Making good conservation decisions to keep the family farm productive and regenerative for future generations is a top priority at Plum Pride Holsteins, LLC. Marv Biese, of Greenleaf, Wisconsin, owns and operates the second-generation family farm with his wife, Patty, three kids, Katie (17), Kyle (15), and Kevin (13) and a small staff that takes pride in the land and animals they help raise.

Marv was born and raised on the farm and started farming in 1991 with his family. In 1999, he took over the farm full time. “We own about 500 acres and rent an additional 600; all the land is planted as forage for the cows,” explains Marv. The dairy milks around 500 cows and raises their own heifers on a newly installed rotational grazing system.

Marv had areas of land on his farm that were not effectively cropable with equipment due to the unique landscape. He explains, “Before we started installing conservation practices, we had vast amounts of gullies and erosion taking place because the land is very hilly. Ditches were continually washing out. Dealing with these issues was hard on our equipment, things break. I wanted to partner with NRCS to alleviate the issues I was having with the gullies, washouts, some of the water ditches and ravines.”

Marv’s family started working with the USDA Natural Resources Conservation Service (NRCS) through the Environmental Quality Incentives Program (EQIP) back in 2003. From that time, until 2011, the family developed a comprehensive nutrient management plan, completed nutrient and pest management practices and residue management.

With the early success of the management plan and practices, in 2012–2017, the farm again partnered with NRCS through the EQIP to close an aged waste facility, complete critical area planting and heavy use area protection, install roof runoff structures and underground outlets, install grassed waterways, mulching and a stream crossing. During this time, the family also started trying cover crops to update their land management practices to be more regenerative. The family’s longstanding conservation efforts were passed down to Marv, and when he took over the farm, he knew he wanted to implement even more conservation. In 2019, Marv installed a new, compliant waste storage facility and completed heavy use area protection and critical area planting. Marv continues to implement cover crops and no-till. Now, he’s working with NRCS on managed rotational grazing.

In 2019, Marv met with Outagamie County Land Conservation (OCLC) and the NRCS to learn about the opportunities available to implement managed grazing on his farm. “I’ve worked with Outagamie County and the NRCS in the past. Hearing about the many benefits of the NRCS Great Lakes Restoration Initiative (GLRI), I knew I wanted to apply,” said Marv. “We were in the Dakotas a few years ago looking at the vast areas of grazing and pasturing. It was really inspiring how farmers out west utilized certain areas of their land that weren’t prime for cropping.”

Marv wanted to use areas of his rolling hills for grazing. He partnered to develop a conservation plan and applied for assistance through the GLRI EQIP. His application was accepted for funding and 60 acres of his farm, previously cropped in corn, was converted into managed rotational grazing.

“Through GLRI EQIP funding, we completed a forest and biomass planting using a multi-species pasture seed mix on the contracted acres and also installed fencing,” explained Marv. With assistance from NRCS and OCLC, he was able to smooth and seed down all the gullies, erosion and buffer areas, which made a huge impact and improvement to the landscape, helping prevent future erosion issues. “We also added a livestock watering pipeline out to the grazing acres and two watering stations. We only put pregnant heifers out on the pastured areas. We plan for them to be out on pasture 3–4 months. Moving the cattle is very time efficient. If I drop the fence, they just move to the next area in about five minutes,” Marv added. Marv is very pleased with his new grazing system and it allows him to check on his animals often. Marv explains, “I like that I can graze my heifers myself, keep a close eye on them and give them space to graze. It’s a big
cost to have someone raise them for you. I’m so glad I can do it here on the new grazing acres. The practices that I implemented are working in really well with my farm goals.”

“Utilizing some of these acres in a different way, with the size of equipment these days and all the small hillsides and fields, I couldn’t get equipment into those areas well. Managed grazing has been great in trying to find more effective ways to manage the land,” said Marv. “With the size of equipment, I can pull into a 100-acre field and chop it off in an hour or two. Then, the small, half-acre fields still take 45 minutes. Rotational grazing is a better way to utilize my smaller fields; it’s more cost effective and saves time.”

Marv also realizes the other benefits to managed rotational grazing. “There are economic benefits in feed costs, start-up and maintenance costs compared with confinement systems. There are time savings in moving cattle, versus feeding hay and silage. There are various environmental benefits including decreased soil erosion, decreased use of pesticides and fertilizers, increased soil health, and more. There’s wildlife advantages for grassland birds, pollinators and those species looking for nesting habitat. There’s even benefits to animal health and welfare; the list goes on,” explained Adam Abel, NRCS Soil Conservationist.

Through GRLI EQIP, Marv was also able to install trails and two stream crossings. “The new stream crossings are a big benefit because we have to drive equipment through, and the stream is protected instead of us sinking into the banks,” explained Marv. The heifers are also brought over the stream crossings to get to the managed grazing acres. “The first time we brought them across the newly installed stream crossing they were hesitant, but now, they just go right across, like nothing to it,” explained Marv.

Through a GLRI grant, OCLC signed an MOU with Brown and Calumet County Land Conservation Departments to add additional staff members to help grow the push for local GLRI. “We’ve partnered with NRCS and Brown County LCD to share resources across county lines; it’s really nice to have a group of such talented people working together to complete conservation projects like this,” said Jeremy Freund, OCLC Project Coordinator.

OCLC partnered to shape streambanks and pull them back to help alleviate the erosion that was taking place on Marv’s land. “We seeded down the streambanks with the goal of helping stabilize the stream; the surrounding woods had many waist deep gullies; NRCS developed a forest management plan and we were able to repair areas and hopefully will do some more tree planting soon,” explained Wes Kotila, OCLC Engineering Technician.

“Our main push partnering on this project is to help Marv’s operation while improving the local water quality. The goal of GLRI is to decrease the phosphorus and sediment to the Bay of Green Bay and Lake Michigan,” added Freund. The neighbors are seeing the improvements made on Marv’s property and are now signing up to do similar projects.

The farm also plans to continue trying different multi-species cover crops and no-till. “I like to try new and different technologies, mixing it up so that if something doesn’t work, I’m able to try something else the next year,” added Marv. “NRCS and the county conservationists bring up great ideas to discuss on my landscape. Their partnership helps me realize all the possible options and make well-informed decisions for my farm and natural resources.”

Marv has had such success in partnering to implement conservation, he plans to host pasture walks in the future to show others the positive difference managed grazing can make on their operations. “Conservation is very important to me. I want to sustain or improve our natural resources for generations to come. I want to keep this land healthy for my kids; they help on the farm and really love it. They are starting to find their niches and different things they like to do on the farm,” explained Marv.

Marv has taken his conservation goals one step further, also enrolling in the NRCS Conservation Stewardship Program (CSP). Through CSP, he is using drift reducing nozzles, low pressures, lower boom height and adjuvants to reduce pesticide drift and using GPS for a more targeted spray application to apply enhanced efficiently fertilizer products, including nitrification inhibitors. He’s also harvesting hay in a manner that allows wildlife to flush and escape. The farm is extending existing filter strips for water quality protection and wildlife habitat. CSP also allows him to split applications of nitrogen and conduct plant tissue tests and analysis to improve nitrogen management.

Adam Abel sums up Marv’s partnership, “Marv is prepared to keep moving the management of his land forward; the newly seeded areas are going to look completely different over the next few years of establishment. Marv has planned to complete managed rotational grazing with NRCS through EQIP until 2022. As an NRCS employee, I love working with graziers, like Marv; when farmers are willing to work together towards a management plan, we’re excited and here to help.”