



## Long-term strategy delivers results for Heidke family

*The Heidke family of the Hummock area have made a number of long-term investments including lateral irrigation and fallow management options. These have delivered efficiencies and productivity to their business. By Brad Pfeffer*

Bundaberg farmers Alwyn, Mark and Brett Heidke take a long term view of their farming business.

With the farm having been in the one family since 1876 when cane was first grown on the property, across five generations (and a sixth currently running around their feet), the Heidkes say that planning ahead and making investments and decisions around a long-term approach have proven valuable for their operation.

This has seen them gradually introduce new practices including lateral move irrigation, fertigation, potatoes as a rotation crop, changing row directions, improving drainage, soil testing and management, and changing row widths of their crop and some of their machinery.

All were gradual changes that required planning and investment, but according to Mark Heidke, the benefits add together to make for an efficient and productive farming system.

The potatoes were first introduced when the sugar price was at about US8c/pound and the family was looking for cash-crop fallow options that wouldn't take too much cane from production.

With large areas of rich volcanic red soil being common in the area, sweet potatoes are common and surround the farm on most sides, but potatoes are a less common crop in the region.

After a lot of work getting the crop right, Mr Heidke said they have now successfully broken the sugarcane monoculture and there were greatly improved results in the subsequent cane crops.

After the final crop of cane, which is usually the third or fourth ratoon, they plant a cover crop of corn that is mulched back into the soil before the potatoes. The potatoes also usually receive gypsum, lime and compost.

"It is a marriage that works but it has taken many years to get it right," Mr Heidke said. "And the improved soil health is helping the number of ratoons. We continue to monitor soil health and if we know there is an issue at the first, second or third ratoon we can use the stool splitter and apply fertiliser and Confidor in one pass.

"The main objective is breaking the cycle of cane. Even on our black soil where we don't grow potatoes and have to replant, there is a great shortfall where you are not giving the ground a break. Even if we long fallow it for 18 months and plant a cover crop, the difference over four years is substantial."

## Farming system delivers strong result

The Heidke family of the Hummock area in the Bundaberg district grow about 50-60 percent of their cane to KQ228<sup>®</sup>, with other varieties including Q240<sup>®</sup> and Q208<sup>®</sup> making up the remainder.

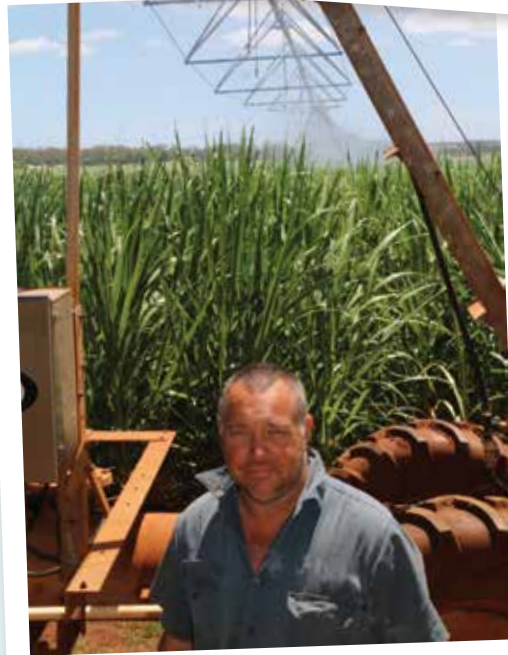
And the results of not just the varieties, but their entire farming system, and the weather, appear to have yielded a good result in 2015.

"Across the whole harvesting group we were nearly 10-15 percent up on the crop, and had a good season except for some work chasing storms at the end," Mark Heidke said.

"We had some really good results with CCS, mainly because we cut later, and I think we had a couple of 18s and averaged 16.5 for the season, which was really good."

The Heidkes typically harvest about 12,500 tonne of their own cane and said tonnes this year were about 120 TCH.

They are hopeful that 2016 will produce a similar result. At the time when *CaneConnection* visited in January they had received good rain and 100 percent water allocation. "It is only early, but so far we have a good crop started and established."



They have taken a similar long-term approach to using lateral move irrigators, which cover about half of their area.

"It is true that the up-front capital cost is huge, but we have also looked at it over an eight-year period that considers firstly labour, then electricity prices, and then water efficiency," he said.

He said the more-common winch method of irrigating required much more labour in moving them, they were more expensive to operate, and were less water efficient in a region that is prone to being windy.

"Our power costs are about 50 percent lower, and we can water at night and in the wind as the water is just going straight down and not blowing away."

He added that there were yield advantages to the crop, perhaps as much as 10-20 percent in some areas.

"We can practically give the farm 50mm in six days, and in the peak time that's what you need to do. It is in December, January and February that you are putting your tonnes on and dollars in your pocket."

He said it took three years of work in some cases to be ready to install laterals, including work on pipes, pump stations, and changing row directions. "I know it is a big call to be looking five years ahead or more, but we feel that in sustainable farming you need to do that," he said.

That said, they continue to be strategic about their investments and have current plans for further laterals on hold while the Australian dollar is low relative to the US dollar.

They are also starting to use the laterals for fertigation, particularly if there is an exceptionally large rainfall event and they need to top-up nitrogen to the crop. They feel this allows for a much greater uptake of nutrient for the crop and avoids runoff.

Running a contract harvesting business as well, they also see that the harvester has a huge influence on future crops.

"Row width plays a big part in that, and we have seen narrow row configurations where the stool is getting squashed like a steamroller."

Visit [www.sugarresearch.com.au](http://www.sugarresearch.com.au) to see the CaneClip with Mark Heidke.

**Above:** (Top) Mark Heidke with one of the lateral irrigators on the family farm. (Bottom) Alwyn Heidke on the property in January 2016.