

OUTSTANDING DAIRY FARM SUSTAINABILITY

Nobis Dairy Farms

St. Johns, Michigan



Dairy establishes new practices for cow comfort and sustainability

In 1974, Nobis Dairy Farms, a family partnership based in St. Johns, Michigan, wanted to switch to sand bedding to improve cow health. It didn't take long to recognize improvement in cow comfort as well. As the herd grew, the cleaning and separation of the sand from manure for potential recycling became a challenge. The change to sand bedding, however good for the cows, could have led to a series of sustainability challenges for the now 1,050-cow operation. Because cow comfort and health come first, brothers Ken and Larry Nobis took on the challenge with openness to trial and error.

"We understand that new, innovative sustainable practices are not one-size-fits-all. You have to take what you know, give it a try, then push and alter it to fit your needs," says Ken Nobis.

When the Nobis brothers implemented sand bedding, they experimented with gravel handling equipment but soon realized it wasn't a match for their dairy operation. They employed the best practices available with environmentally sound results and were open to advanced solutions that became available. In order to make it all work, they worked with Michigan State University through the years and McLanahan Corporation. Not willing to compromise with a less than ideal solution, the brothers continued with their trial and error.

McLanahan developed a closed-loop manure management system that effectively uses the water that is separated from the sand-laden manure and the runoff water captured from feed storage areas, buildings and other areas of the farm to eliminate excessive use of fresh water. The Nobis brothers were quick to install this system, which also maximizes nutrient management and reduces odors.

Today, the system they have in place not only solves the problem of sand-laden manure, but it also allows maximized nutrient management, recyclability and a decrease in the amount of fuel and labor needed. Sand separation is just one example of sustainable agriculture that the Nobis family practices. The recurring theme over the years on the farm addresses the three pillars of sustainability: economic, environmental and social.

Beyond their willingness to experiment, most of the practical on-farm sustainability measures employed by the Nobis brothers can be easily replicated on any dairy. Information about their sand-laden manure management and nutrient management systems is shared with others – the Nobis brothers see sharing as their way to contribute to the sustainability of the dairy industry.

Many projects add up to a sustainable operation for Nobis Dairy Farms:

- The farm collects 400,000 gallons of rainwater for every inch of rainfall.
- The Nobis brothers implemented 60 acres of buffer strips on their land to prevent erosion and for gathering feed.
- Every year, the brothers test every field on the farm for nutrient management purposes.