hope to further grow our chapter and attract members that would contribute to the vision and mission of EWB. I hope that I can help further enhance the involvement of members in the organization and continue to make EWB an organization that members can thrive in and enjoy being a part of.

External Vice President – Allie George

Hi, I'm Allie George, and you probably are familiar with my name for filling up your inboxes with these newsletters. I am a fourth year studying Civil Engineering with an environmental focus, a Spanish minor, and an international plan designation. I am from St. Augustine, Florida, and have been involved with EWB-GT since I first arrived at Georgia Tech.

As our External Vice President, I am responsible for acting as a liaison between our organization and external companies, organizations, and individuals. Some of my specific duties include maintaining this monthly newsletter, arranging advisory board meetings, and connecting professional folk with the appropriate projects or individuals on our end. I am also very active in our Uganda Program. I served as its first technical director and an original travel team member, and I am excited to return to the community in just a few weeks.

Outside of EWB, I enjoy playing beach, excuse me, "sand" volleyball, along with the occasional game of flag football or basketball. My other interests include running, travel, sustainable development, and working on our family farm in South Georgia.

Treasurer – Alexander “Levi” Levit

My name is Alexander Levit, although I normally go by “Levi”. I am a fifth year Civil Engineering major, and have recently decided to pursue a career in medicine. I will be graduating in December of 2013. I have been involved with EWB since the spring of 2011, and have had the opportunity to work as a design engineer, project team member, External Vice President, and now Treasurer. I travelled to Cameroon on an implementation trip in May 2012 to work towards the completion of a water distribution system. While I enjoyed being on a project team, I would have to say that the most fulfillment I have found in EWB is troubleshooting various financial problems such as late ticket purchases, grant allocation and project team emergencies.

While serving as Treasurer, I have worked towards putting new methods in place to ensure the accountability of future treasurers, and also to increase transparency in chapter finances in order to streamline the handling of chapter funds.
My name is Josh Cherian, and I am a fourth year biomedical engineering major from Branchburg, New Jersey. I've been a member of EWB for three years now and helped plan and organize the Southeast Regional Conference this past October as the conference chair. In addition, I am the co-leader of the Navajo Nation project.

I joined EWB because I wanted a way to use everything I was learning in my classes, and now that I'm about to graduate, my experiences in EWB have definitely come to shape my career goals. We now live in a world where many people own a mobile phone and have at least some basic access to the Internet, and I want to use this fact to bring modern healthcare to areas that may not have had access to proper healthcare in the past. Outside of EWB, I’m a member of GT Neuro, which is the neuroscience club at Georgia Tech, and I enjoy reading as well as playing and listening to music.

We are excited to welcome Raunac Khandaker as our first official club-wide design chair. Raunac has been very helpful in designing our conference logo, various flyers, and potential t-shirts for the upcoming semester. We look forward to seeing what else she produces to help better publicize our club!