

On The Right Path

This Mississippi grower counts on GPS AutoSteer to stay on the row.

With GPS coordinates already programmed into his tractor, dense, thick peanut vines posed no problem for Joe Morgan when he began peanut harvest last season. Despite rows that were engulfed by vines, Morgan's harvester dug precisely at the right location to produce pods that "sat up" perfectly for drying down.

During planting last year, when Morgan first started using GPS steering, he was pleased by the ease-of-use and accuracy of his new system from AutoFarm. However, the AutoFarm AutoSteer system's full benefit really came to light during the always-cantankerous job of fighting thick vines and digging the valuable cash crop at harvest. Thanks to the consistency of the sub-inch accurate steering system, his yields increased by 300 pounds or more per acre.

Morgan farms peanuts and cotton on about 2,500 acres in southern Mississippi, near Hattiesburg. His operation is spread over a 30-mile radius in hilly, winding fields virtually carved out of a forest. Four years ago, he switched to strip-tilling his 38-inch-row peanut crop, but the benefits of less water runoff and more fertile soil provided by the extra crop residue had a down side, it made for difficult planting conditions.

Strip Tillage Increases Difficulty

Expensive row markers weren't accurate enough for strip-till operations, Morgan says. "Even with markers it was difficult to stay on the row."

He looked at lasers and various GPS guidance systems to solve his problems.

"I knew that with strip-tillage it would be difficult to plant crops accurately because of the difficulty in visually seeing where to plant," Morgan says. "And when it came time to harvest



peanuts, I couldn't risk digging them up off the line. That could cost a lot in lost production. The AutoSteer system did about everything I expected by enabling us to plant and harvest our crop as efficiently as possible."

Increased Drying Efficiency

Needing three or four days to dry, Morgan works to ensure that once dug, peanuts sit upright on the bed.

"If you're off even 4 inches right or left, the peanuts will be offset, not upright to dry," he says. "We want the nuts turned up. If the roots lay over and the peanuts are on the ground, then they're in dirt and mud when it rains and can quickly lose their quality or eventually rot."

The accuracy of AutoSteer prevents that from happening, even with the jungle of vines that blind any attempt to line-up on the row.

"We already had the information entered into the AutoSteer computer," Morgan says. "So, when it was time to start digging, (with his KMC tractor-pulled digger) we were able to pull up

to the field, touch the control screen, then start digging with confidence – knowing we were within less than an inch of the peanut rows. The accuracy and repeatability gave us the ability to dig peanuts even at night, something that was nearly impossible before."

With the rows in perfect condition for harvest, Morgan then used a self-propelled Amadas harvester.

"We were able to bring in an average of 3,950 pounds per acre last year," he says. "With the growing conditions we saw, I know the yields were at least 300 pounds better with AutoSteer."

From Runways to Row Crops

The ability of the AutoSteer system to eliminate guess rows stems back to technology initially developed by IntegriNautics Corporation for aircraft landing systems in the mid-1990s. IntegriNautics then formed its AutoFarm division to drive GPS technology into farm equipment in the late 1990s.

The use of AutoFarm systems has since spread to all of the major agricultural production states, where AutoSteer

installs on virtually all major vehicle brands, including John Deere, Case, New Holland, Challenger and many other makes and models.

Ready for Next Year

Repeatability is essential.

"We were able to go to the field for planting this spring, touch the control panel screen, and immediately start traveling down the row within an inch of where we planted last year," Morgan says.

Morgan has also improved his labor efficiency.

"With AutoFarm, you don't have to have your best workers digging peanuts. Any of your employees who can operate the AutoSteer system can do the job. That saves us time and enables us to use our resources more efficiently."

This past spring, the new AutoFarm "Curves Module" was installed on Morgan's tractors, which will allow for sub-inch repeatable curved path.

"Curves should help us better manage the many winding fields that we have.



This should help us increase our yields for peanuts and cotton even more," he says.

Morgan initially installed AutoSteer on three John Deere tractors. In 2004, he will add three more systems to better apply growth regulators and defoliant to cotton. But, there are no such

plant regulators for peanuts.

For those thick vines, Morgan will use his AutoSteer system to get the most out of his harvest. PG

Article submitted by Fruehling Communications on behalf of AutoFarm.