

# Drakeland Farms Reduces Manure Hauling Frequency with McLanahan Sand Separation System

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Jennifer Drake-Keller  
Drakeland Farms

**Drakeland Farms is a sixth-generation family-owned dairy currently run by the brother-sister team of James Drake and Jennifer Drake-Keller. Started in 1862 in Jonesville, Mich., Drakeland Farms now milks 520 cows. The dairy has been bedding their freestalls with sand for as long as Drake and Drake-Keller can remember because it resists bacteria growth and provides a comfortable resting place for the cows.**

## **Challenge**

When Drakeland expanded their herd from 230 cows to 520 cows, they faced some new challenges with the increased amount of sand-laden manure.

“The settling pit would fill up a lot faster,” Drake-Keller explained. “We would have to haul out every month. We were putting more sand out in the fields, and we didn’t know what impact that would have on our soils.”

Drake and Drake-Keller wanted to find a way to recycle their sand while reducing wear and tear on their equipment. They also wanted a way to lessen the burden of handling the manure so they didn’t have the three-day job of hauling sand out of the lagoon.

## **Solution**

Through Kaeb Sales, McLanahan’s agricultural products dealer in Michigan, Drakeland Farms installed a Sand Separation System for removing the sand from their manure. The system included a Collection Auger for pre-separating the sand, an Inclined Auger for feeding the sand to the Sand-Manure Separator and an Agricultural Sand Dewatering Screen for removing excess moisture from the sand before stockpiling.

The Drakes said McLanahan was helpful in designing the system for their dairy.

“They worked with us and drew up the blueprints for the barn and for the system and the pits,” Drake-Keller said. “They had a couple people here when we first got it up and running, probably for three or four days, to make sure that everything was running like it was supposed to. They’ve stopped back by over the years to check in on it and to see if there were any little tweaks that we needed to make to make sure we were getting all the sand.”



## Results

When Drakeland first put in the McLanahan Sand Separation System, they would start reusing the sand immediately, but this meant that they were still bringing in new sand. Renee Schrift, McLanahan's Director of Sales, Agricultural Products – North America, suggested they stockpile three to four months' worth of sand instead of reusing it right away.

Since then, Drakeland has only had to purchase a small amount of new sand during the winter if the sand freezes. They haven't had to regularly purchase sand since November 2015. The recycled sand bedding has been working well for the dairy, and the Drakes have not seen a change in somatic cell count or cow comfort level when using the recycled sand over new sand.

Besides not having to purchase new sand, the McLanahan Sand Separation System has reduced the rate at which Drakeland needs to clean out their lagoon.

"Probably the best thing is not having to clean out our pit," said Drake-Keller. "That was wear and tear on the payloader and the manure spreaders. It would take three or four people to get it done and it took a day, so we're saving the wear and tear on our equipment and also just not putting it out on the fields."

Drake added, "We don't have to haul the sand, so there's less wear and tear on tankers."

Reducing the frequency of manure hauling was another benefit the Drakes have seen since installing the McLanahan Sand Separation System.

"The bigger that we've gotten, we have more neighbors and we have more manure, and it's allowed us to go to hauling basically twice a year versus once a month," said Drake-Keller.

With Kaeb Sales being located only a few miles from Drakeland Farms, the Drakes have benefitted from the service and support that a local McLanahan dealer can provide.

"That was one of the big beneficial things, was if we had trouble, there was someone close by," Drake said.

Drake-Keller added, "They do a nice job of keeping everything up and running. It doesn't matter when we call, they always come out and help fix it."

The Drakes like that the McLanahan Sand Separation System doesn't give them any issues. The system is on a timer and starts once the manure is scraped into the reception pit. All the Drakes have to do is check to make sure the system is running.

"It always works fairly smoothly," Drake said.