## Level Land Produces

## Pioneers In Land Leveling Reap Success From Early Efforts

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## CLEVELAND, MISS.

Precision leveling has made a big difference in rice and soybean yields on Circle H Farms run by the Howarth family in Cleveland, Miss. Harry Howarth, who manages the rice, is in a partnership with his three brothers, Randy, Thomas and Jack, and nephew John Howarth, since his father, Johnny, passed away last Nov. 20.

Harry graduated from Mississippi State University in agricultural economics in 1977 and came back to farm with his family. Randy takes care of the labor and soybeans, and Thomas has taken care of the shop, parts buying, mechanics and maintenance for years. Now he is working with the cattle too, since the hired cowboy passed on. Jack takes care of the big tractors, groundbreaking, the land leveling and combines in the fall.

just like anything else, some have not done quite what I expected," he said. "But I think the potential is there for them to be pretty consistent, up in that 200 bushel range and better. We don't always do it. We hope we will, but we haven't managed to average that across the board yet.

"I like working with RiceTec, but you've got to sit down and really put the pencil to it," Harry continued. "It has to make enough to justify that high seed cost, but I think we are on the right track. I don't know that every year every one has justified it, but I think overall we are heading in the right direction anyway."

In other words, he doesn't want to get locked into any one variety.

"No, I am not going to, you can't do it," he said. "Something may hit one variety one year and wipe you out, you are going to have to diversify a little bit. The same thing with our soybean



When Harry got into farming 30 years ago the operation included 1,200 to 1,500 acres of rice. Today it has grown to a little more than 3,800 acres that are rotated 50-50 between soybeans and rice.

"We started leveling the land in 1980 when no one else was doing it," Harry said. "We have not had a crooked levee in a rice field, a contour levee since 1981. Most people are just now getting to that point, but my dad had the foresight to see that that would be good for us, and it would make more money, be more water conservative, less chemical dependent and provide more yield. So we leveled enough in 1980 that we had about half our rice crop in 1981 on conventional, half on straight levees. Then we actually hired some outside help for a couple of crop. We plant several different varieties for just that reason. It changes your maturity date and planting dates."

Their soybean yields have also increased. Twenty years ago yields were in the 30 bushel range, now they are about double that. Soybeans and rice complement each other, adding to each other's yield potential. "I think they do," said Harry. "I think it is a

"I think they do," said Harry. "I think it is a converse relationship. I think the soybeans are making nitrogen, the ground is better behind them, and then with the water on the rice crop, soybeans certainly do better behind a crop that has held water on it all year, than they do on a dry situation."

All of their land is irrigated.

"We flood irrigate everything we grow basically," he said.

years to help us complete the work. We doubled up on crops for a few years, then in 1982 we had enough leveled to plant all straight levee rice.

The land is sloped in different increments, some at a quarter tenth, but most is either one tenth or a half tenth. They used lasers and control buckets to complete the leveling.

"We are basically broken up into 40-acre plots," Harry said. "Most of what we have done is just a quarter by quarter."

Pointing to a field in front of him, he said, "I can have rice for a full half mile here, but it is broken in the middle, so we are working both sides of the center line and that is a one-tenth levee. They are about 200 feet apart, so that gives us about a five-acre levee in a 40-acre field. Then you get into where they are a half tenth and they are built about 400 feet apart. So you will end up with 10 acres in a patty still basically in a 40-acre field."

They do have some fields that are over 100 acres. That is just what fit between two canals. They also have neighbors who have leveled, some with much larger fields, but it takes a lot more dirt moving to get that one constant grade.

"If we can drop ours this way four different times that makes four different fields," he said. "We tried to be as conservative as we could on moving the dirt while keeping the land productive. I can farm it like a 100-acre or a 160-acre block, but I water it like four 40-acre plots." They find the precision leveled fields result in a water savings of about 25 percent.

When Harry joined the operation the rice varieties were mostly Starbonnet and Labell. Then they branched out.

"We actually bought some Lemont in 1983," he said. "We grew Lemont for the first time then. Things changed for us after that point, but we stayed with Lemont until just a couple of years ago. It is a real good variety, but we have had Cypress and Jackson and some others too."

Today they use varieties and hybrids, some of which are RiceTec's Clearfield XL 729 and Clearfield 161 from Horizon Ag.

We had a good bit of that, and we also had some Cocodrie last year," Harry recalled. "Those are the only three varieties of rice that we had last year."

As 2008 rolled in he was planning to plant some 131 and 161, a couple of hybrids, and some Cocodrie as well.

"We would have liked to have had some different ones that we couldn't get at the time," Harry said.

Yields have come up since he started farming. A good yield from Starbonnet back then was 120 bushels.

"The county average was about 85 bushels back then, but most people I knew were around 100 to 120 bushels," he said.

With the laser leveling and the new varieties, he started shooting for the 150 bushel mark, then the 170 bushel mark, and then the 200 bushel.

"The variety changes have made a lot of difference, but the efficiency of what we were trying to do has also helped," he said. He couldn't give an exact figure for yields in the last three years, but added it's much easier to make 150-175 to 180 and even 190 bushel rice now. "These varieties are better, and you have a good year and you have a bad year, but still if you drop below 150 bushel, it is getting pretty low."

His RiceTec hybrids have been especially good yielders.

"We cut some really good plots with the Clearfield XL 729, better than I expected, and

Deciding what hybrid or variety they will plant is simply a judgement call.

"We do sit down and talk about what we have on that piece of ground, whether we need to go with this kind of rice or that kind," Harry explained. "But it's all a judgement call."

They do no precision agriculture, and don't rely heavily on soil tests. They find the history of the ground is their best predictor.

"Like everybody else, we have had some red rice problems," he said. "Some fields have gotten pretty bad and we have had several crops of Clearfield rice rotated with Roundup soybeans. It has made a lot of difference, but we really like the Clearfield system. We are real excited about it. The Clearfield for us has worked really really well in cleaning up the crop."

One blessing that has helped the farm's continuity was the presence of his father, who, until his death still played an important part in the business.

"He was right here everyday," Harry said. He went to the office and was an integral part. He served on several boards and was very active and real sharp until the end. We are very proud of him." Along with his six children, he has a proud legacy of many grandchildren and some great grands.

"His vision for agriculture and technology has led to many changes and his business sense made this operation a viable family business," Harry said. "He leaves a legacy of family, Christian values, and hard work and is greatly missed by family and friends."

Harry said the easiest part of rice production is watching it grow. But there are also some hard parts.

"The hardest part, well there are two things: My most difficult thing is grass control and making the decision to spend that money on chemicals and that balancing act," he said. "You have \$1,000 worth of grass, and it takes \$10,000 to kill it. Do you leave it or do you clean your field? Sometimes you farm a little ugly and then sometimes you regret it. However it ends up costing more than you thought and I have made those mistakes lots of times.

"The other hardest part and the most difficult decision I have is draining the water, picking the time that I think is the proper time for drainage," Harry added. "If it is real hot and dry it is easy to leave it on until it is almost totally ripe and it dries up pretty quick. But sometimes you drain it and you find you drained a little too early. Sometimes, if it rains once or twice you are still wet when it is harvested."

Harry and his brothers meet at the shop every morning and discuss their activities. They seldom have a formal meeting. A couple of times a year they will all gather at the office for special concerns and talk about things.

"Basically we just all show up for work at the same time and divide up the labor for what we are going to do," he said. Besides that, there's the phone calls and the two-way radio and they're always passing one another along the way.

At harvest time it is one harvest and one farm. A couple of combines will be used to cut beans, and others will cut rice, with both crops under harvest at the same time.

"You get different trucks, one for beans, one for rice," he said.

They have plenty on-farm storage. They store all the rice and some beans.

"Then it just depends on where it is and how dry it is," Harry said. "We may end up shipping some rice to make a little room for some beans.  $\Delta$