



**Tim, Sandy and Mark Keller**

At Kellercrest the focus is managing a high lifetime production herd.



United States of America

Herd size:	<b>320</b>
Average yield:	<b>14,500kg</b>
Farm size:	<b>220 hectares</b>
100-tonne cows:	<b>56</b>

The US-based Kellercrest herd has a whopping 56 100-tonne cows

# Every cow has the right to grow old

Consciously investing in good housing for fresh cows and young stock at Kellercrest farm results in high lifetime production. Cows from the L cow family now underline high production with high genomic breeding values that ensure a lot of AI interest.

text **Jaap van der Knaap**

The transition barn is the pride of the unit. Tim Keller moves a cow out of the comfortable sand stall and stretches out his arms from side to side to show the width of the space available for each animal.

"In this barn the sand stalls are wider than usual and for 20 cows there are 20 stalls and 28 places available at the feeding alley. It is a type 1 + 0 stall where the cows can get to the feeding alley quickly and there is a lot of space per cow," explains Tim.

The transition house cost £80,000 in 2010 and for just 20 cows that is a considerable investment. Tim readily justifies this cost. "In this house we can give freshly calved cows all the attention they need. This extra attention at the beginning of the lactation pays for itself in improved health and ultimately greater longevity," he says.

Longevity. The importance of the word quickly becomes clear on a visit to the Kellercrest farm in Mount Horeb, Wisconsin. The dairy operation, owned by brothers Tim and Mark Keller, who farm in partnership with their wives Sandy and Kareen, attracted international attention in 2013 because they have so many cows with high lifetime production. A total of 56 cows have now surpassed 100,000kg of milk. These are impressive figures.

## Culling rate

"Every cow earns a chance to grow old," says Tim. "I am keen to see how a calf develops into a young heifer and finally becomes an old cow. It is a shame from the viewpoint of investing in young stock, when a cow has to leave the herd early." On many units, after two lactations a replacement is common. But not at

Kellercrest. "For years we had a culling rate of 18%. We think that by keeping cows in the herd for longer and selling heifers we can make more money."

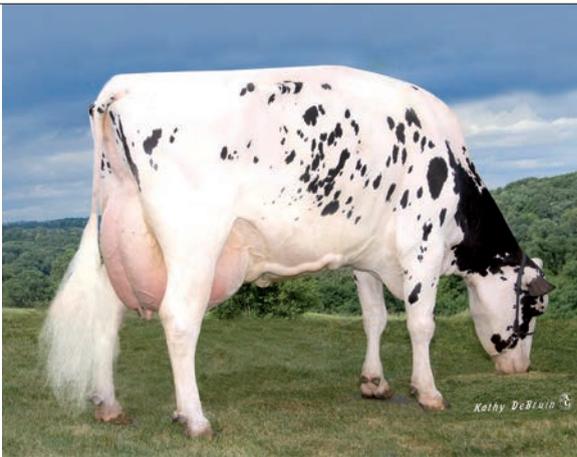
His brother Mark adds that they are prepared to invest in old cows. "In addition to good cow comfort and feed it means particularly investing in time. Milking takes 4.5 hours. It can be done more quickly but we think that a thorough milking routine, and paying close attention to every cow, is more important than paying our Hispanic milkers for fewer hours," Mark says.

Mark also calls it a 'sport' to get a cow through another production barrier. "Where other herds would cull a cow we try to get her in calf again, or we milk her in a special group owing to a higher cell count," he says. It is one of the side effects of the older herd. The somatic cell count is above 250,000 cells/ml.

*Building design: hilly terrain means that the barns are built on several levels*

*Trophy wall: the display of cow certificates*





Leader: Loni is top producer in Wisconsin



Top facilities: the 'transition' housing offers cows comfort and space

"Some cows complete 500 or 600 day lactations, either because we'll try several times to get her in calf or because we have used them intensively for embryo transfer," he adds.

### Extreme production

One of the cows with a long lactation record and with many ET sessions is Kellercrest Shottle Loni. The Shottle daughter classified with 92 points in 2013 and was culled because of cancer in her eye. But she completed impressive lactation yields.

"Loni was crazy. She ate and produced milk – nothing else. We have never had such a high yielding cow before," Tim says. And Mark refers to her 365-day record of almost 13,000kg of milk at 5.3% fat and 2.9% protein. In addition, Loni was a productive flushing cow: in six flushes with Active, Planet, Freddie and Man-O-Man she produced 132 embryos. Many embryos were sold and there are 15 Loni daughters in the Keller herd.

In 2013, Loni was nominated as the most productive cow in the state of Wisconsin, but at the moment other members of the L family are attracting the interest of AI organisations. Examples are the sires

Kellercrest Bret Les (from Bret) and Kellercrest Langdon (from Forbidden). Young genomic bulls, such as a former top-ten GTPI bull Kellercrest Super Layne (Superstition x Loni), are also causing a stir.

"The production strength of our cow family is now accentuated via genomic breeding values. We have now provided more than 100 bulls to AI organisations," says Mark, proudly. In order to remain among the top breeders, genomic bulls in particular are now used, and a few bulls like Dorcey and Massey are also given a chance.

### Accommodation investment

"Despite the speed of the rate of genetic gain among our top breeders, we also maintain our breeding goals," says Mark. "We're looking for the whole package – not too big, well-balanced cows with good udders and feed and legs. We don't specifically look at the breeding value lifespan, but ultimately we want cows to complete three lactations and have produced 50,000kg of milk."

According to Tim, the achievement of this minimum lifetime production is a matter of adding the finishing touches.

"In 2009 we invested in a ventilated calf house for calves aged up to three months old. A long and healthy life begins in this barn."

In the young stock house, he refers to the transverse arrangement of the cubicles in relation to the feed passage. "Thanks to this position you have a better overview from the feeding alley and you can see quickly if there is anything wrong with the animals. Young stock between one and two years old are often a forgotten group," he says.

Mark also mentions the importance of a good nutrition. "Apart from the transition group, all the cows are fed the same TMR ration, which produces for 44kg of milk. This contains 60% alfalfa and grass silage and 40% maize silage. The high percentage of grass is vital because on the hills here we cannot grow maize everywhere but the large quantity of grass provides a healthy and well-structured ration," he says.

After a tour of the unit, Tim shows the office where the wall is full of certificates for cows that have passed the 100-tonnes of milk threshold. "We are proud of all these certificates, they are recognition. But believe me, the older cows here also provide us with a good living." |

Best start: a long and healthy life begins in the unit's calf house

