

MSU Extension Tool Lending Program,

Greetings from the Keweenaw Peninsula!

Our farm, Whispering Wild Market Farm, along with our cohort farms, received an NCR-SARE Farmer Rancher grant in 2024 entitled "Demonstration of low-impact tractor cultivation in a regenerative farm model to increase production using equipment sharing on multiple farms". We were able to purchase several pieces of tractor implements and equipment with the intention of reducing labor costs, fatigue, and overuse injury while increasing production, revenue, profit, soil quality, and quality of life for our farmers. The equipment we purchased was a PTO Power Harrow, PTO driven Compost spreader, an undercutter, a subsoiler, 2 Rohand II's (for different bed widths), pallet forks, and a PTO fence trimmer.

We used these pieces for bed prep, drainage, loosening soil, creating a tilthy seed bed, spreading compost, loosening crops for ease in harvesting; planting, weeding, and harvesting on the Rohands, moving heavy tarps and materials with the pallet forks, and keeping fences clear. We would like to share our results with you.

We experienced a decrease in labor needs by 75% overall. For example, trimming fences would take us 30-40 hours

with handheld electric/gas trimmers. The PTO trimmer knocked that job down to 4 hours. The compost spreader took 60-70 hours of heavy labor moving compost by buckets to just 6 hours with the tractor bucket and compost spreader. The Rohands were invaluable not only in decreasing the time it took to complete jobs like planting onion starts and weeding, but it took the pressure off the back, hips, and feet. The soil improved with subsoiling and undercutting that mimics broadforking. The power harrow was a favorite amongst the farms, creating a perfect seedbed with minimal effort.

We saw an overall doubling of our revenue and an increase in individual crop profit up to 10 times, including a 10-fold increase in production, revenue, and profit for potatoes. Many crops increased production by 4 times, as we were easily able to expand our farming acreage and were able to afford to hire a full-time farm hand.

Even with deer pressure and extreme rain events that took out entire crops, we were able to meet every actionable data insight with these pieces. We believe a perfect season would have yielded even better results.

We included a shared equipment program in our grant and shared these pieces with 2 neighboring farms, with the goal of sharing with all interested neighboring farms around the Keweenaw. These cohort farms also saw increased production, the ability to hire new employees, expanded their farms, and reduced injury and fatigue.

We wanted to specifically bring the demonstration of these pieces to your attention to encourage you to make larger purchases for your tool sharing program for neighboring

farms and also, hopefully, purchase these pieces to use on North Farm to inspire beginner farmers to invest in larger equipment as a way to not only increase production and revenue, but maintain their physical ability to farm into older ages. This is true sustainability.

Please see our YouTube videos below to view this demonstration. Thank you.

NCR-SARE awards 30k to UP farms for equipment sharing: tractor cultivation

<https://youtu.be/KymMYAxbiU>

We Tested a Rohand II Picking Assistant on Our Market Farm

<https://youtu.be/PCnK893o8SI>

Low-Impact Tractor Cultivation: Featuring the Power Harrow

<https://youtu.be/-6-0S9rfnE>

Regenerative Farming Equipment Doubled Our Production

<https://youtu.be/GftfykrijDA>

Thank you for your time and attention,

Gina Kerr

Whispering Wild Market Farm

Toivola, MI

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