



Mad Ag continues to evolve into our fullest expression. As we listen and learn from the land and the stewards we serve, we are faced with the joy and challenge of growth: being open to change, vulnerable to new awakenings, mustering courage to let go, coming alive to the swimmy-ness of transformation.

I admit, I'm short on words to describe the threshold we are on. My best comfort and guidance has come from John O'Donohue. Please enjoy the excerpt from his book, *To Bless the Space Between Us.* I offer this passage in hope that it might resonate with all of us who are in the tumult of becoming.

"To acknowledge and cross a new threshold is always a challenge. It demands courage and also a sense of trust in whatever is emerging. This becomes essential when a threshold opens suddenly in front of you, one for which you had no preparation. This could be illness, suffering or loss. Because we are so engaged with the world, we usually forget how fragile life can be and how vulnerable we always are. It takes only a couple of seconds for a life to change irreversibly.

Suddenly you stand on completely strange ground and a new course of life has to be embraced. Especially at such times we desperately need blessing and protection. You look back at the life you have lived up to a few hours before, and it suddenly seems so far away. Think for a moment how, across the world, someone's life has just changed – irrevocably, permanently, and not necessarily for the better – and everything that was once so steady, so reliable, must now find a new way of unfolding.

Whatever comes, the great sacrament of life will remain faithful to us, blessing us always with visible signs of invisible grace. We merely need to trust."

RGS G. Tf

Philip Taylor Co-Founder & Executive Director



the calendar in a mother's home are the flowers on the table Seasons gathered from beside the path arranged by essence in the glass the passing of time is measured by the level of water and plumpness of petal in winter, the vase may stay the same for weeks until the day arrives to stir the birds a tweet In Spring it seems every day is new And in Summer nights displays of sun burst over our Dinner plates In Fall, the collection is sturdy and delicate both harvested choicely from amongst the litter

And so go the months and years Made of moments picking flowers

Tanner Starbard

TABLE OF CONTENTS

Purpose Mission & Vision	4
Team	
Regions of Impact	6
4 Areas of Work	
Markets	8
Perennial Promise	
Capital	
Perennial Fund Road Trip	
Stewardship	
Regenerative Research Project	
Restore Colorado	
The Revolution	15
Mad Events	
Fellowship Program	17
The Journal	
The Grain Revival Guide	19
Farmer Spotlight	
Financials	
Notable Press	
Donors	24

VISION PURPOSE MISSION

An Earth where land, sea and people thrive together forever

We are here to reimagine and restore our relationship to Earth

Create a regenerative revolution in agriculture



TEAM



PHILIP TAYLOR Co-Founder & Executive Director



NICOLE BRINKS Co-Founder & Cultural Strategist



TANNER STARBARD Director of Operations



BRANDON WELCH Director of Radical Capital



ELIZABETH CANDELARIO Director of Strategic Partnerships



CLARK HARSHBARGER Director of Stewardship



ALEX HEILMAN Director of Supply & Trading



MAT MOORE Senior Credit Analyst



JANE CAVAGNERO Director of Marketing

BOARD

MARK LEWIS Robbie Vitrano Maggie Fox Mark Retzloff Ryan Marten



REBECCA BALDWIN-KORDICK Farm Planner

REGIONS -OF IMPACT

This year, Mad Agriculture worked in the Mountain West, Midwest, Oregon, Louisana & Pennsylanvia. Based in Boulder, CO our team spent a lot of time in the field this season.







4 AREAS OF WORK

Mad Agriculture supports farmers through Capital, Markets, Stewardship & the growth of the Revolution. Through these four key levers, farmers are able to thrive in their transition toward a regenerative organic system.

MARKETS

CAPITAL

Mad Markets connects farmers & buyers to accelerate regenerative agriculture.

Mad Capital finances regenerative organic farmers.

7

STEWARDSHIP

Mad Stewardship works with farmers to regenerate their land & business.

THE REVOLUTION

Mad Ag builds community to catalyze the regenerative revolution.

Mad Markets connects farmers & buyers to accelerate regenerative agriculture.



FARM DIRECT SOURCING

INGREDIENT BROKERAGE

We partner with brands and farmers to create sourcing programs that highlight the highest quality organic and regenerative organic ingredients. Organic farmers don't have the same local market opportunities as their conventional neighbors. We find buyers and new market channels.





PERENNIAL PROMISE

Perennial Promise is a newly incorporated, farmer-owned co-op that supports growers of emerging perennial staple crops. The co-op is launching with Kernza[™] by aggregating high-quality reliable supply, providing agronomic expertise, and assisting in market development. Mad Agriculture has partnered with Perennial Promise to develop the crop marketing strategy for this innovative and climate-beneficial crop and will be representing the majority of the Kernza production in the USA.

Kernza is the first commercially available perennial grain crop in the United States, and is in early stages of market development. In perennial production systems, continuous soil coverage greatly reduces soil erosion and minimizes the need for tillage and herbicide applications. Farmers growing Kernza have the potential to sequester more carbon and reduce greenhouse gas emissions, as its extensive root system pumps carbon into the soil and prevents nutrient leaching to waterways and the gaseous production of nitrous oxide - a potent greenhouse gas.

Kernza's success in the marketplace will accelerate adoption of regenerative agriculture, provide increased profitability to farmers and economic development to rural communities, and provide a delicious and nutritious alternative to commercial grain crops. Farming in nature's image benefits everything.

The Mad Agriculture Markets program connects organic and regenerative farmers to values-aligned buyers to improve farm profitability and leverage the marketplace to drive adoption of regenerative practices. Our services include origination and production contracting, ingredient brokerage, and supply chain optimization.

MARKETS HIGHLIGHT





CAPITAL

Mad Capital finances regenerative organic farmers.



LONG TERM & LOW-COST FINANCING

Mad Ag loans are long term to better support farms transitioning to organic. Farmers only pay when they're making money, based on a flexible crop share and deferral years.





WHY THE PERENNIAL FUND IS DIFFERENT

- (1) Farmer first, community driven
- (2) Financing with farm knowledge
- (3) Readily scalable
- (4) Built on ecological principles
- (5) Monitoring ecological and economic outcomes of organic transition

VERIFICATION

Beyond verifying the transition to regenerative agriculture under the new Regenerative Organic Certification, the Mad Agriculture team is aiming for even higher standards of impact reporting for investors and the public.

Mad Ag is partnering with Ecdysis Foundation and Resource Environmental Solutions to conduct a long-term research project to monitor changes in soil health, carbon sequestration, bird and pollinator diversity, cash flow, and more.



CAPITAL Highlight

PERENNIAL FUND Road Trip



The Mad Ag team hit the road for two weeks this summer, visiting:

 $\mathsf{CO} \rightarrow \mathsf{MT} \rightarrow \mathsf{SD} \rightarrow \mathsf{MN} \rightarrow \mathsf{WI} \rightarrow \mathsf{IL} \rightarrow \mathsf{IN} \rightarrow \mathsf{IA} \rightarrow \mathsf{NE}$

ROAD TRIP TO BUILD COMMUNITY

In a truck, an RV & a sprinter van, our team of 9 made our way throughout the Midwest to touch down at some of our existing projects, our budding partner farms and some of the farms that have inspired our work. In each state and each stop we were able to witness place-based wisdom & the continued call for a regenerative revolution.



STEWARDSHIP

Mad Stewardship works with farmers to regenerate their land & business



LAND & BUSINESS STRATEGY

The Stewardship Team partners with farmers to realize their highest ideals for their land to create both ecological and financial wealth. Stewardship uses a holistic framework to help farmers define success in their life as it relates to finances, business and land under management. We actively help farmers seek and find partnerships whose support will directly impact the success of a farm's business.

Stewardship helps farmers create a Land and Business Plan that ensures farmers are rewarded for their high level of stewardship by accessing premium markets and financial support. We will strategize ways to reduce costs, and optimize revenues, profit and equity. Certification consultation and impact reporting are value offerings solidifying for 2022.

CROP & LIVESTOCK SYSTEMS

Mad Ag worked with cropland, pastureland and rangeland; organic, transitional and non-organic; Crop & animal systems included corn, wheat , alfalfa, soy beans, soybeans barley, rye, 4 varieties of potatoes, safflower, sunflower, proso millet, milo sorghum, sorghum sudangrass, pinto beans, rice, beef cattle, dairy cattle, hair sheep, layers, broilers, and hogs.

PARTNERSHIPS

Jubilee Justice, Quivira Coalition, Colorado Conservation Tillage Association (CCTA) CSU-COMET, Origin Milk, Team Ag, USDA-NRCS CO, Soil Regen, Boulder Valley and Longmont Conservation Districts, West Greeley Conservation District, Boulder City and Boulder County, ECDYSIS, RES, Dryland Agroecology, Zero Foodprint.



STEWARDSHIP HIGHLIGHT







REGENERATIVE RESEARCH

The vast majority of farmers are stuck in the food system, unable to change, even in the face of the worsening farm crisis. The food system, from policy to agronomic support to marketplace, is structured and scaffolded to serve and reinforce the old system. Breaking out of the old and into the new world of regenerative and organic agriculture requires many things to come together, from farmer success stories, new types of capital and markets, growing communities of change, policy and more, all of which amounts to cultural change.

Measuring the impacts of transitioning conventional farmland to organic is a critical tool to encourage the change we seek. We need data that illustrates the positive impacts to the farm, to the community, and to our planet. The Stewardship team, in partnership with the Perennial Fund farmers, developed and launched a research project that will provide critical insights on real farms, run by real farmers, with total clarity on practices and enterprise health. This research project provides critical insights into relationships between soil health, risk-mitigation, financial performance/resilience and farmer wellbeing - all indicators of system transformation.

The ecological assessment will be conducted by Ecdysis Foundation and Applied Ecological Services (AES), recently acquired by Resource Environmental Solutions. Dr. Jonathan Lundgren, Founder and ED of Ecdysis Foundation, is an expert and leader in understanding the ecological and financial benefits of regenerative agriculture. Steve Apfelbaum, Founder and Chairman of AES, has been a leader in monitoring the ecological benefits of agriculture and creating technically defensible data sets to learn from and document improvements from regenerative organic agriculture. AES has co-developed and/or evaluated the industry standards for ecological measurement and monitoring protocols for documenting ecological health (biodiversity among various ecological strata, soil carbon, hydrology and vegetation).

Over the next 10 years, we will monitor financial and ecological improvements. Verifying the impact of regenerative and organic practices will be an essential piece of this movement going forward. The outcomes of this project will help encourage farms to transition, communicate impact to consumers and buyers, and bring comphrensive data to climate & soil science.

STEWARDSHIP HIGHLIGHT

RESTORE -Colorado

A Table-to-Farm movement that mobilizes Coloradans around agricultural climate solutions. Built on the model Zero Foodprint created in California, Restore Colorado has launched a public-private collaboration to raise private capital for compost application and soil regeneration projects.





14

more information at www.zerofoodprint.org/restorecolorado

THE REVOLUTION

Mad Ag builds community to catalyze the regenerative revolution



Mad Agriculture has a community that spans from in-person gatherings, to workshops, webinars, engagement with our Journal publication, our Fellowship program, social media, and website enagagement. This expansive network of folks is really the heartbeat of our work. Building community to drive a revolution in agriculture is fundamental to our work and is what keeps us inspired.

(1) MAD EVENTS

Mad Events are a time for our community to come together over food & storytelling to build connections, partnerships and memories. Mad Ag hosted 17 events, webinars & workshops in 2021.

(2) FELLOWSHIP PROGRAM

The Fellowship Program is an opportunity for people interested in careers in the regenerative movement to investigate, develop, and deliver projects with the support of the Mad Agriculture staff.

(3) THE JOURNAL

The Journal reflects the heart and soul of Mad Ag, and provides a way for us to share our work, celebrate the creativity of our community and give voice to our farmers, while fostering the emergence of the new agrarian culture.

(4) THE GRAIN REVIVAL

Ancient and heritage grain production and local grain economies offer a system that pays farmer more and reflects what the land wants to be.

MAD — Events

(1) Summer Solstice Pizza Party
(2) Fall Equinox Poetry Night
(3) Winter Solstice Moxie Pizza Party
(4) Minneapolis Agricultural Networking BBQ
(5) Meadowlark Organics 4th of July Hootenanny
(6) Movie Night at Trident Bookseller & Cafe
(7) Front Range Grain Community Gathering
(8) RFSI Oakland After Party





16

FELLOWSHIP Program

Our Fellowship Program exists to cultivate the skills, stories, and networks that propel students into the professional world and share in the work of regenerating our food and ecosystems. As Mad Ag fellows, this group brought their gifts to the movement and became a vibrant part of our community of change.

MENV Fellows	Sophia Piña-McMahon Carson Noel Lauren Ames	The Grain Revival
MENV Fellow	Tejas Srikanth	Financial Resources for Small and Medium-Sized Regenerative Farms in Colorado
Fellow	Gabe Toth	Local Grain Sourcing White Paper
Fellow	Lauren Harper	Journal Publication



THE Journal

The purpose of the Mad Agriculture Journal is to explore and create the new agrarian culture. It is dedicated to living the questions, trusting that in the living we will find the answers.



THE GRAIN Revival Guide

The Grain Revival Guide is an evolving, and holistic collection of resources on the Front Range grain revival movement.

THE Revolution Highlight



This guide, found on our website, provides anyone from farmers, to buyers, to consumers, with the stories and science behind ancient and heritage grains, as well as resources on how to support the movement and participate in our growing, vibrant local grain economy.

Grains 101: Grains are the lifeblood of kitchens and communities around the world. Find out how these staple foods are revolutionizing systems from those that take, to those that abundantly give.

Farmers: Are you a grain grower or interested in becoming one? Learn more about ancient and heritage grain production in the Front Range and see data from the 2021 grain trials here.

Buyers: Ancient and heritage grains are tasty and in demand. As a brand or small business-owner, find out how to buy these grains for your products and why they are important for your customers.

FARMER Spotlight

When Terry deGroot returned to Kersey, Colorado, in 2017 after serving in the U.S. Navy, the family dairy farm was going broke.

Terry's father, William, was milking around 1,100 Holstein cows for a conventional dairy buyer at the time. The farm had generated a profit just 3 of the last 10 years. William knew that they couldn't continue with current operations.

"We didn't like how we were doing it, anyway," Terry says. "When a farmer goes and looks at their animals, they want to see that they're happy and healthy. Our animals weren't. We could just see it in their eyes."

William had refused to use hormones for his first eight years of raising cattle. Giving an animal a hormone is forcing them to do something that their body doesn't want to do, he says. But in the conventional dairy business, it's efficiency over everything. A consultant told William the blunt truth: it didn't matter how he wanted to operate, he would have to use hormones to produce more milk and keep up with competition, or the farm would go out of business.

By 2019, the deGroots had nothing to lose. William and Terry had grown interested in an endangered breed of heritage cattle called Guernsey, which is known to produce richer, creamier, and better-quality milk than the conventional Holstein. They purchased a couple of Guernsey calves to experiment with another way of dairy farming.

Today, the family—Terry, William, Julia, and Tabitha—raises just 80 Guernsey cattle that graze 100 acres on their regenerative dairy farm, Colorado Cow. Their milk is sold in Natural Grocers and Whole Foods stores across the front range and produced into an artisan cheese through Longmont-based Haystack Mountain Creamery.

"We turned into farmers again," Terry says. But when the de-Groots sold off their entire Holstein herd just more than a year ago, the family was taking a leap of faith towards a better way of farming—and they had no idea how to begin.



THE Revolution Highlight



Origin knew how to bring the Guernsey milk to market, but the deGroots were rebuilding their business from the ground up. The transition from conventional management to the intensive grazing system necessary for the Guernsey cattle is complex and for dairy farmers running on thin margins, risky. This is where Mad Agriculture came in with boots on the ground.

"We were terrified at first," Terry remembers, laughing: "We thought, will the cow come back if we let her out to graze?"

Terry had been manager over the larger dairy team for so long that he barely knew how to milk a cow, he says. With the support of a Conservation Innovation Grant from the State of Colorado, Mad Agriculture brought in Willie Reid, an expert grazing affiliate and soil educator. Willie has practiced bio-dynamic agriculture and holistically managed dairy cows for many years—a sharp departure from the industrial management of the deGroots' region. He showed Terry the basics of stewarding the land with dairy farming, rather than degrading it.

"They treat the soil the way we treat our animals," Terry says. "It's much more complex than we had realized."

The team first showed Terry corners of his farm where soil health damage was stark: the ground was green where it had been left alone, and yellow where they were disking each year. With a twoday crash course, Terry learned about methods like no-till and restorative cover crop mixes to build soil health and re-perennialize the pastures. He practiced building a fence for a paddock system, which rotationally grazes the cattle to allow soil to regenerate, sequestering carbon and giving rise to more nutritious grass for the cattle.

The land showed signs of change almost immediately. Terry remembers putting cattle out on the pasture one morning, shortly after they stopped disking their soil, and noticing the sound of crickets. "I couldn't remember ever hearing crickets before," he shares. "We see soil health through the animals coming back the bunnies, the bugs—those are things we look for now."

"When we were milking 1,000 cows, we were making milk that no one wanted," he says. Now, not only are customers seeking out Colorado Cow's milk for its flavor and nutrition, his animals are happier.

FINANCIALS



EXPENDITURES



NOTABLE Press —

<u>Restore Colorado Will Take Diners From the Table to the Farm</u> **Westword,** March 2021

Downsized Dairy Boulder Weekly, April 2021

Want Healthier, More Sustainable Cheese? Here's How You Can Get Some **5280,** April 2021

Boulder County restaurants join Restore Colorado to fund regenerative farming projects Colorado Hometown Weekly, April 2021

How Mad Agriculture and Origin Milk Are Changing Dairy, One Guernsey Cow at a Time Farm Flavor, June 2021

Grains that Sustain Life & Thyme, June 2021

The Next Ventures for a Regenerative Food System Fresh Ventures Studio, July 2021

The Table to Farm Movement Championing Sustainable Agriculture in Colorado Food Tank, August 2021

\$1M Grant Aims to Transform Dairy Landscape Lancaster Farming News, August 2021

Perennial Fund aims to drive the next great revolution in agriculture: regenerative organic **The Organic & Non-GMO Report,** September 2021

Organic and conventional farmers see the promise of perennial grain, form co-op to scale it **The Organic & Non-GMO Report**, November 2021

Mad Ag: Seeking to Create a Regenerative Revolution in Agriculture Albert Lee Seeds, December 2021

<u>Q&A: The Trickiest Part of Regenerative Agriculture is Financing It. But That's Fixable</u> Bank of the West, December 2021





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