Distributions

Engineers Without Borders-Northeastern University is excited to present our first edition of Distributions, our quarterly newsletter.

A Quarterly Newsletter

Issue No. 1 - Fall 2009

Northeast Regional Workshop

By Daniel Sullivan and Roxanne Meuse

In early November, EWB-NEU hosted the 2009 Northeast Regional Workshop. The collaboration between the members of EWB-NEU, the leaders of the Northeast Region, the various speakers involved, and the large number of participating EWB student members made this workshop a great success. Close to 300 people attended, from Maine to Delaware.

The workshop helped the various chapters in attendance communicate with each other, learn about each other's projects, and hear lectures on a variety of EWB-related topics from the 45 different speakers in attendance.

The keynote speaker was David Murphy, a graduate of Northeastern, who addressed the assembly about the technical and emotional aspects of reconstructing tsunami-devastated areas in Indonesia. The tsunami had destroyed over 120,000 homes, as well as schools, hospitals, and bridges. Murphy and his family lived in Indonesia for several years to help rebuild the communities. He shared powerful photographs from this experience with us, and those in the audience will not soon forget them.

Informational sessions covered technical, cultural, environmental, and economical aspects of EWB, as well as ones about the structure of EWB. Many of the sessions were hands-on, further facilitating the communication and



EWB members gather for a photo in the lecture hall of West Village F, the headquarters of the weekend's events.

understanding of the participators.

"The technical sessions were really helpful, e.g. land surveying, concrete design, and advanced water system design theory. It was really useful to connect with other chapters who were working on similar projects and discuss strategies for overcoming similar technical problems," commented one student.

"I really enjoyed the 'Growing Your Chapter Panel,' because it gave us a chance to discuss our issues and figure out a way to progress. On the same lines, I really liked the 'President's Forum,' because it gave us presidents a chance to network and talk about ways to better our chapters," said another student.

There were many opportunities for students to socialize and network with each other throughout the weekend. At Saturday's dinner in the student center (the only venue capable of seating so many people!), tables were labeled by regions of the world that EWB chapters were working in, and students took advantage of this by sitting and conversing with students from similar project regions.

Informational and interactive sessions, coupled with the social networking that took place, helped every chapter involved to become more knowledgeable and will contribute to their impact on their campuses and throughout the world. We are already looking forward to next year's workshop and wish the host school good luck!

"Do not wait for leaders; do it alone, person to person"

-Mother Teresa

Spotlight on...Gabe



By Gina Palino

Photo: Facebook

The day I first met Gabe Woolf-Sullivan, he instantly stuck out. He was aggressive, avid about his ideas, and serious about getting what needs to be done, done. Gabe is currently one of the Co-Chairs of the fundraising committee, a freshman civil engineering major, and so much more.

Throughout the time I have spent working with Gabe, I learned that he is not only an EMT, but also a firefighter and a lifeguard. Helping others is clearly important to Gabe and one of the many qualities that make him an asset to EWB-NEU. In addition to all of the time he spends co-chairing a committee, he also finds time to help out with our Uganda project. Often times I find myself asking him, "When do you sleep?" to which he replies, "What is that? I don't have time for that." Gabe is my co-chair, and I am grateful that he shares my passion for EWB. He brings his enthusiasm to every meeting, keeps me motivated, and is always filled with new fundraising ideas. I know that he will continue to grow as a conscientious worker within EWB and soon help fill the roles of our current leaders. This will not be an easy job, but it is one that I know Gabe will be prepared for.



Photo: L. Johnson

Update: **Uganda**

Photo: M. Walsh

By Charlotte Alger

I can't believe a year has gone by since the Uganda project has started. This time last year, we had just submitted our application to help the village of Bbanda, Uganda address its water shortage. So much has happened since then! It's easy to forget all that we have accomplished amidst the future deadlines that keep us all so busy.

Having visited Bbanda in April, compiled our assessment report, and examined various technologies for conveying water, we are now working on in-depth design and preparing for our next trip this spring or summer. Designing a "system" for Bbanda was a challenge. We couldn't rely on the triedand-true method of piped water that works so well for villages in Honduras, as Bbanda is large and dispersed and has no source of energy that can move water. Instead, we estimated the demand, picked locations in the village that will provide a good distribution of water points, and zeroed in on the right technology for those water points.

We are now compiling our implementation plans and evaluating several quotes for drilling two boreholes in downtown Bbanda. Whew! And that's just the short of it.

"The Earth is what we all have in common"

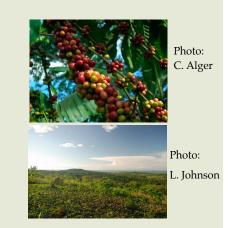
-Wendell Barry

Why We Start with Water

By Matt Walsh

Some people ask me "why?" Why Engineers Without Borders? But most importantly, why start with water? What if we simply provided a few people with the education and tools to do it themselves? I used to ask the same questions. Why couldn't I bring books? Why not sponsor education for the children in our villages rather than simply encourage it?

It wasn't until I was on the ground, experiencing the lives of the "bottom billion" first hand that I began to think back to my questions and realize why we were beginning our mission with water. Everywhere we went, we were met with a sea of smiling faces, each grasping to touch the skin of a Mizungu, or "white person," waving furiously in hopes of a wave in return, or simply staring in awe with their tiny eyes. These children shared similar backgrounds, and they'll most likely share similar fates.



The beauty of Bbanda lies in the faces of its people and of the environment.

Prior to my trip to Africa, I had always assumed that if we provided the villagers with education, it would surely help them to their feet. I then began to realize the enormous amount of time spent each day, mainly by children, collecting water. UNICEF claims that over 40 billion hours of productivity are lost each year to collecting water in the developing world. Forty *billion*. How could the children attend school and

Photo: K. Dunn.

How could the children attend school, and subsequently gain a better education, if the majority of their time was spent out of school collecting water for their families?

Our trip to Uganda brought us thousands of miles from home to witness how the "bottom billion" truly live. It was life changing in so many ways and taught me lessons I'll take with me through life. Most importantly, it taught me that access to clean water truly is the world's greatest challenge, and as an engineer, I feel obligated to assist in the solution.

Thank You

... For the T-Shirts

Thanks to the combined efforts of the Public Relations Committee, the Fundraising Committee, and several creative individuals, we are all looking forward to the January arrival of organic cotton T-shirts. Each T-shirt has a quote, either by Wendell Barry or by Mother Teresa, each of which can be found in one of the large pictures of this newsletter.

The process of planning both the order and distribution of the T-shirts was led by Jake Tischler and Alex Raymond. Alison Baggen designed the Earth-water drop graphic (see below) and worked extensively with the screen printer. The quotes were found by members of the Culture/Education Committee.



T-shirt Design: Alison Baggen

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Update: Culture/ Education

The Culture Committee is dedicated to accustoming the people of the regions we work in to understand who we are, how we aim to help them, and how the water systems we design can be properly used and repaired.

By Alex Raymond

The Culture Committee has been working hard this fall semester. We've been primarily focusing our efforts on



researching and creating educational materials for Uganda. We're hoping to travel with these materials on the next Uganda

Photo: C. Alger

trip to begin implementation of our materials. Moving forward into next semester, the Culture group is going to be split up into two groups, one with Honduras, led by Megan Fritz, and one with Uganda, head up by Roxanne Meuse.

Who We Are

President: Ann Polaneczky

Vice President of Chapter Administration: **Zubin Joy**

Vice President of Projects: Matt Walsh

Treasurer: Kelsey Dunn

Secretary: Ryan Moynihan

Public Relations Coordinator: Jake Tischler

Honduras Design Lead: Daniel Sullivan

Uganda Design Lead: Charlotte Alger

Co-Chairs of the Fundraising Committee: Gina Palino and Gabe Woolf-Sullivan

Culture/Education Committee Lead: Alex Raymond

Local Service Coordinator: Andrew Childs

Note from the Editor

I am very excited to be the editor of the first EWB-NEU newsletter! Doing my part to help EWB progress has been one of the best experiences of my college career thanks to the people involved and the work that we do, and I hope that you learn about both from reading this newsletter and those to come.

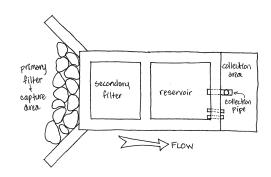
-Roxanne Meuse

Technical Corner: Spring Boxes

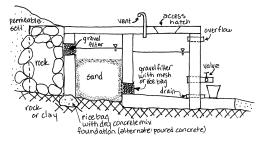
Technologies of Developing Countries' Infrastructure

By Ann Polaneczky

Springs are a commonly used, and generally safe, source of drinking water in developing countries. To prevent water from becoming contaminated, a spring box can be built to contain the spring. A spring box is a concrete or masonry structure made by excavating the spring and constructing a box similar to the one drawn below. The water passes through gravel, sand, and some sedimentation as a natural method of filtration. From the spring box, the water can flow into a distribution system or collection tank. Spring boxes are made of locally available, inexpensive material, and require minimal maintenance. Similar spring boxes are part of our projects in Los Planes, El Chaguite, and El Carrizalito, Honduras, as well as potentially part of our source protection efforts in Bbanda, Uganda.



Plan View of a Spring Box



Profile View of a Spring Box