

Sweet Briar plants native grasses to produce biofuels



Rolling hills, woods and fields surround Sweet Briar's main campus, as seen here in 2010 photograph provided by the college.

Posted: Monday, May 12 Amy Trent

Conservation researchers set about killing the grass on about 500 acres of land at Sweet Briar College this spring in preparation for a multi-year study that could have implications for landowners and

environmentalists nationwide.

This past fall, FDC Enterprises, a conservation service company, was awarded a grant to support its study aimed at demonstrating that energy crops and wildlife friendly practices can go hand in hand. The Conservation Innovation Grant is from the federal Natural Resource Conservation Service and the United State Department of Agriculture.

Last month Sweet Briar College announced it had partnered with FDC Enterprises, offering up about 500 acres of land, on which to conduct its study.

"These are dedicated energy crops that are environmentally sustainable and wildlife friendly," Tom Schwartz, vice President of Marketing for FDC Enterprises, said.

The land is ideal, Schwartz said, because it allows researchers to limit the kind of variables that often affect data.

"They're kind of pioneers in helping us to demonstrate that fact that we can establish these crops, create energy independence and do something good for the environment."

Now, the company is beginning the process of planting warm season grasses, big blue stem and switch grasses, which are native to this area. They also will plant up to 80 different species of wildflowers that will bloom throughout the year in a variety of colors and attract pollinators. Researchers, as well as some SBC teachers and students, will monitor closely this pollinator habitat, which is expected to make a positive impact on agricultural crops. About 30 days after the planting, Schwartz said visitors can expect to see some changes in the landscape. By the fall, there will be a marked change.

In the fall of 2016, the company anticipates collecting its first full harvest of warm-season grass, which Sweet Briar will sell for biofuel. Researchers will be studying the land and the affects for three years, at which point Sweet Briar will have an option to sign on for another five years.

Sweet Briar long has been taking steps toward sustainability and Scott Shank, Sweet Briar College's vice president for finance and administration, said the agreement was a perfect fit for the college given its property and desire to become carbon neutral. Warm season grasses — which produce large amounts of biomass, help with soil erosion and water quality, don't have to planted year after year and require little to no fertilization — sequester carbon more than the cool seasons grasses that were in place.

"There is a positive impact on your carbon footprint through this conversion," Shank said. He calls the collaboration "another step forward in our environmental stewardship" that aligns with academic programming as well.

The project will have minimal impact on students. The grass is harvested once per year, compared to the three times a year the hay is cut. And the grass will be at its height while students are away for the summer. No college programs had to be relocated to accommodate the study.

Shank is particularly excited to be part of a program that makes a positive impact on the environment as well as on the college's finances. Depending on the yields, the college anticipates receiving about \$50,000 per season for the grass. The school does not have the resources to use the biofuels, but Shank hopes the school will eventually move in a direction that would enable it to become a biofuel consumer.

The money SBC receives will go into the college's general fund.

Sweet Briar's collaboration gets the school involved in cutting edge research, and confirms the staff's commitment to the environment, Schwartz said.

"They are showing their willingness to establish environmentally sustainable practices that are viable across the United States," he said.

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