

**Larson Acres**

A new cross ventilation barn helped support milk production during the hot summer at Larson Acres.



USA

Number of cows:	<b>2,900</b>
Unit size:	<b>2000 ha</b>
Number of employees:	<b>60</b>
Milk production/day:	<b>100.000kg</b>



Sandy Larson



New building: the cross ventilation barn

US unit combines conventional breeding with a standard genome test

# Maximum control in a turbulent climate

A feed shortage stemming from the 2012 drought pushed this large unit's breakeven price to 27ppl. But, fortunately, a new cross ventilation system helped support milk production during the hot summer and the business is still in the black.

text **Jaap van der Knaap**

**A** website geared to consumers and a telephone answering message with a friendly voice that ends with 'drinking milk is also good for the environment.' You don't immediately expect this from a dairy where every day 2,900 cows are milked three times a day and where 60 staff look after a total of 5,500 head of cattle.

"We believe it is important that the consumer knows what we do," says Sandy Larson from the Larson Acres

farm at Evansville, Wisconsin. "We put a lot of energy into improving the public's perception of modern dairy farming. I spend half of my time taking tours of school classes or interested people around our dairy."

Larson Acres is most certainly a modern dairy farm. The new cross ventilation barn brings the dairy completely up to date. Measuring 360 metres by 72 metres, 1,850 dairy cows, including some of the older young stock, are

housed. The climate is mechanically controlled via 185 large ventilators in the side wall. The climate can be cooled considerably because the air entering the building is water cooled. That proved extremely useful during the hot summer.

"The outside temperature was 32°C for a whole month. This barn cost us £3,000 per cubicle to build but we hardly had a dip in milk production, or fertility results, due to the excessive heat. We can control the environment inside now," says Sandy.

## Genomic selection

Sandy Larson is the first point of contact for the family farm. "I am the fifth generation to farm on this land," she explains. Her father, uncles, brother, and sister-in-law are part of the team that works on the dairy.

During the past 15 years things have

*Larson Acres accommodates 5,500 head of cattle*







*Climate control: air is water cooled by the cross ventilation system before entering the cow house*



*Big barn: 1,850 milkers, as well as some of the older young stock, are housed in the new building*

changed quickly. In 1998 it was decided to change from the old tie-stall barn with 150 cows to a freestall with 600 cows. Two years later, the freestall was doubled in size and in 2010, the new cross ventilation barn arrived.

That same year, four new calf sheds were erected, each taking 60 calves that are fed pasteurised milk three times a day. Sandy mentions a number of calves in particular. “They are descendants of Markwell Durham Felice and Lars-Acres Shottle Truffle, cows that we intensively flush and in which there is a lot of AI interest.”

Felice is from the family of Markwell Blackstar Raven. Truffle is from the same family as the sire Lars-Acres Trigger, an early Shottle son with a high genomic index, which made him popular worldwide.

Genomic testing is used to aid breeding decisions for the best cows and heifers, but there are plans to use it across the whole herd.

“We have also used sexed semen in recent years, but that resulted in too many young stock. The sale of two-year-old heifers is not profitable due to the high feed and rearing costs.

“We now want to select the best calves we breed with the genomic test and sell the calves with lower indexes. That should help to save on heifer rearing costs.”

### **Milk price**

Sandy is open about the cost price margin. “We now need a milk price of 27ppl to break even,” she says.

“That is considerable, but we bought 800 hectares of corn this year due to the drought.”

“We have been lucky, the corn harvest halved here compared to other years although the quality was not entirely disappointing.”

Larson Acres itself has 2,025 hectares, which is used to grow alfalfa and corn and for spreading manure. Via a three-

mile pipeline, the thin fraction is pumped and distributed.

“We have a thin and a thick fraction of the manure and we recycle 96% of the sand used in bedding stalls,” says Sandy, with pride. She is responsible for the nutrient management plan.

“With two kinds of manure and with different values in phosphate and nitrogen, we can manage manure more accurately,” she says.

The tour at the 40 hectare farm ends at one of the two 44-point rapid-exit milking parlours where the staff milk 1,100 cows in seven-hour shifts.

“Many visitors have never seen cows before, let alone a milking parlour. They often leave our farm fully understanding what we do.

“Cow welfare is a priority here, as is ensuring that the herd produces high-quality dairy products.

“We want to promote the dairy business and it gives us support in living here,” adds Sandy. |