WISCONSIN STATE FARMER

NEWS

Conservation-minded farmers making difference to protect soils and waterways

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LODI – With a view of Lake Wisconsin that would be the envy of many, conservation-minded farmers from several counties gathered at Schoepp Farms, north of Lodi, to view sustainability practices, see rotational grazing in practice and hear from fifth-generation farmer Rick Clark, who talked about his experiences using no-till and cover crops in Warren County, Indiana.

As keynote speaker Clark said, the view over the lake emphasized how important it is for farmers in this or any watershed to do all they can to protect their soils and prevent nutrients from leaving the farm and entering lakes or streams. While learning about Clark's practices, farmers who attended could hear and see water-ski boats and jet skis zipping about below them on a perfect summer day.

The farmers gathered under a big white tent that got a lot of use by the Schoepp family over the last week. A week earlier Ron and Tara Schoepp's daughter got married under a huge oak tree overlooking the lake and the tent hosted the reception. It also served as the venue for a polka dance, then the Moo Day Brunch on the farm and the conservation field day – both on Saturday.

"Mom didn't think that was enough so she also scheduled a family reunion," said Ron Schoepp.

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Several farmer-led watershed groups helped sponsor the event and procured Clark as a speaker. Joe Benish, a member of the Lake Wisconsin Watershed Council has a dairy farm a mile and a half from the Schoepps' farm and said that the event highlights the efforts farmers are making to do their part and reduce phosphorus runoff with the use of various practices.

Another sponsor, the Sauk Soil and Water Improvement Group (SSWIG) was formed like other watershed groups to make regenerative farming happen in the area. Another sponsoring group was the Producers of Lake Redstone, which is north of the SSWIG area. Schoepp said he couldn't imagine farming 7,000 acres like Clark does but is doing what he can on a smaller scale and feels like he's making a difference.

"We started no-till a long time ago," Schoepp said.

County Agricultural Agent George Koepp said farmers care and they want to make a difference.

"They want to keep the soil on their farms. Back in my grandfather's day we used the plow and the disc and ran over it again with the disc. Now we've learned to do things differently. We can all learn," he said.

As he looked down over Lake Wisconsin, Clark said "I can't imagine a better view. This day is about protecting waters like that."

The Warren County, Indiana farmer works his land on a seven-crop rotation that builds soil health. He's been refining his practices for 37 years. In addition to extensive use of cover crops and no-till, he has also transitioned away from the use of chemicals.

"I've been no-tilling soybeans for 17 years and corn for 12 years and using cover crops for 12 years. I've been doing what I call 'farming green' for 10 years," he told the gathered group. He wore a hat emblazoned with "Sacred Ground" on the front with "no-till" and "cover crops" added on the sides.

Essential steps in the system

Clark's seven-crop rotation includes corn, soybeans, wheat, alfalfa, peas, milo, cattle (which he considers a crop) and an acre out of production.

"These are essential to get incorporated into your system," he told farmers. "I don't want to hear excuses like 'it's too cold' or 'our season is too short.' You have plenty of time to get it done."

One of the things he did to allow more time for cover crop establishment is use shorter-season corn varieties. He also mentioned using 16-way warm season cover crops to feed cattle.

"There are farmers north of here who do this stuff," he added.

The Clark family – which includes his wife of 32 years, Carol and daughters Jessica and Rachel – has 4,200 acres that are now certified organic and the rest of their farm is in transition. It will be certified organic by next year. He said he wasn't at the Schoepp farm to "do an organic talk", but talked about practices he has added to replace fertilizer and chemical usage on his land.

"For seven years we have not used starter fertilizer, fungicide, seed treatments, insecticide, phosphorus, potassium or ag lime," he said. "We have not used added nitrogen for two years. This will be the third. Everything is done naturally – organic with no tillage."

One of the practices that he highlighted was planting a cash crop like corn, into a green and growing cover crop, like cereal rye, and he may not terminate that cover crop for 30 days after he plants the cash crop.

"It usually happens within three to five days, but it depends. We were always told corn is king and I'm sorry but that's just not true." Now, instead of concentrating all his time and energy on getting his corn in the ground first, Clark plants all his soybeans first.

Armor the soil

One of the reasons he finds that the delay is a good practice is that it allows more time for the "legume package" in his cover crops to do what they are intended to do – fix plenty of nitrogen for the intended corn crop. This practice maximizes the other things that the cover crop was intended to do – prevent erosion, sequester nutrients, grow carbon in the form of biomass and suppress weeds. He says that the practice "armors the soil."

Last week when temperatures were 94 degrees – something that had been true on his farm for four weeks – he took the temperature of his soils that were protected by 13,000 pounds of biomass per acre. It read 70 degrees. Where there was a bare spot in the field, it was 110 degrees, he said.

"That is huge when you think about preventing evaporation. The power of cover crops is amazing."

Clark said his system is driven by building soil health, diversification, planting multiple cash crops together and harvesting them together. He suggested harvesting corn and fava beans together or soybeans and peas for use as cattle feed.

Farmers need to collect data on their fields and yields, not because high yields are the goal but "how do you know where you're going unless you know where you've been? It's not about yield but return on investment and for that you need data.

"Don't ask me what a field yielded last year because I don't care," he added.

The practices he is using, Clark said, armor the soil but also build human health by eliminating pesticides, herbicides, salts and acids.

"People don't need to handle any of that anymore." The practice is based on balance – a symbiotic relationship with Mother Nature.

For many farmers, cover crops are considered a defense against soil erosion — "that's where a lot of people start," he said. And it's a good start. "If we don't change how we're farming somebody's going to dictate how we farm. Change is the answer."

Roller-crimper

Clark showed videos of a large roller-crimper going through a tall stand of cover crop. Once that crop is lying on the ground it is a "weapon of mass destruction" against weeds, he said.

Using a favorite "Balansa Fixation" clover, Clark said he can generate 75 pounds of N by May 20 and biomass of 3,800 pounds per acre. By June 4, his clover had fixed 114 pounds of N per acre and biomass stood at 6,800 pounds per acre. The clover also generated P2O5 and K2O. With the price of N at 70 cents per pound, not applying purchased N saves him \$35 per acre, he said. "And the more biomass, the better."

Some people tell him he's "mining his soils" Clark said, but he disagrees, saying he's generating those nutrients from a wide variety and careful use of cover crops. The cover crop suppresses weeds and then the canopy of the cover crop continues the weed suppression.

He urged farmers to consider covering their soils with cover crops in every season and learn how to suppress weeds in the bargain.

"Do whatever you have to do to have a cover crop on every acre."

He believes that the success of next year's cash crop starts with the success of this year's cover crop.

"Please don't give up. If you can't get the cover crop planted in the fall, try frost seeding in the spring. Cover crops are the most efficient way to build soil health." Cover crops, he believes, have to be viewed as being as important as cash crops.

At the same time, he doesn't want farmers to jeopardize the livelihood of their farm business.

"Go slow and try things," he urged. "The people who are being talked about are the ones that are creating change and change is good."

Clark also believes that livestock are "the final piece of the system. I always wish I could get more dairy heifers out on pasture."

He credited Erin Silva at the University of Wisconsin-Madison for teaching him and others to plant soybeans into cereal rye (at the boot stage) and then using a roller-crimper instead of chemicals, to terminate the rye.

"We had fields around us that farmers had sprayed four times and our fields were cleaner than theirs."

Farmers should take the word "failure" out of their vocabulary, he said, and substitute "outcomes we did not expect" and they should never underestimate the power of networking – like the farmer-led networks that helped sponsor the field day. "This is what it's all about."