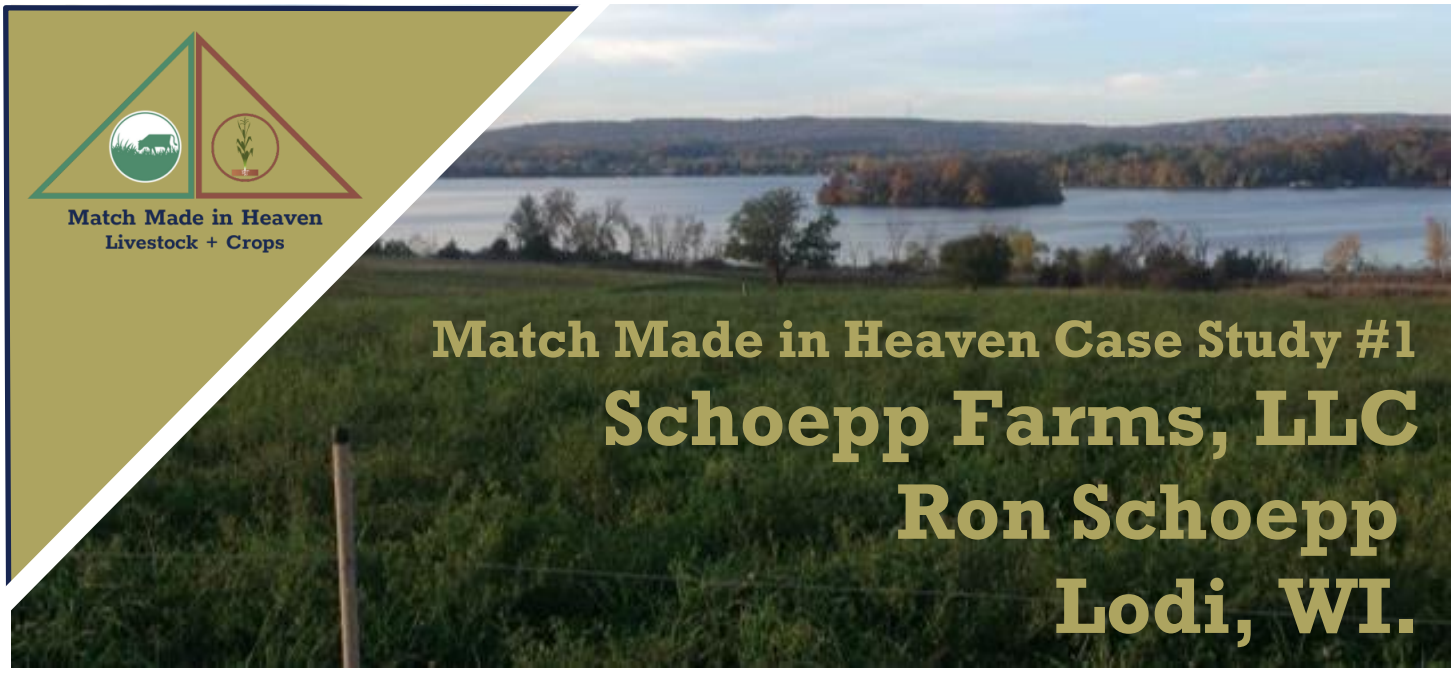


Looking north from the farm lane.

May 2023

The Match Made in Heaven project seeks to understand the state of the art of livestock and crop integration on farms in the Upper Mississippi River Basin. This is one of six profiles of farmers who have honed their craft and successfully built livestock and crop integration systems on their farms. We hope you enjoy getting to know them!

Generations of the Schoepp family have striven to do the right thing, whether that is with other people or the land they live on. Ron Schoepp said, “Living on a farm with a million-dollar view of Lake Wisconsin, you become conscious of how things you do can affect others. “

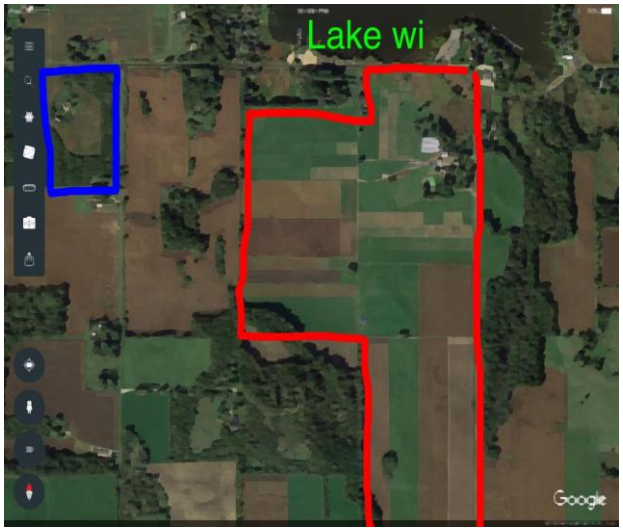
Farm Statistics:

- Number of acres owned: 250
- Number of acres rented: 250
- Crops raised: pasture, corn, soybeans, wheat, alfalfa-grass hay, cover crops
- Livestock raised: dairy heifers, dry dairy cows

Key Points:

1. A very high stocking rate and stocking density are possible if you manage your grazing system to match your farm with the principles of rest and rotation.
2. The Schoepp family has been able to move away from tillage and improve productivity while improving soil health.
3. One simple improvement was gained by letting animals spread their manure daily and actually reducing N losses.

Description of Family and Operation



Red outline shows the Schoepp farm, with Lake Wisconsin just to the north. Rented property nearby is outlined in blue.

Schoepp Farms, LLC farms about 500 acres, half of which are owned. About 140 acres are in permanent pasture. The Schoepps are now on their third generation on this farm that they moved to in 1949. They have been beef and hog farmers for most of that time. Ron joined his parents, Dave and Nancy, in the farming operation after graduation from high school. On average, labor requirements are 2.5 -3.0 FTEs. Ron and his very able 86-year-old father operate the farm. Ron's son and other part-time help round out the labor supply.

The Schoepps run a custom heifer raising operation that raises dairy heifers from 5-6 months until one month before calving. He also has a group of dry dairy cows from the same farm. On average, there are 225 to 230 growing heifers and 30 dry cows at any one time on the farm. All animals are outside for most of the year unless the pastures and fields are very soft and muddy. Animals are on pasture throughout the growing season. In winter the animals are on crop fields with extra forage as baleage in feeders, a practice known as outwintering. When wet ground conditions prevent animals from being out on pasture or row crop acres, they stay in a dedicated "heavy use area" with a concrete base.

All of the animals get daily supplemental grain the year around to provide extra energy and carry the salt, minerals, and protein. Ron currently charges $2.75/head/day, which includes pasture and feed. Breeding fees and most veterinary costs are extra, paid by the heifer owner. Breeding is by artificial insemination, and the sorting and handling work to get the heifers and cows bred is part of the custom raising. Ron used to have a vet come out to do pregnancy checks, but he and the vet eventually agreed it was unnecessary because the heifers were always either pregnant or Ron had a record of last estrus. The Schoepps' net return over direct expenses averages $380 per head per year.

Why and How of Livestock & Crop Integration

The Schoepps began grazing with permanent pasture, which included some marshy areas on the farm. In the mid-nineties, they began to use a more managed system of grazing. This caring for the land has led Ron to be active in teaching others about what they do and why they do it. They actively take part in extension and other non-government and government projects, such NRCS and the Sand County "Unto Greener Pastures."

Pastures are quite diverse and very productive. Grazing is managed quite closely and intensely, utilizing a mob grazing approach. Depending on the pasture, Ron aims for 2 tons of dry matter per acre, or more, every 60 days of rotation. They have estimated some fields to be twice that much in DM yield. Ron will typically place one half million to one million lbs. of grazing animals in a paddock for 6 to 12 hours. It would appear to some that the paddock is overgrazed when the animals are moved to the next paddock, but the pastures remain quite productive.

Ron utilizes front and back fencing with no water in the paddock. All fences are high-tensile electric fence with electric fencers. Ron used solar fencers in the past but found the reliability not as good and more expensive to operate. One program that could benefit the grazing of cover crops would be some cost share to put permanent but flexible perimeter fencing in place.

A little over half of the corn raised is sold to a local dairy farm. Some is sold to a grain elevator, and the remainder is used to feed the dairy heifers that Schoepps raise under contract with the dairy farm. Ground, dry, ear corn is fed in the summer, and ground shelled corn is fed in the winter. Ground ear corn adds more fiber in the summer grain when the heifers are on pasture. Five pounds/head/day of the grain mix is fed in the summer and ten pounds/head/day of the shelled corn grain mix is fed during the winter to provide more energy in the colder weather.

Soybeans are used as a rotation crop and sold for cash. Cash crops account for about $100,000 of gross income each year. All row crops are planted with no-till equipment and have been since the early 90s. Observations by Ron of soil loss from the fields, ruts, and being part of demonstration projects led to the decision to move to no-till.

Benefits of Integrating Livestock & Crops

Ron feels that it is valuable to get all animals up and moving for a period of time before actually moving the fence. This is done to allow animals to defecate and urinate before moving onto the fresh forage supply. Ron would speculate that the healthy soils of a well-managed grazing system better utilize the nutrients deposited.

50-60 day rest period

Outwintering is a key piece of the Schoepps' system. Ron learned at a seminar several years ago that there is 40% to 60% N loss from manure accumulated in a bedding pack in winter livestock housing. Outwintering on row crop acres seems to retain more N, and Ron has observed much lower commercial fertilizer requirements on fields where cattle have outwintered.

Currently, the paddocks are productive enough to allow Ron to harvest about 50 acres for hay this year. Ron raises 30 acres of wheat per year. After wheat harvest, volunteer wheat grows and is terminated before a multi-species cover crop is planted. Species in the mix include red and white clover, vetch, oats, radish, sunflower, buckwheat, peas, and others. The cover crop is grazed in the fall rotation. Planting a cover crop following wheat provides additional forage supply for the system and may justify planting more wheat in the system as well.

Finding the right cover crop management takes some trial and error. Ron thought he should plant cover crops right away into wheat stubble in order to get more growth, but other farmers in the area found that led to drier soil and a poor corn crop following the cover crop. Allowing the volunteer wheat to come up first seems to be the better method on their farm.

Keys to Success

Success with this integrated crop and livestock model does require above average ambition to make it work. A major motivator for Ron is that his property adjoins Lake Wisconsin, a popular recreational destination. Ron wants his farm to be a showcase for best practices that protect the lake. He views himself and his farm as ambassadors for how agriculture can coexist harmoniously with the natural environment.

Managing several different crops in rotation, along with cover crops and grazing, makes for a complex system. Another key to Ron's success is finding enjoyment in rising to the challenge and seeing the system improve over time.

Ron's summary of his farm is that it has allowed them to have a steady income and not have to rely on off-farm income to support the farm. Living expenses have to be watched but time off for fun is also important. Fishing and snowmobiling are a priority for the family.

Layout of one of Ron's pastures. *This property is located 13 miles from Schoepp's farm and is owned by a CAFO operation, which is subject to DNR regulation. It is a myth that CAFO land can't be grazed, but NRCS and DNR needed to agree to make this work with Ron's model of grazing plus feeding supplemental grain. Ron rents the pasture ground here to graze dairy heifers, using a mob grazing (high stock density grazing) model with daily moves and backfencing. Green lines show the current cross-fencing configuration. Water is supplied only in the feeding area.*

What Can Others Learn & Apply

Portable windbreaks are utilized for rotational winter feeding.

- Put a value on the savings in fertilizer because of utilizing a grazing system
- Put a value on healthy, active soils
- With good organization, you can embrace complexity. A diverse yet flexible system is a stable system.
- Raising livestock requires dedication to the livestock and a fair amount of work, but it also allows for opportunity to make a good living. To succeed, to stay with it, you need enough animals and successful management of higher stocking rates.
- Invest in good infrastructure to set up your fences and paddocks so you don't have to spend a lot of time on maintenance and fixing things.

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Green Lands Blue Waters and partners are conducting essential research, improving the genetics of old and new crops, translating knowledge into Continuous Living Cover farming systems, developing new extension and outreach capacity, working in farm fields, shaping policy, building profitable markets for new crops, and changing the narrative around what's possible through agriculture. The value of Continuous Living Cover farming comes in yields and profits, but also in improved soil health, cleaner water, new economic opportunities, diverse agricultural communities, more wildlife, reduced risk, and resiliency in the face of a changing climate.

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