

UGA Tifton saves energy and recycles

By Susan Varlamoff, Director, Office of Environmental Sciences

The administration at the University of Georgia's Tifton Campus wanted to make their campus more energy efficient, but it was budget cuts the campus faced in 2008 that made going green an necessity.

Over the past two years, administrators have significantly reduced their energy and waste management costs by taking small steps towards a greener campus.

"We began with a practical approach to be more efficient with our natural resources," said Joe West, assistant dean of the University of Georgia Tifton Campus.

"When the budget cuts started in July 2008, the only way to make the cuts without losing personnel was to reduce energy consumption," West said.

West launched a campaign on campus to get people to do simple things like turn down the thermostat and turn off lights when leaving an empty room. And the campus staff began being more responsible regarding energy use on weekends and holidays. The campaign netted a savings of \$100,000 and reduced energy use by nine percent over a one-year period, he said.

"Next we asked our power provider, Georgia Power, to conduct an energy audit to identify low hanging fruit such as adding insulation, retrofitting buildings with energy efficient windows and doors, and using more energy efficient lighting, heating and cooling," West said.

Over the course of three years, every interior fluorescent fixture on campus has been replaced with energy efficient lights. Now parking lot and building exterior lights are being replaced with high efficiency, low power LED lights. "In spite of an eight percent power rate increase, we further reduced our energy expenditures by five percent," he said.

Natural gas has been added to Tifton Campus' energy portfolio. It burns cleaner than coal or oil and is significantly cheaper than propane gas.

"We are converting peanut and tobacco dryers to natural gas. And, we tapped into a natural gas pipeline brought onto the campus by the UGA Veterinary Diagnostic Laboratory to power an incinerator at a greatly reduced cost when compared with the diesel fuel they had been using," he said. Soon an electric boiler at the UGA Tifton Campus Conference Center will be replaced by a more efficient natural gas boiler, reducing heating costs there.

The campus has also made a concerted effort to reduce water usage and improve irrigation efficiency.

“We were watering turfgrass research plots with city water so we converted that to a more economical campus well. We use ponds to collect surface water to irrigate research land through pivot irrigation, and our scientists have developed variable rate irrigation to more precisely apply water as it is needed in the field, even using soil moisture probes and radio-telemetry to transmit this important information to the computer controlled pivots,” West said.

Before this spring, only a few buildings hosted can-recycling bins.

“It was kind of a mish mash,” said Ashley Cochran, a UGA agricultural education major who helped create the Green PAW recycling program on the Tifton Campus. “You knew where to put your cardboard or your cans, but there wasn’t really a campus-wide effort.”

Only the most dedicated recyclers would make the effort to find a recycling bin. Cochran and Green PAW Founder Brandi Bishop wanted to make it easier for people to recycle.

Bishop, also an agricultural education major, secured a grant from the UGA Office of Sustainability to place about 30 recycling bins all over campus. She and Cochran then launched a large-scaled education effort to let people know that the bins were out there.

A senior from Pike County, Bishop had started a recycling program at her high school so she and Cochran built on that experience to create Green PAW.

In addition to promoting the use of the bins for on-campus trash they developed a collection and pick up schedule with Tift County Recycling that allows faculty members and students to bring their recyclables from home. They won’t know until the end of fall semester how much waste the recycling effort has kept out of local landfills, but they know people are using them, and that’s a start.

The Future Farmstead, located on the UGA Tifton Campus, will showcase leading edge technology and management practices to help farmers improve efficiencies – human, natural resource, and energy – as they produce food. Slated to open by early 2013, the project will include a net zero energy home operated by solar and geothermal power and many water conservation features.

“We hope to transfer many of these ideas to campus,” West said.