Another Conservation Success Story...

Irwin County, Georgia

March 2009

Micro-Irrigation on Small Farms

In the early 1900's, Henry Powell bought some land outside of the community of Fitzgerald in Irwin County and started a farm. Today, Jerome Powell, a third generation farmer, farms the same land his grandfather farmed – 11 of his 14 acres are now under micro-irrigation.

Vance Heirs (left) of United Irrigation System, Mary Leidner, district conservationist in Tifton and land owner Jerome Powell talk about the micro-irrigation system he had installed.

Powell was raised on the farm and left only when his Country called him to duty. "I graduated high school in 1965 and came back here in 1970 for one or two years then moved to Florida. I lived my life here except for my service and when I lived in Florida for three years. I learned how to farm right here," said Powell.

During his service in the Army he served a tour in China where he became interested in micro-irrigation. He tried other irrigation systems, travelers, set guns, and pivots but decided to make a transition into drip irrigation after seeing the wasted water. "I look at the type of irrigation around, I have irrigation as well, but what made me really look at it was—other better farmers land. As long as they water the fields that's fine, but when they get to the end of the field going into to the branches and out into the road, they are not making any use of it. I got into it because of water source," said Powell.

> ***"Credit to life, give back in a normal aspect for the future generation to enjoy." —Jerome Powell***

Powell learned about the USDA-Natural Resources Conservation Service (NRCS) from reading books, newsletters and a soil conservationist. "What got me into it more was when Carl Brown, a soil conservation technician for the NRCS and another older gentleman, did a lot of research out here on the different types of soils and I'd catch up with them and ask them questions, said Powell. "And then I took agricultural in high school. Carl Brown would come by and give us lectures on different types of water and soils—and all that he did in his field."

"The drip system with plastic puts the water in the root zone. There is very little evaporative loss. You are only watering the area under the plastic, not the whole surface area. This is a very good water conserving practice," said Mary Leidner, district conservationist for the NRCS in Tifton.

Powell believes in conserving water wherever possible, that's what he likes best about Environmental Quality Incentive Program (EQIP). "Water conserving; it will help you get the crops to the point that you want. Where I was using three gallons of water I now use one, for example. With EQIP and the set up I got, I can water 4 acres in 16 hours all due to the drip and it's all from the source direct to the plants," said Powell.

Participating in the EQIP has helped Powell to make changes in his operation. He believes that the program is a big incentive. "I haven't found anything that I don't like about EQIP yet. There are a lot of good advantages in it. Your work load shifts. It has a lot of good saving features in it: expenses, time to market, and it helps you save time as well," said Powell.

"Other practices in use on the Powell farm are irrigation water management, pest management, and nutrient management," said Leidner.

His benefits are yet to be seen but he has toyed around with using the micro-irrigation system versus the conventional overhead watering with great results.

Jerome Powell explains to the other farmers how the equipment makes the planting beds, installs the drip holes, and then lays the fabric over bed during the field day on his farm.

He said, "I experimented on the watering, drip verses conventional with overhead watering; I go from seed to mature watermelon in 65 days using the drip verses 90 to 110 days using the conventional watering method based on what type of melon. Crops grow faster with micro-irrigation."

Powell's philosophy for future generations is simple. "Credit to life, give back in a normal aspect for the future generation to enjoy."

Jerome Powell demostrates how to make the rasied planting beds for the micro-irrigation system.

NRCS Natural Resources Conservation Service

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Middle South Georgia Soil And Water Conservation District

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