## Gaining a World View Act-M students exposed to European environmental issues

When Brandon Hartley traveled to Belgium last summer, he gained a first-hand appreciation for international soil and water issues.

Story by Kathy Wythe

Hartley, a Texas A&M University biological and agricultural engineering major from Santa Fe, Texas, is one of 24 students who have traveled with the department's Environmental Soil and Water Study Abroad Program to Belgium over the last two summers to obtain a different view of environmental soil and water issues.

"The program gave me a chance to experience something totally different from what I was used to," Hartley said. "It gave me a global perspective on what I will be pursuing after graduation and some of the problems I may need to face in a global market."

Dr. Clyde Munster, a professor in the Department of Biological and Agricultural Engineering, organized the program. "Our students need to get international experience," he said. "The job market is not just state- or United States-wide anymore." The five-week program, scheduled to correspond with A&M's second summer session, is hosted by the Katholieke Universiteit of Leuven, Belgium. The Belgium Study Abroad program costs \$3,000, which includes lodging, meals and field trips. Students are responsible for their A&M tuition, airline ticket and spending money.

r

Each summer the program offers two non-engineering courses and one engineering class for six hours of course credit toward graduation. Engineering students can take one of the non-engineering courses as a technical elective. The study abroad program, which satisfies the international and cultural diversity requirement, is open to all students in the Texas A&M University System.

In summer 2007, Munster and Dr. Ann Kenimer, a biological and agricultural engineering professor, will teach a basic environmental hydrology class (one engineering section and one nonengineering section) and an overview class on the technology for environmental and natural resource protection (nonengineering course).

Munster said classes are intense with all-day, in-class teaching on Tuesdays and Wednesdays, and field trips to different water and wastewater projects unique to Europe on Thursdays. Since Belgium is small and centrally located, the group has traveled to the Ardennes region of Belgium as well as the Netherlands and Germany on field trips.

"The field trips allow the students to compare and contrast European ways to solve environmental problems," he said.

One of the students' favorite trips is to the Delta Works project in the Netherlands. The Dutch developed this project after a huge North Sea flood in 1953 broke dikes and seawalls, killing nearly 2000 people and forcing evacuation of 70,000 more. The flood defense system consists of 13 projects, one of which is called *Oosterscheldekering*, which is a series of 50 to 60 gates that can be opened and closed to keep the sea at bay while preserving the saltwater river delta for wildlife and for the fishing industry.

"They came up with a solution that is environmentally sound but still protects," Munster said. "It's very cutting-edge technology."

Hartley, whose home is near Galveston on Texas' coast, said he was particularly interested in this project because of the damage of Hurricane Katrina in 2005. "Observing this project has reassured me that once people put their minds to something, they can accomplish just about anything," he said.

Hartley said since the A&M classes are open to other international students—students from Vietnam, Iran and Kenya were in the 2006 classes—he learned about environmental problems in those countries as well. Both Hartley and Craig Birkenfeld, a biological and agricultural engineering student from Nazareth, Texas, said they were intrigued with Belgium's sophisticated recycling program.

In Belgium, Hartley said, every piece of land is put to good use. "What is not used for towns or cities is used for agriculture," he said. "Everything is recycled because they do not have any land for landfills."

"I was amazed at how much effort is put forth to avoid wasting materials," Birkenfeld said. "I think I may be able to apply these practices to my career field some day."

Elvin Sterns, who participated in the program in 2005, said that in every interview he has had since participating, he has been asked about his experience and what he gained from the program. Sterns, who graduated in May 2006 and is currently interning at the National Association of State Departments of Agriculture, said because of the program, he became interested in international water issues.

"Many other countries are not as modern as the United States when it comes to water management," he said, "and that is something where we could use our knowledge to help others."

Munster agreed that the program gives students a diverse outlook.

"The students gain a different perspective on the world and other people's culture. They see things a little bit differently." Munster said. "But they also see that we're all basically the same."

