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FARM MANAGEMENT

The

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KNOWLEDGE FOR FIELDS AND YIELDS

*July 2019*

A Beautiful Fit

Saturated Buffers

A Fresh Season

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## Moffitt Farms & SFM: A Beautiful Fit

It's nice to know that when you need help, someone will be there to answer. That's what happened for Mary Moffitt, a California native with roots in Dakota City, Iowa.

"My grandfather worked with Roger [Sunderman] for many years," she says. "He helped him get the land my grandfather owned tiled. They had a great relationship."

When Mary inherited the family farms in 2009, she knew it would be too difficult to manage the farms from her home in California. Knowing she would need some assistance, she reached out to Brian Larson and Sunderman Farm Management to see if he could help her manage her land.

"It's a beautiful fit," she says. "They're always willing and able to help. Brian helps do the footwork I wouldn't be able to do being in California. I couldn't do it without them."

Mary says the Sunderman Farm Management (SFM) team makes it easy because they handle everything for her and her farms. For example, her three farms are enrolled in the Conservation Reserve Program, and they are in the midst of arranging for three – or perhaps four – wind turbines to be located on her land. When she decided to have turbines installed, she called Brian to see if he could help.

"Brian knew the guy I was talking

with, and now he's been doing all of the footwork for me to get them set up," she says. "He helps me deal with all of the things that aren't the tenant's responsibility."

Mary worked as a teacher for 20 years, so summers were her only opportunity to visit the farms. Each year she stayed at her great-grandmother's house, surrounded by the family farm ground, where her family once raised hogs and dairy cattle.

Now that she has retired, Mary loves to visit Iowa at different times of the year – except winter. Experiencing the peace and serenity of Iowa is a refreshing change from her life in California. One of her favorite things is being able to see the crops grow and mature.

"I was worried the first time I came back in May and nothing was growing," she admits, "but Brian reminded me that Iowa May and California May are very different. Then, within a couple of weeks, things were coming to life."

Mary gives Sunderman Farm Management Company credit for making it easy to manage her family farms from a distance and for helping her build and retain the farm's value.

"They're beyond fantastic," she says, "They are a 10+ to work with. If it weren't for Brian, I don't know if I'd still have what I have." 🌱

# Caring for Your Soil

Things sure have changed since the mid-1900s, and it is always interesting to look back on historical farming practices and see just how far we have come. One change that stands out is the tillage practices of today versus those of 70 years ago. During the middle of the 20th century, fields were worked multiple times each year for various reasons including: weed control, soil aeration, and to bury heavy crop residue.

Today, farmers are realizing the effect that excessive or unnecessary field tillage has on the precious soil in their fields. Erosion and runoff are two of the most detrimental effects causing reduced yield, lower soil fertility, and even a reduction in the land value.

The team here at SFM highly encourages conservation practices for the sake of protecting the land God gave us. We hope more landowners and farmers try to preserve the soils we were given by looking at practices they may not have considered in the past such as reduced tillage, no-till, cover crops, and other conservation options.

It's an exciting time to be in agriculture, and it should be interesting to see what the next 70 years look like. 🌱



## A FRESH SEASON

Spring in Iowa had a slower start than usual. Growers were finally able to get crops in the ground, and for that we are thankful. We look forward to making the rounds each month to visit your farms and help keep an eye on things for you as the growing season progresses.

If you live out of the area and will be visiting at any time this year, please be sure to give us a call so we can set aside some time to visit your farms and your farmers with you. We always enjoy having our clients here!

Summer is a great time to think about future plans you are considering for your farm — whether it is a field project like tiling after harvest or looking at a new conservation practice to implement in the future. Never hesitate to reach out to us if you have questions about anything regarding your farms. That's what we are here for, and we want to help. 🌱



*Conventionally tilled field*



*Field being strip-tilled*

# Eliminating the Excess

When it rains, it pours. Excess rainfall causes runoff sending nutrients intended for the farm's soil fertility into potential sources of drinking water. There are several options for dealing with fertilizer runoff including: denitrifying bioreactors, controlled drainage systems, and saturated buffers. Of these options, saturated buffers can be a lower cost method making them easier to implement on farms in the Midwest. In a recent study of saturated buffers, Dr. Dan Jaynes, USDA-Agriculture Research Service, and Dr. Tom Isenhardt, Iowa State University, researched ways to improve and filter the water redistributed by field tiles.

This edge-of-field conservation practice is used to reduce the nitrate runoff from tile-drained fields in the Midwest. Rather than sending field tile runoff straight into waterways, saturated buffers filter and redistribute the water and the nitrogen it carries to plants for uptake, resulting in microbial immobilization and denitrification. When

large amounts of water are running through field tile, water is allowed to overflow the control structure directly into waterways, helping limit drainage back-up in the field.

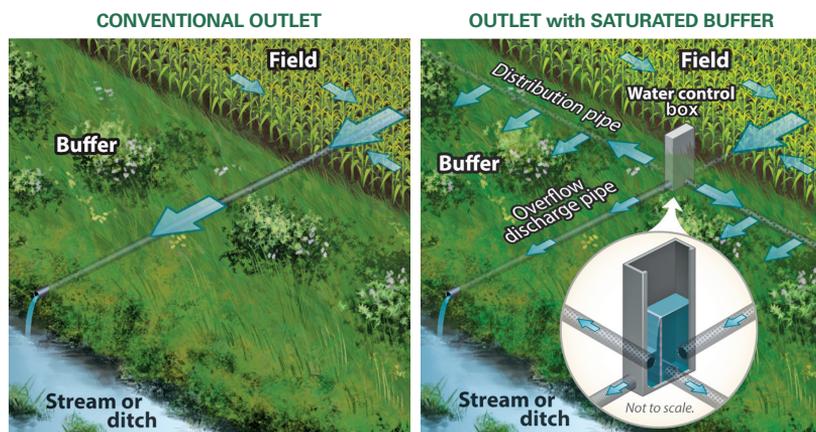
Saturated buffers are an effective way to divert and reuse excess nitrogen that is in field water runoff. The most important thing for implementing this practice is finding the right location that meets the standards to have a saturated buffer installed. It is estimated that approximately 9.5 million acres of tile-drained land are suitable to have a saturated buffer implemented. Many of those acres are located in Iowa, Illinois, and Ohio.

As a relatively new addition to the conservation tool chest, studies of saturated buffers have shown nitrate reductions of up to 85 percent and are showing promise as an option to include in your nutrient reduction strategy. Hopefully, we will see more of these being installed around our state and the surrounding areas in the future. 🌱

## Tile-drained lands

Underground pipes divert water from cropland, reducing stress on plants. A box diverts water flow into the buffer, increasing the shallow groundwater level and nutrient removal. This is a

saturated buffer.



Source: Frankenburger et al., unpublished