

Regnier Traveling Fellowship

Monthly Report: June, 2006

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SUMMARY

This first month has been a great experience. I have three projects going right now: my internship with Mexico's Green Building Council, sustainable research at the Tec, and my case study investigation. There was an extra room at the house of one of my co-workers at Mexico GBC, so I found a place to stay for the summer without trouble.

I'm working mornings from 8 a.m. to 1 p.m., which leaves afternoons open for me to work on my other projects. I have been working on these at the Universidad Tec de Monterrey. I made great contacts with professors at the Tec and I go there regularly to meet with professors, help out with a construction project, and swim in the evenings.

Huston Eubank, from the World GBC, sent some case studies and contacts for buildings in Europe. I'm using these case studies and the web sites on which they appear as examples in finding a good format my own case studies and web site.

I took a weekend trip to Cd. Victoria to visit old friends from my semester at the Escuela Prepa during high school. It was a great visit and I even got a few pictures of a traditional style of brick dome. The dome was approximately 15 feet in diameter and I am told that it was constructed without any formwork.

I have a two week trip planned to meet with architects visit sustainable projects in Mexico City, Tlaxcala, Puebla, and Oaxaca. I'll be leaving July 12 and return to Monterrey July 25. I have yet to plan my trip to Loreto, although Peter Clark, Director of Sustainability for the project has let me know that I am welcome anytime in August.

MEXICO GREEN BUILDING COUNCIL

My work here at the "Consejo Mexicano de Edificación Sustentable" consists of helping out with all the current projects that are on the table. Since there are only five of us working on a regular basis, I get to help out with all projects and see how all aspects of the projects work.

The project that has us all busy our International Sustainable Building Conference and Expo, which will be taking place in November. I am coordinating our sponsorship efforts with American firms. This gives me the chance to work on my professional Spanish vocabulary and use my English as an added value to the Council.

Aside from contacting American firms about sponsoring this event, I translate documents such as our Sponsorship Prospectus and am working on contact databases for exhibitors y sponsors. The web site for the Conference is up and can be accessed as www.edificacionsustentable.com.mx.



RESEARCH AT UNIVERSIDAD TEC

My search for sustainable buildings and techniques to write case studies on, which will make up the majority of web site content, led me to the Tec. I'm in contact with Architecture Dept. directors and professors at the university who have offered a number of architecture and sustainability contacts here in Mexico. Dr. Pedro Pacheco recommended that I look at examples of traditional adobe houses and other examples of "arquitectura vernacula" and mentioned specific projects in and around Mexico City and Oaxaca. "Arquitectura vernacula" is the traditional style of country housing where homes are built from materials collected around the site. Walls are made of adobe and reinforced with straw. The adobe thermal mass maintains the temperature inside the house without the need for air conditioning. Roofs are made from bamboo and palm fronds. All the materials required to build the house end up costing very little and they save energy when in use. Additionally, the method in which they are constructed: neighbors getting together to build a house, is very sustainable for the community. It creates bonds between townspeople and unites them as a community.

At the university, Dr. Pacheco is in charge of a program called 10 Casas Para 10 Familias. Through this program, students in a seminar work with families that need housing to design and then build houses made from reclaimed industrial waste materials, like pallets and formwork. He invited me to work with a group on a mock-up building using donated fiberglass encased wood frames. The intent of the mock-up is to see whether the design, which uses louvers to take advantage of natural ventilation, can be viably used in the quick construction of disaster relief housing. One of the biggest disasters in Mexico is lack of sufficient housing among the poor.



It has been great to get back to doing some carpentry work. Even in 100+ degree heat. I also get a sense from the construction standpoint of how non-standard, post-industrial material use can add time to the schedule for all the customizing that must take place on site. In this case, since much of the donated wood was warped, cupped, and twisted, none of the panel spaces ended up square, so we had to re-cut the panels to fit between the posts.

TRIP TO MEXICO, PUEBLA & OAXACA

Arriving July 12th in Mexico City, I will spend 3 or 4 nights there and visit high performance, energy saving, commercial office buildings. My schedule isn't confirmed yet, but I'm in contact with and hoping to meet José Picciotto and visit these projects of his: Corporative Insurgentes 553, a building that houses a hotel and offices; Edificio Eclipse is the office building of Mexico's Department of Energy so there are many energy saving elements designed into this building; finally Parque Insurgentes, another office building displaying energy saving elements.

Another big project I plan to visit in Mexico City is the new HSBC bank tower designed by HOK architects. I'm in contact with folks in their office, who are working to coordinate a visit for me with the folks at HSBC. This project is currently seeking LEED certification through the U.S. Green Building Council.

Apart from this project, Estela Tijerina, one of the other principals at Mexico's Green Building Council, is putting me in contact with Arq. Eduardo de Leon. Eduardo de Leon is passionate about water conservation and consults on how to save water both in eco-construction and eco-agriculture. His office in Mexico City displays some of the water conservation techniques he has designed.

Tlaxcala and Oaxaca have GRUPEDSAC Centers for Sustainable Construction. These centers offer workshops on building traditional sustainable buildings in the vernacular architectural style. They also offer classes on integration of food gardens in houses and how to use treat grey and black water to both irrigate and fertilize plants.

Arq. Blanca Amaro, a professor at the University of Puebla, will show me sustainable projects in Puebla and have me as a guest in her class to talk about what I'm doing on this trip and view student projects that are based around principles of sustainability.

As it turns out, I'll be in Oaxaca just in time for the cultural festival of the year, Guelaguetza. This is a festival that celebrates a bountiful harvest and gives thanks to the goddess of corn, and dates back to the indigenous people that settled the area and began farming 3000 years ago. I look forward to participating in the festivities.



CONCLUSION

The trip is off to a wonderful start. I'm very excited about the people I'm meeting, the work I'm doing with Mexico's Green Building Council and the excitement surrounding sustainable construction exhibited by many of the people I meet. This fellowship experience really is a dream-come-true and I want you all to know how much I appreciate the opportunity to carry out this investigation and explore the world. Many thanks and I look forward to keeping you updated on my progress.