

# A dairy in transition

BRANDON — A firstgeneration dairy farmer is getting a start in a more efficient and environmentally sound setup with assistance from the USDA's Natural Resources Conservation Service and guidance from the longtime organic farmer whose operation he'll eventually own.

Jack Schouweiler, 21, is phasing into full-time dairy farming as Ben Wagner, 61, transitions into retirement.

A remodeled parlor style barn, new manure storage facility and 59 acres of additional pasture for rotational grazing will make chores less backbreaking, allow the dairy to expand — and protect both groundwater and surface water in the Upper Chippewa River watershed.



Pasture expansion, new manure storage system made possible by Clean Water Funds, NRCS assistance and help from Douglas SWCD staff will improve water quality in the Upper Chippewa River watershed as it sets beginning, retiring farmers up for the future

**Top:** Jack Schouweiler brings the last of the cows from the pasture to the barn July 8 on Ben Wagner's Douglas County farm. **Above:** Schouweiler, 21, is getting into farming as Ben Wagner, 61, prepares to eventually retire. "We disagree, but we've never had an argument," Wagner said of Schouweiler, who started milking for him part time at age 16. **Photo Credits:** Ann Wessel, BWSR

Schouweiler is remodeling the barn at his own expense. Leveraging a combined \$247,000 in Environmental Quality Incentives Program (EQIP) assistance from NRCS

and Clean Water Funds from the Minnesota Board of Water and Soil Resources made the manure facility and pasture



expansion possible. As a beginning farmer, Schouweiler qualified for higher NRCS payment rates.

"Otherwise, we couldn't do this," Wagner said of NRCS and Clean Water Fund assistance. "I couldn't afford to borrow that kind of money, and (Schouweiler) doesn't



Jack Schouweiler and Ben Wagner will move the milking operation to a remodeled barn on the farm Schouweiler bought from Wagner's retired brother. That new parlor setup — with a new manure storage system at that site and an expansion of rotationally grazed pasture, both made possible with NRCS assistance — will protect groundwater and surface water within the Upper Chippewa River watershed. Those improvements also will make it possible to eventually expand from 38 to 70 cows. The cattle usually stay clean in the pasture but recent heavy rains made spots muddy on July 8.

have the assets to borrow against."

What Schouweiler does have is a "fire in his belly" for farming, Wagner said, and a talent for working with cattle.

"I'm starting to call him the cow-whisperer. When he works with cattle, they seem to respond to him so easily. He's got cattle sense that you can't teach. He's going to be a better cattleman than I ever was," Wagner said. "He sees calves are sick before I do. ... Heifers, they don't get startled with him."

Schouweiler grew up on a hobby farm 18 miles from Wagner's 38-cow organic



# I want to preserve what I worked for, and he wants to take it to the next level — and that's something unique.

- Ben Wagner, on building soil health

dairy, and has milked cows for more than a dozen other farmers. He wanted a farm of his own. Wagner's children had no plans to farm. He was looking for someone to take over.

They met at a 4-H rabbit show.

But Schouweiler was only

14. Wagner wasn't sure what would come of the conversation. Two years later, he got a call. It was Schouweiler, wondering when he could start milking.

"With milking, no matter how fast you go, it still takes the same amount of time. It's just relaxing, the actual milking part of it," Schouweiler said. "You've really got to like cows."

On June 1, 2020, Schouweiler became the owner of the dairy herd.

It's one milestone among many in two years of intensive planning. Schouweiler plans to rent — and eventually buy — Wagner's machinery and land, as cash-flow allows. Meanwhile, Schouweiler is learning about fieldwork and crops from Wagner. Together, they run about 440 acres of cropland and pasture.

Wagner said he could have sold to farmers who would



Left: Jack Schouweiler shovels corn silage before milking July 8. Middle: Ben Wagner and Schouweiler usually take turns milking. While he becomes established, Schouweiler also milks at another dairy farm. He said working on different dairy farms since he was a teenager gave him a good look at how each operates differently. Right: Among the changes since Schouweiler started working with Wagner: The cows now have names in addition to numbers.

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**Top:** On Ben Wagner's Douglas County farm, the cows graze a different 1.5- to 2-acre paddock every day. NRCS grazing lands specialist Jeff Duchene said leaving 4 to 6 inches of growth results in faster regrowth. **Bottom:** The 130-mile-long Chippewa River runs through Pope County.

have absorbed his land into the thousands of acres they already run. But he'd improved soil health over the years, and didn't want to see those benefits disappear.

"I want to preserve what I worked for, and he wants to take it to the next level — and that's something unique," Wagner said.

Together, Schouweiler and Wagner completed a program through the nonprofit Dairy Grazing Apprenticeship, and a farm business management program through Alexandria Technical and Community College. Schouweiler earned a two-year dairy management degree from Willmar's Ridgewater College in May 2019 — the one condition his mother placed on supporting his decision to farm.

"I talk to a lot of older farmers and they (say), 'Well, I write it up on a sticky note," Schouweiler said of tracking business expenses. While a lot of his figuring starts on paper towels, "It's nice to have those numbers in perspective."

Ian Olson, the Chippewa River watershed conservation planner based at Douglas Soil & Water Conservation District, has worked with Schouweiler and Wagner on plans tied to Schouweiler's NRCS applications. Olson was hired as part of BWSR and NRCS' **66** By either eliminating existing pits that aren't in compliance, or (reconstructing) those that are still being used, the groundwater resources in that area will be better protected.

—Jerry Haggenmiller, Douglas SWCD coordinator



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collaborative Watershed Conservation Planning Initiative.

Building a new manure storage system to replace a decommissioned manure pit allowed Schouweiler to use the milking barn on the farm he bought from Wagner's retired brother, Robert, a mile down the road. When the cows move out of Wagner's tie-stall barn — a setup that's harder on the back — Wagner will continue to rotationally graze heifers on his farm. The new, 400,000-gallon lagoon at the remodeled barn site has the capacity to hold 12 months' manure.

Clean Water Funds part of a \$356,960 grant Douglas SWCD received in 2019 to improve drinking water quality by upgrading, replacing or closing out-ofcompliance manure pits covered 75% of the project costs, which included a 60-by-100-foot cement stacking slab with 4-foot-high walls, and fenced cattle walkways leading to the pasture.

The area was among those identified through a 2017 Clean Water Fund grant, which led to work in Millerville Township and parts of Ida and Leaf Valley townships.

Douglas SWCD initially targeted the area based on Minnesota Department of Health nitrate testing of 1,864 wells in nine Douglas County townships. On average, 1.7% of the wells tested exceeded the state's allowable limits. MDH has linked nitrate to blue baby syndrome.

"By either eliminating existing pits that aren't in compliance, or (reconstructing) those that are still being used, the groundwater resources in that area will be better protected," said Jerry Haggenmiller, Douglas SWCD coordinator. "As a secondary bonus, any runoff into surface waters will be corrected by these ag waste system (upgrades)."

The Upper Chippewa River watershed in Douglas County consists of dairy farms, cropland, wetlands and lakes set amid rolling hills. Landuse and topography make the area more vulnerable to nitrate pollution.

The 130-mile-long river flows from Otter Tail County to the Minnesota River at Montevideo. Its watershed encompasses 2,080 square miles in parts of Otter Tail, Douglas, Grant, Pope, Stevens, Swift, Kandiyohi, Chippewa and Stearns count. Among the concerns within the watershed are sediment, phosphorus, nitrogen and bacteria.

"Whatever protection we can do here is going to benefit everybody all the way down," Haggenmiller said.

Converting marginal cropland to pasture is one protection that benefits water quality.

NRCS grazing lands specialist Jeff Duchene writes 70 to 100 grazing plans a year for producers within 20-some northwestern Minnesota counties. Over the past 10 years, he said rotational grazing has caught on across the region.

"As you get more people implementing better grazing management, it seems like you just get more interest," Duchene said. "Then I think the farming environment has changed, where people see the value of doing things differently."

As land values increased, Duchene said producers turned to pasture management as a way to raise more animals on existing acreage. Commodity prices were another factor.

Duchene initially worked with Wagner to establish his rotationally grazed pasture. His most recent 50-acre enrollment — bordering a wetland, with steep slopes that made it difficult to farm — grew out of a discussion during a field day Wagner hosted. Schouweiler enrolled 9 acres of rented land.

"Probably the biggest challenge on Ben's site was the soil wetness. He's got a couple wetlands near the farm site that the pasture goes around. He had been trying to farm some of those soils. It was poorly drained, and marginal cropland," Duchene said. "With well-managed grazing, you can really minimize your impact as far as water quality and reduced soil erosion."

Grasses will grow where crops were spotty. EQIP assistance will offset expenses tied to seeding, extending water lines and fencing.

By buffering the wetlands, the pasture will decrease the potential for runoff. While that land may be too wet for grazing part of the year, Duchene said it will serve as drought insurance remaining productive longer, even if it doesn't rain for a few weeks. The site will balance some of the drier upland pasture on Schouweiler's rented farm.

The new setup plus more pasture will make it possible for Schouweiler and Wagner to milk up to 70 cows.

"I feel so blessed that this has happened. I don't know how I'd be running the farm without his help," Wagner said.



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BWSR

The Minnesota Board of Water and Soil Resources' mission is to improve and protect the state's water and soil resources by working in partnership with local organizations and private landowners. Website: www.bwsr.state.mn.us.

## Details: Grant, WCPI & Grazing

**UPPER CHIPPEWA GRANT:** Douglas SWCD's \$356,960 Clean Water Fund grant from BWSR will protect groundwater and improve water quality in the Upper Chippewa River watershed by upgrading, replacing or closing existing damaged or unpermitted manure storage areas; and by addressing feedlot runoff. In addition to Jack Schouweiler's project, four manure pits have been closed; two more are set to close this year. Eligible projects included feedlot runoff control structures, feedlot fencing and stacking slab construction. The 10 projects would reduce nitrogen by an estimated 421 pounds and phosphorus by an estimated 122 pounds a year. Grant funds can cover up to 75% of a project's cost.

#### WATERSHED CONSERVATION PLANNING INITIATIVE:

lan Olson is one of seven conservation planners working in watersheds across Minnesota as part of an NRCS-BWSR-SWCD <u>collaboration</u>. WCPI was designed to help producers gain a comprehensive view of their land and the resource concerns they might have. Planners work with producers to develop a whole-farm assessment. Implementation is voluntary. Plans are



Olson

meant to increase landowners' readiness to implement conservation practice when the opportunity arises.

### **COVER CROPS & GRAZING:** Jeff Duchene, NRCS' grazing

lands specialist covering northwestern Minnesota, considers cover crops when he works with producers to get more grazing days out of their operation. Improved pasture management means improved land productivity — and more profitability. "A lot of producers get in the mind-set that your pasture is pasture and your cropland is cropland," Duchene said. Incorporating cover crops can



Duchene

increase grazing days — by grazing crop residue, or by growing cover crops to be grazed. "I think once you start looking at both your perennial pasture resources and any cropland or hay land you may have access to, you can develop a more well-rounded system. You just get a lot of options."

In Minnesota, NRCS grazing plans call for at least five months of grazing. "I think seven months could be a very feasible goal for a lot of operations," Duchene said. Even a couple of weeks more grazing could be more economical. One factor in developing a grazing plan is how much time the producer can spend on management. Some use drones and phone apps to help with livestock and pasture management.