A GROWER'S STORY

Best Management Practices Water Conservation



Strawberry growers of Fancy Farms, Inc. in Plant City, Florida, are working with UF/IFAS researchers and extension agents to test, implement and share best management practices (BMPs) with farmers.

Carl Grooms began growing strawberries in 1974. Since its inception, Fancy Farms, Inc. has been a family business involving Carl's son Dustin and his wife DeeDee.

"Well, my father was a vegetable and strawberry farmer himself, so I was raised in agriculture," Carl said. "As I got older, I decided I was going to get into agriculture and started Fancy Farms from nothing and built it up to what it is today."

Carl said he was a late adopter of drip irrigation, a BMP most strawberry farmers utilize. Carl said while this practice does not necessarily produce more berries, they are of better quality. Dustin said before drip irrigation, there was too much water on the plant, causing the berries to rot quicker on the plant.

"After drip irrigation, we realized you could run fertilizer and nutrients through the drip tape," Carl said. "That was another stepping stone of innovation that really stepped into the future of growing

berries because it allowed us to give them what they necessarily needed."

UF/IFAS Extension agent Jemy Hinton specializes in BMP implementation and works as an education specialist. Jemy said she has worked in extension for most of her adult life and Fancy Farms has partnered with UF/IFAS research and extension agents to share the university's findings.

"As far as best management practices, drip irrigation over overhead irrigation saves about 90 percent of their water," Hinton said. "They have had that much water savings, but they have also had a lot of fungicide savings."

Hinton said strawberry growers no longer put a cold mix of fertilizer on their beds like other agriculture commodities do, as a kind of insurance to make sure the plants have enough nutrients. She said growers have stopped doing this because of the leaching out that occurs.

"They just put their fertilizer through the drip, so it's prescribed fertilization right to the roots," Hinton said.

Along with plastic coverings and drip irrigation, the Grooms said they have also implemented other BMPs to increase their water savings and efficiency. Dustin said Fancy Farms, Inc. has a tailwater recovery pond, which serves as water conservation and frost protection for their crops.

"We have all the rainwater, all the Rain Bird water that we pump, and it goes into a ditch and then it goes into our pond," Dustin said. "Then we pump that out of our pond onto the crop."

Carl said while they have to watch

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-Carl Grooms,
Fancy Farms, Inc. Owner and
Strawberry Grower

the pond for evaporation, it helps them to recycle the water they are using and waste less water. The Grooms said they also use soil moisture sensors, soil testing, tissue testing, water quality testing and land contouring.

"We have these new sensors and they're going to go to a computer program, like an app, and we will see what the moisture is at on three different levels, 6, 12 and 18 inches," Dustin said. "We will know what the water table is in those different zones as well as the salts. So we're doing that and trying to get better about putting water and fertilizer out."

Carl said land contouring makes a major difference on a berry operation like Fancy Farms,



-Jemy Hinton, Extension Agent

Inc. The Grooms said by land contouring they are making sure the land is level or contoured enough to get excessive water out of the field. Dustin said their farm is laser leveled and terraced so the water does not pool.

"That makes a world of difference in the berry operation," Carl said. "If you have, say, mud holes down the road, workers can't go through the mud holes, and the standing water creates diseases and holds water, making it too wet."

Carl and Dustin said BMPs are crucial to the success of any farming operation, whether it be vegetable, cattle or any other type of agricultural commodity.

"Best management practices are what is current for the time, and farmers have always tried to adapt to that," Carl said.

Hinton said the UF/IFAS Gulf Coast Research and Education Center has at least half a dozen different research endevors happening currently at Fancy Farms, Inc. The research includes, but is not limited to, entomology, plant disease, and soil moisture sensor research. Hinton said the farm has been open to working with the university on BMP research.

"I have always said that the strawberry industry is the poster child for the BMP program because they were kind of on the cutting edge," Hinton said. "They did everything before everyone else."

Hinton said over the years Fancy Farms, Inc. has hosted demonstrations or field days geared toward educating growers about the latest research and BMPs.

"The last one we had out here, we had all of the different researchers here discussing their research," Hinton said. "It was a grower field day and they could come out here and see the different research that was going on at the time."

Carl said he has always relied on extension agents and UF/IFAS to learn more about ways he can improve his farming operation.

Photographs on the cover and above were taken by Shelby Oesterreicher and feature Dustin Grooms, Jemy Hinton, Carl Grooms and DeeDee Grooms.



ABOUT OUR RESEARCH

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources partnered with the Florida Agriculture Best Management Practices program to document grower and extension agent experiences with BMPs. The PIE Center is also conducting research to understand the impacts of BMPs on local growers throughout the state of Florida.

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