

CONSERVATION *Showcase*



Switchgrass Entices 43 Southeast Iowa Landowners

The USDA's Natural Resources Conservation Service offered landowners in southeast Iowa incentive payments and cost-share in the 2007 Environmental Quality Incentives Program (EQIP) signup to seed down switchgrass for use as a biomass energy crop and for other alternative energy uses.

A total of 43 contracts totaling \$690,513 that cover 1,920 acres were signed through this EQIP incentive. Contracts run for five years.

"We didn't have a lot of time to promote this incentive," said Bruce Trautman, assistant state conservationist for field operations in Fairfield. "It went unbelievably well, though. Results exceeded my expectations."

Switchgrass is a perennial warm-season grass native to Iowa, grown for decades on marginal lands not well-suited for conventional row crops. As a conservation method, switchgrass is beneficial for controlling soil erosion, reducing chemical and sediment runoff and providing nesting, cover and habitat for wildlife.

The EQIP incentive was offered to southeast Iowa counties where a local priority was identified. Switchgrass has become a more viable option in this area of the state, as a potential biomass energy crop. Chariton Valley Resource Conservation & Development (RC&D) in Centerville recently coordinated the Chariton Valley Biomass Project, Iowa's first major switchgrass demonstration project, which also served as the premier switchgrass production site in the United States. The project demonstrated



Switchgrass

switchgrass as an energy source by co-firing it with coal at the Ottumwa Generating Station.

"Southeast Iowa landowners need to be ready when power plant burning of switchgrass with coal goes commercial," said Dora Guffey, Chariton Valley RC&D Coordinator.

President Bush brought further attention to this part of the state when, in his 2006 State of the Union Address, he mentioned switchgrass as a way to help develop bio-based transportation fuels from agricultural waste products. This mention brought national media, such as ABC's Good Morning America, to southeast Iowa.

Today, there is still a limited market for harvesting switchgrass as a biomass energy crop in Iowa, but much potential exists. "That's one of the reasons we made these contracts run five years," said Dave Brommel, EQIP coordinator for NRCS in Iowa. "There has been a lot of talk about a variety

CONSERVATION *Showcase*



of uses for switchgrass, and if we can get the switchgrass on the ground, producers will be ready when the need is there.”

Along with co-firing switchgrass with coal to produce electricity, other potential uses of switchgrass include:

- ecologically safe construction panels
- converting switchgrass to pellets for use in gasifier pellet stoves and furnaces
- producing biodegradable plastics using flour from switchgrass
- feedstock for ethanol production, along with corn
- animal bedding
- mulch

Contracts for this special 2007 EQIP incentive averaged about 45 acres, so most producers signed up only a portion of their farm. Marion County District Conservationist Jay Jung recommended producers place some land in the program, just to test the waters. “I want Marion County producers to be ahead of the learning curve when or if switchgrass becomes a more viable product here,” he said. “I want our producers to be the leader in that movement. That would provide the community economic development and help the producers that we serve.”

Jack Bensink of Pleasantville took 28 acres from an expiring Conservation Reserve Program (CRP) contract and placed it in the 2007 EQIP incentive. Bensink believes switchgrass could replace corn as a source for ethanol. “If corn is grown on too many acres and the demand goes down, whoever is on the learning curve ahead of everybody else on switchgrass, might see the money,” he said.



Marion County District Conservationist Jay Jung inspects a switchgrass plot near Lake Red Rock. Jung signed up eight landowners totaling 248 acres to seed switchgrass for five years through the 2007 EQIP incentive.

Even though corn prices are high this year, Bensink says seeding a portion of his land to switchgrass is still cost-effective. “If the switchgrass pays off like it could, I would make as much or more money off switchgrass because of less labor,” he said. “I could plant it once and only fertilize it a little bit. You don’t have to put many chemicals on it and I can still use it to hunt birds. As a hunting area, it’s a win-win situation.”

Rory Worthington of Pleasantville knew he wanted to seed down switchgrass as soon as he saw the EQIP incentive. He will replace 26 acres of row cropland this fall or next spring and seed it with switchgrass. Worthington also runs a small beef herd on 70 acres. “Switchgrass gives me an option of harvesting it and selling it for biomass, or if that doesn’t work out in five years, I can make hay on the switchgrass for the cattle herd,” he said.

Worthington also sees the environmental benefits switchgrass provides. “In Marion



Jack Bensink raises these quail to be hunted on his property. Bensink will use the switchgrass for wildlife habitat, and hopes to harvest it for biomass production in the future.

CONSERVATION *Showcase*



County, we need more options than just corn and beans,” he said. “We can’t afford to take residue off the ground. Our ground is too vulnerable to erosion. Switchgrass is hopefully another option for farmers that will work down the road.”

Guffey says the EQIP incentive is a good risk for southern Iowa farmers. “We want producers to be ready for all of the potential markets for switchgrass,” she said. “In the meantime, switchgrass will protect the ground from soil erosion, improve water quality in the area and provide wildlife habitat.”

-30-

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