

Regenerative Agriculture & Community Engagement at Haystack Farms

Mad Agriculture x MENV Fall 2025
Capstone Project Brief

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Purpose

The owners of Haystack Farms, Anders and Jacqueline Hester, connected with Mad Agriculture shortly after purchasing the land, a large portion of the former Haystack Golf Course, and agreed upon a shared vision to transform the land into a productive place for agricultural and ecological land stewardship. This vision entailed adding a regenerative farm on the land, which led to Krisan Christensen moving her CSA operation, Wild Wellspring Farm, to the property. It also included keeping a “wild” portion of the land to be untouched, as well as a broader initiative to incorporate regenerative land management practices on the property to make the land more productive and ecologically sustainable.

The primary purpose of the project was to expand upon the initial efforts made by the Hesters to revitalize the land to a more natural state, from its previous state as a once heavily-managed golf course. Our capstone team decided upon a set of deliverables to help facilitate the establishment of regenerative agriculture (outside of the Wild Wellspring Farm space) and ecological systems to promote biodiversity on the land, improve soil health, and support the local ecology. Our mission also included efforts to benefit the Boulder County and Mad Agriculture communities and to celebrate such a beautiful place. Thus, we sought to include community engagement events as part of the scope of this project. Lastly, as a way of giving back to one of the primary land stewards at Haystack, resident farmer Krisan Christensen, we included farm labor as part of our project deliverables.

The 2025 Capstone Project with Mad Agriculture was a continuation of the work completed by the previous capstone team in 2024, which was a research-based land assessment project that laid out several focus areas for future considerations. Our project team reviewed the findings of the 2024 capstone team and considered their proposed focus areas to help formulate our own set of deliverables for our 2025 project.

Considering the recommendations of the previous capstone team and the mission of the land owners, Mad Agriculture, and other land stewards, we chose a set of deliverables and develop design plans for each, and implement those that were feasible to implement. They are as follows:

- Design-only Deliverables:
 - Orchard
 - Regenerative Pasture
- Design-and-Implement Deliverables:
 - Event Series
 - Grant Proposals
 - Pollinator Patch



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Methods

For both the land-based and community based deliverables, our team conducted extensive background research, designed landscape and organizational plans, and implemented projects/events when applicable. Our specific methodologies included:

- Consultation with 2024 MENV team
- Primary and secondary research
 - Farm tours and consultation with farmers and land stewards
 - Online and text reviews on relevant topics
 - Soil testing
- Land-based observational learning through land-walks and time spent on the land
- Manual labor in support of the overall Haystack community and our specific projects
- Stakeholder engagement with stakeholders on and off the farm
- Community engagement with the CU Boulder MENV community, friends of Mad Agriculture
- Collaboration with fellow agricultural and environmental organizations like DAR, Apis Arborea, and High Plains Biochar
- Developing our team's sense of place at Haystack

Outcomes

Regenerative Pasture:

- Rerouted the farm access road, complete with the weight-distribution feature over the irrigation pond inlet pipe, creating safe access and opening the pasture for flood irrigation
- Evaluated the 3 acre plot of legacy wood debris:
 - Estimated 2.58 metric tons of CO₂e in potential carbon storage via biochar pyrolysis
 - Developed a proposal for the Boulder County Circular Economy Fund to support this work; although the application was not selected, the process clarified a feasible action pathway for future biochar efforts
- Explored pathways for pasture establishment, including flood-irrigation and earthwork concepts, prairie dog deterrence, and on-site biochar production

Orchard:

- Orchard landscape design on google maps
- Orchard information sheet that includes detailed information on the biota in the orchard and operational considerations of maintaining the area including:
 - Plant sourcing
 - Fruit harvesting times
 - Implementation and maintenance budget
- Grant application (Zero Footprint's Restore Grant)
 - Application was not accepted, but the outline and documentation created can be used for future grant applications.

Pollinator Patch:

- A new drip irrigation system, as an extension off of the irrigation line that runs to Wild Wellspring Farm's windbreak
- Soil amendment to improve water and nutrient retention; components of the soil amendment process include:
 - Removal of non-native grasses and weeds
 - Hand hoeing of soil for rhizome removal and soil aeration
 - Compost and biochar application
- More than 75 individual plants planted
- Hundreds of native flower seeds scattered
- Visual map / design blueprint of the pollinator patch
- Management plan for patch maintenance in spring 2026 and recommendations for future patch management and expansion.

Events:

- Collectively, events received 200+ RSVPs, with an estimated 165 participants attending in person
- Increased community engagement in regenerative agriculture through participation in events
- Collaboration and support from various organizations and businesses, including Frontline Farming, Hearty Provisions, Patagonia Provisions x Deschutes Brewery, Wild Wellspring Farm, Apis Arborea, High Plains Biochar, Charm Industrial, and Victory Permaculture
- Recommendations based on survey data collected

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Acknowledgements

We would like to acknowledge and thank our capstone partners Tanner Starbard and Clark Harshbarger, and our capstone advisor Damien Thompson, for their continued guidance, support, and shared knowledge. We would also like to thank the owner and operator of Wild Wellspring Farm Krisan Christensen, for her insight and assistance, well as fellow stakeholders of the farm, Liza McConnell, and Shan Wo.

We would like to thank the many collaborators from Mad Ag who also helped us along the way, particularly Rayle Blevins-Odle, Jane Cavagnero and Elizabeth Candelario. We would like to thank those from other organizations who partnered with us along the way - Michael Box, of Victory Permaculture, Michael Thiele of Apis Arborea, and Rowdy Yeats of High Plains Biochar.

Lastly, we would like to thank Alice Reznickova and Liz Holland of CU Boulder's Masters of the Environment program for their advising and project assistance, and Haystack Farms landowners Anders and Jacqueline Hester.



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