The **MISSION** of Mad Agriculture is to reimagine and restore our relationship to Earth with the story, community and practice of good agriculture.

The **PURPOSE** of the Mad Agriculture Biannual 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 frontend will contain pieces from staff and friends of Mad Agriculture, while the backend will provide updates on action, impact and vignettes from our Story, Community and Practice domains.

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**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter From the Editor</td>
<td>4</td>
</tr>
<tr>
<td>Mad Agriculture At a Glance</td>
<td>5</td>
</tr>
<tr>
<td>Blood Root, P. Taylor</td>
<td>7</td>
</tr>
<tr>
<td>Carbon Farming, P. Taylor</td>
<td>11</td>
</tr>
<tr>
<td>The Way of Water, J. Perkins</td>
<td>15</td>
</tr>
<tr>
<td>Ojai Elemental, T. Starbard</td>
<td>21</td>
</tr>
<tr>
<td>Roots . Rhythm . Radicalism, P. Taylor</td>
<td>23</td>
</tr>
<tr>
<td>Story</td>
<td>29</td>
</tr>
<tr>
<td>Community</td>
<td>31</td>
</tr>
<tr>
<td>Practice</td>
<td>33</td>
</tr>
<tr>
<td>Edge Effect, C. Harshbarger</td>
<td>35</td>
</tr>
<tr>
<td>Farmer Profile</td>
<td>37</td>
</tr>
<tr>
<td>Paid to Build Soil Health, B. Welch</td>
<td>39</td>
</tr>
<tr>
<td>Farming Is, C. Harshbarger</td>
<td>41</td>
</tr>
<tr>
<td>Team &amp; Board</td>
<td>43</td>
</tr>
<tr>
<td>Hats</td>
<td>45</td>
</tr>
</tbody>
</table>
Dear reader,

I woke this morning with a profound sense of absence. The bison missing on the prairie, the native peoples massacred, the Chesapeake Bay and Gulf of Mexico choked with agricultural runoff, the plains turned to grains, rainforests razed, empty rivers where salmon and herring used to run by the billions, the lack of love and gift as guiding forces in our society.

A more beautiful world is possible.

Mad Agriculture is being born out of this necessity. We need a cultural revolution at the global scale that liberates us into a more vibrant and collective belonging on Earth, where humanity and the Earth system live in a deeper reciprocity and equity. This revolution must be founded on the virtues of good and true economy that discovers a new harmony between human and ecological wellbeing.

This revolution is rooted in those before us, from Thoreau to Mary Oliver, and alive now in the work of Robin Wall Kimmerer, Terry Tempest Williams, Charles Eisenstein, Stewart Brand, Adrienne Brown, Ted Nordhaus, Wendell Berry and many, many more.

Mad Agriculture is an extension of this journey and I’m filled with gratitude for all of support before and with us. I’m especially grateful for the staff and board, fellows and donors, for they are the givers, risk takers, lovers, creators and believers in the new story.

This is the first issue of our biannual and in it you will learn about the mission, foundation and spirit of Mad Agriculture. But rather than read it, believe it, test it, try it. I invite you to pursue the vision in your heart of a world that is better and more beautiful, but not yet defined. I’ll leave you with a challenge from Adrienne Brown’s book, Emergent Strategy, which has become my mantra for the year.

Can you say: ‘I am living a life I don’t regret, a life that will resonate with my ancestors, and with as many generations forward as I can imagine. I am attending to the crises of my time with my best self, I am of communities that are doing their collective best to honor our ancestors and all humans to come.’

— Philip Taylor
Our mission is to reimagine and restore our relationship with Earth through the story, community and practice of good agriculture.

MAD AGRICULTURE

I am often asked, "why mad?" Mad is inspired by the Mad Farmer poems of Wendell Berry, which call us to rework society and agriculture with love, community and lots of radicalism. In Wendell’s words, "I am done with apologies. If contrariness is my inheritance and destiny, so be it. If it is my mission to go in at exisits and come out at entrances, so be it." The world that I’m striving to create is so vastly different than the world that is, that nearly everything that I do bears certain madness.

Mad Agriculture is being born out of frustration and inequity of the current paradigm for living within the Earth system. We are focused on agriculture because how we grow food defines our relationship to Earth, and that relationship is deeply fractured. Agriculture has progressively subverted the economy of nature, degrading planetary ecosystems and creating some of the largest challenges humanity has ever faced, like climate change and the loss of fertile soil. We’ve de-humanized food through the commoditization of food, and detached ourselves from understanding our inescapable bonds to Earth. No matter how urban you are, your body lives on and continues by farming. We come from the earth and return to it. We live in agriculture as we live in flesh.

Eating in its fullest pleasure does not depend on ignorance. When we to where our food comes from and who it depends upon, injustice easily takes root within the long supply chains that hug the Earth.

As a result, we’ve harmed the Earth and ourselves. Not only is the Earth a faint glimmer of what it wants to be, but so too is humanity. The health of the land, sea and people is one and indivisible. As we do to one, we do to ourselves. As we do to the Earth, we do to ourselves. The modern tragedy of the Earth system is calling us to heal our relationship to Earth and one another. Mad Agriculture is heeding the call.

Our mission is to reimagine and restore our relationship to Earth with the story, community and practice of good agriculture. We believe that story, community and practice are the foundational elements to creating a cultural revolution that reimagines how to live well on Earth. These pillars of work interact and inform each other.

— Philip Taylor
when all is fog
  pale and gray
numb from lack of texture
  because there is none
exhausted by seeking the path
  because there is none
the only food you find
  is despair (and one must eat)
and hope
  just a word
when questions
  are the only answers
one step or a thousand
  leads to nowhere
when you are the only thing
  available to love
  but don’t know how

the way becomes a place
  beneath you
where death itself
  dies into life
if you be still and look
  you will see
the sanguine flower
  in the forest of unknowing
building itself
  from the juice of decay
the palmate leaf unfurling
  a snow white monocle
containing threads of gold
  shining with the luminosity
of a thousand suns
  only for a moment
  which is all you need

  Philip Taylor
‘Carbon farming’ is a new term on the lips of everyone that cares for soil health and regenerative agriculture. When I first heard the term, I didn’t like it. We farm food, not carbon, right? However, once the term fermented a bit and I got over my apprehension of buzzwords, I’ve come to love the concept because it acknowledges the centrality of carbon in our lives and in producing food and fiber. Before I dig into carbon farming, let us consider our own place within the grand elemental cycle that we are part and parcel of. We are impossible without carbon. It’s quite literally the fabric of our lives. Our brains, hearts, sensations, perceptions and feelings are made of or mediated by carbon-based compounds. We are composed of 18.5% carbon. Like wings to birds, gills to a fish, marrow to bone, carbon is with us every step and breath we take.

We are also in constant exchange with the world. Your body replaces itself on average every 7 years. Involuntarily, the body rebuilds, replaces, restores, and lives in an elegant interplay with the planet. You are the carbon cycle lifted into song, outrageously beautiful and wild. The importance of carbon to life extends well beyond our own budgetary makeup. It is both material and energy, and it drives the economy of nature. The cycles of water and fertility equilibrate with the carbon cycle. One cannot imagine one without the other. There is no beginning or end – the cycles of life and emergence of complex ecosystems are so intimately wound together that no single lens of truth seeking can see the system as a whole. We need poetry, science, history, fiction, art and other disciplines to discover our place in the carbon cycle. A collective exploration is needed to clarify our inescapable bonds to nature. For me, such clarification begins with food.

**EATING**

Our primary engagement with the carbon cycle comes by eating. We eat at least three times a day, ingesting nature. Eating is how the Earth passes through you and ultimately how you pass through the Earth – you will eventually be
unraveled by fungi and bacteria to become something else. Eating is how we move among elements. We live in carbon as we live in flesh and love and place. Eating defines how we depend on the Earth.

We are heterotrophs. Remember that 7th grade life science lesson? We cannot make our own energy. All food begins with energy from the sun. Autotrophs, like plants and algae, have the ability to convert light into chemical energy. They absorb carbon dioxide, and use it to build complex chemical architectures and elegant bodies that are packed with energy and nutrition – stored in carbon-to-carbon bonds.

When we eat, our bodies break these bonds, reducing them to simple organic compounds, liberating nutrients and harvesting energy, renewing and running the interworking of the body. With every breath you take, you are connecting the earth and atmosphere, entering a simple and profound cycle of return, converting the visible into the invisible, solid into gas, completing the conversion of animate to inanimate.

We are but one node in the ecosystem. Not only does what we wear and eat determine our own health but also the health of the world. Food and fiber are the end result of an often very long chain of investments and interactions between people and the earth. When we consume, we pull on a vast web of global independencies, like roots hugging the earth. One must be careful in consumption, for it defines your interaction with the world by reinforcing an economic system that you may be conscious or unconscious of. It defines how you support justice or injustice, the enrichment or destruction of ecological and social systems.

Lately, humanity has not been feeding or clothing itself well. Billions of people are stuffed on unhealthy food while roughly a billion people are starved for basic nutrition. Our lack of self-care, as individuals and a global civilization, is mirrored in the ecosystems we depend on.

HURTING THE MOTHER

Food production has caused soil erosion, dead zones in waterways, severe reductions in biodiversity, damage to soil health and climate change. The advent of agriculture began a divorce from the land that we have struggled to heal. The invention of the plow, which gave us dominion over forest and prairie, has ripped the skin of the Mother. These matters have been amplified by the Green Revolution and modern modes of industrial agriculture. The Earth is tender. It can take moments to destroy ecosystems that took thousands of years to develop: rainforests cut for wood, wetlands filled in for development, prairies plowed for grain. In Boulder County, where I dwell, I recently watched a single windstorm blow away a half inch of topsoil in a matter of minutes that took perhaps 100 years to create, reminiscent of the Dust Bowl.

The Earth is also resilient. Time and space are the only conditions needed to heal. Nature is regenerative and its drive for diversification and flourishing is vigorous and unending. With some breathing room, the ecological vibrancy of the world will restore.

While it is easy to see all of the ways we have hurt the Mother, we must imagine and create ways to enrich her. We have rent the ecological fabric of Earth. Now, how do we begin mending the bond?

LIFE IN THE CARBON CYCLE

Begin with story. It is critical that we create a new language to describe new and rediscovered truths as they arise and unfold before us. And while I’m happy that ‘carbon’ has entered the social lexicon, its remains objectified in ways that dehumanized our existence within the Earth system. Language for the carbon cycle feels young, foreign, and combative.

We demonize greenhouse gases, like carbon dioxide and methane, as if they are villains in the sky, brought on by tailpipes, smokestacks, fertilizers and fossil fuels. And while pollution is unhealthy, these gases are neither good nor bad; they just are. Our anger and frustration has manifested in words of combat:

We fight climate change, rather than heal the world.

We decarbonize rather than use contemporary sunlight for energy.

We go carbon negative rather than restore balance.

Until we make the solution joyous, exciting and the progenitor of true wealth, the climate movement will fail to galvanize people. Doom and gloom is a dying strategy. I
prefer to see carbon as the most wondrous and fortuitous element for our sake—without which we would not exist. A much more powerful narrative is one of hope, gratitude and collective abundance.

Its high time for reconciliation with the Mother than sustains us. She welcomes us home, like the prodigal son, and does not fail to nourish. Regenerative agriculture is our pathway to planetary redemption. Regenerative agriculture focuses on reinvesting in the Earth to create healthy food and community. Carbon farming is a lens within the movement that treats carbon as the central element on which all agriculture depends, working with plants and soil to absorb and store atmospheric carbon in agricultural ecosystems.

Carbon plays the same role in soil as it does in our bodies—it’s the engine of life. Carbon Farm Planning is a holistic approach to use carbon-beneficial practices to create agroecosystems that are rich in soil health, diversity, resilience and productivity. At Mad Agriculture we help farmers and ranchers develop holistic carbon farm plans. Our approach is inspired by the collective work of Carbon Cycle Institute, Fibershed, and the Marin Carbon Project in California.

In the end, carbon farming yields much more than healthy soil, nutritious food and a stable climate. It creates true wealth, happiness and joy, which make the regenerative revolution irresistible. It fundamentally disrupts the industrial economy by shifting it from principles of extraction to regeneration, quality over quantity, diversity in place of monoculture, community instead of conquest, circularity over linear design, and invites us into a wholesale re-grounding of the economy in the virtues of stewardship, love and reciprocity. Carbon farming boldly reimagines how humanity belongs on Earth.

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Until we make the solution joyous, exciting and the progenitor of true wealth, the climate movement will fail to galvanize people.
From the cathedral of soil I am drawn to the roots of plants.

Through cambium I rise, the sun beckons.

The winds move me, rivers in the sky.

I fall and gather, flake upon flake.

I am free, recreation by gravity, canyons bear my creativity.

I pour across land, bearing gifts, seldom resting along The Way.

I move from life to life, soil to sea and back again.

I am water.
Tanner Starbard

Ojai’s charismatic nature entices visitors and residents from around the world, seeking the vortex or peace or the wisdom of the gods or hip instagram spots. L.A. loves to getaway here, or stay here for a respite from itself. But rarely the locals themselves. A destination, a home, tension amongst those poles, but not be found by familiar tree or opening of a thick section of brush or even the old trail, which also washed away. This was change on the geological scale, so the thoughts took on the scope of generations. “My dad knew this canyon as I did, and my brother did. How many generations of fathers and sons also knew this place the way we did?” And what will this canyon become as Mother Nature nurtures life and beauty anew?

Returning to the climbers, Tanner could not answer the question “how far back did you get?” Persie, Rope Swing, and even the wading holes too small to deserve names were not discovered when heat overwhelmed patience; all of these landmarks were indistinguishable, vanished by fire and mudslide. New holes will form, and new camp spots, and new familiar trees. Singular trees didn’t fare so well as the groves of oaks; by fate or by design, the groves withstood the fire to give shade another day. Survival of the grove, still connected with mycorrhizal webs below the ashy surface.

In places the creek flows belowground, resisting evaporation, as if in recognition of the dry and fiery recency. Elsewhere in the West, human creativity has conjured schemes like millions of plastic balls covering the surface of manufactured reservoirs to reduce losses to evaporation. Here, in the canyon, greater forces achieve similar effect, though for what means or purpose remains a mystery. Earth responds to Water responds to Fire responds to Air, and so on, in all directions and combinations, so that plant and animal can join the chorus of Nature, singing the songs of place.

Perpendicular to most mountains of North America, the Ojai Valley conveys the sun from East rise to West set, and at that closing hour of the day, when the light is cast most favorably upon the land, an alpenglow appears in rose upon the Topa Topa bluffs, for a moment.

In times of water, the valley’s verdant expression surrounds you, as if land and air and water and sunfire are in their most harmonious agreement. Land: the clay soil rejoiced to be full and the sage and chaparral, emanating velvet smells. Air: a swirl of inland dryness and coastal mist transmits the goodness of their joining. Water: as it dances, roars, or trickles under the oaks, brings to its fleeting banks the thirsty tongues of coyotes and toads and sycamore. Sunfire: warming the rocks still cool from the moon’s gentle touch until they become disciples of the sun and bring heat to the arroyos.

And so many are the types of plants: oak, sage, and tangerine amongst the pepper, cyrus, and sycamore; ferns in the canyon, agave on the ranch, succulents in pots and on rocks up in the hills. Oh, when Ojai has water.

And when it has Fire! About a year before we arrived in Ojai this time, there had been a massive fire that surrounded the valley on all sides, even searching much of the upper valley where Tanner’s dad kept the blaze at bay with shovels and kevlar hose until the firemen arrived, did their best, and sent him away for safety. After a while, Paul returned to Awhai Ranch and discovered that the devastation had spared his home, opting instead for the more resilient grasslands and oak groves on the hillside. A centuries old oak above the reliable spring finally met its lethal foe in the Thomas fire of 2017. The Sycamore whose roots tap the same source survived, though it remains how the change will affect that arboreal neighborhood.

The changes wrought by fire go deeper than the biosphere where plants and trees became grey ash. With roots gone, and violent storms seizing the opportunity to create a legacy, massive flows of earth and rock filled the familiar Matilija Creek. Tanner, his brother Tyler, and friend, RJ, spent a day there, mostly to scout and climb boulders previously hidden from view, but also to collect sage and explore the place in its newest iteration.

While Tyler and RJ continued to climb beyond Tanner’s threshold of interest, he ventured further into the canyon. Water always flows in Matilija Creek, which is rare for this ecosystem, especially in this past decade-plus of drought. This trip, the stream has yet to scour last year’s heavy sediments from its course; instead, it takes on a yellow hue from this source; instead, it takes on a yellow hue from a moss that differs from the customary deep green version that used to cover the rocks on the edges of the water.

“It’s different, you’ll see” said all the friends that know this canyon, too. Searching for landmarks of memories, Tanner had to rely upon the big views West and characteristically diagonal ledges of rock along the canyon walls. Even still, the place felt new. Camping tenless in the sand, rock hopping, rope swings, skinny dipping, the spots that housed these glimpses of Ojai childhood could...
Money, compost
Soil, fertile.
Rh
yhn.
There is an old intelligence
that runs through us,
called love.
Find that ancient song,
and sing.
Find the pace of the earth
slow down, when needed.
go fast, when needed.
Find its cadence
set your cadence
Be an observer.
Learn from nature, which is truth.
Look to the woods,
where life and death are balanced.
Reimagine economy,
live in the true economy:
the carbon cycle.
Carbon: fabric and currency,
material and energy,
lifted into song and beauty by star shine,
driving the economy of nature.
Where:
Soil is principle.
3 percent, the natural rate of return.

Roots.
Stand for what you stand on.
Sink you roots into the ground;
be deeply human,
feast on broken, and
unbroken ground.
Your branches
to rise and spread,
gathering light,
bearing fruits
free, like the fruit tree,
for all to come.
Be native to your place.
even if an outsider,
Give yourself
to belonging
where you are,
why you are.
We are better at living
than dying,
better at taking
than giving
naive
to how fertility works.
What would we be if we knew how to die well,
to return what was taken?
Healthcare, affordable
Exxon, long gone.

Philip Taylor
It insulates, creates polarity.
Follow your love
and learn the love of others.
Both are true.
Leave your comfort zone,
your belief system, even for a moment.
Step into the shoes of another.
Go to the Prairie. The desert. The woods.
Find people and eat with them.
Food is the common denominator of humanity.
Prepare to be surprised.
By technology, Republicans, Democrats, children, youth,
women, first peoples, soil.
The people not like you, are just like you.
The things you judge, are just like you.
The revolution is rising from around the table,
where all are welcome and invited,
with every bite of food,
every drink of wine,
every hug,
every conscious act of healing and commitment to belonging,
every moment of gratitude for the world we depend on
and return to.
The revolution is us. It is delicious. It is irresistible.
Unstopable: our imagination is more
beautiful,
equitative,
and joyous
than competing paradigms wrestling for the future.

The future is a battle of imagination.

The revolution is here.

Give yourself to it.

It depends on you. How much you give,

money and otherwise,

how much you’re willing to risk for the future.

for your children, for my children, for the earth.

And this is our hope:

It rests in the intangibles,

in the unimaginable.

in the stuff that fills the void

and slips through the hand

when gripped too hard by words and the mind.

Beauty can only be expressed

in the practical imagination

that denies categories,

and lives fully between the

heart and head

spirit and soul

mind and body

good and evil

black and white

so that such divides

close upon each other

into the wholeness

of common ground.

--- Philip Taylor
We play with story in every dimension of Mad Agriculture. It permeates our work. One way we’re telling the new story is through trucker hats. Yes, trucker hats. The revolution has to be attractive and irresistible. Who doesn’t like a good trucker hat to represent the new agrarian philosophy and practice?

The Perennial Hat is probably the coolest hat ever made. This patch is a rendition of the central graph of a 50-Year Farm Bill that Wes Jackson, Wendell Berry, and Fred Kirschenmann took to Washington DC in 2009, which depicts the stepwise transition to perennial agroecosystems.

As Wendell Berry writes, ‘This bill addresses the most urgent problems of our dominant way of agriculture: soil erosion, toxic pollution of soil and water, loss of biodiversity, the destruction of farming communities and cultures. It addresses these problems by invoking nature’s primary law, in default of which her other laws are of no avail: Keep the ground covered, and keep it covered whenever possible with perennial plants.

At present, 80 percent of our farmable acreage is planted in annual crops, only 20 percent having the beneficial coverage of perennials. This, by the standard of any healthy ecosystem, is absurdly disproportionate. Annual plants are nature’s emergency medical service, seeded in sounds and scars to hold the land until the perennial cover is re-established. By this rule, our present agriculture, which gives 80 percent of our farmland to annuals, is in a state of emergency.

And so “A 50-Year Farm Bill” proposes a 50-year schedule by which the present ratio of 80 percent annual to 20 percent perennial would be exactly reversed. Nobody at present is talking about the possibility of breeding and raising perennial table vegetables, though they should.’ Except for the Land Institute, where a community of good folk are pushing the boundaries on perennial agriculture. Kernza is their first grain ramping into commercial production. Check out Patagonia Provisions Long Root Ale or Fair State Brewing Coop beers, or breads and goods at Moxie Bread, The Perennial, Birchwood Café, Ben Cuit, Cascadian Farms, and many more.

Tommy Williams of Dedicate Brand makes our hats. We’re stoked to be in the yoke on improving textile and fiber systems soil-to-soil. We’ve also begun sourcing canvas and denim from Huston Textiles, which is a Fibershed partner mill that is redefining the textiles market. Huston is a veteran-owned, family-operated textile mill weaving 100% American made selvage cloth on vintage looms using domestically grown, natural and regenerative fibers.

I cannot think of a more powerful rally cry for change than MLK’s proclamation, ‘I have a dream.’ At Mad Agriculture, we are continually dreaming about the future we are creating. Radical imagination is the foundation for creating a more just, beautiful and abundant world. We are in the midst of an imagination-battle for the future with other forces, often antagonistic; they are fighting for their stories to be told, known and lived in. Our goal with Story is to tell a new story of beauty, belonging and interbeing, reimagining humanity as part and parcel of nature.

One of the most powerful stories we can tell and work toward is developing an agriculture that works with nature, rather than against it. Most agricultural practices and tools are oriented to fighting, like killing weeds, tilling the ground every year, and eliminating biodiversity to plant and harvest monocultures year after year. These annual-based systems keep the land in a perpetual state of emergency. The Land Institute has been working on a vision of perennial agriculture, and Kernza - a perennial wheatgrass - is their first grain undergoing commercialization. Below, Mad Ag planted Kernza alongside perennial alfalfa on the High Plains, testing dryland and irrigated scenarios under certified organic production at Lewis Family Farm, CO.

We ask the big questions. Who are we? What are people for? What does it means to call Earth ‘Home’? How do we work with nature and not against it? What does it mean to heal our relationship with the Earth? While these are questions for the mind, they are actions of the heart. Facts cannot answer these questions, but stories can. Story is what we live in and live for. Stories inspire, give hope, start revolutions, bring down empires, and catalyze social movements that bring justice.

Philip Taylor
Field Notes

Sarah Meade

The first murmurs of spring
Are slowly emerging
They can be heard in the bird songs
Gradually growing brighter and more fluttery
In the gusty winds
Letting us know
The mountain spirits are just waking up
From a long and restful winter sleep
This is a time of balance
Between the sun and the earth
The Light and the dark
That which is dying
And that which is beginning to grow
A cycle of cycles
unearthing in the midst of change

Our goal with Community is to reimagine agrarian culture that lives well on Earth.

The Community Forum is our core Community program. (We’ll tell you about our workshops and policy work in future). The purpose of the Farm Forum is to create community, discover intergenerational wisdom and support one another in building a healthy, vibrant food and fiber system. The forum is not about seeking answers and making judgments, but rather sharing, learning, and opening our hearts and minds to all possibilities and potential of collective belonging. We believe that love is the root of good, and love gives birth to a constellation of virtues that will make this world a more beautiful, connected and just place for all.

The event is hosted monthly at the Altona Grange hall in Longmont, CO. The format is simple: eat together then move into council around a hot topic in agriculture. People of all ages and many walks of life come to the forum. Together, we share in the joy and struggle of doing good agriculture. The immediate success of the Community Forum in the Front Range of Colorado indicates that community is sorely needed in public life. We started in September 2017 with 14 people. Today, after 17 meetings, the attendance ranges between 75 – 200 people.

The power of eating together cannot be underestimated. People open their hearts and minds around the community table; good food and drink softens the body and soul, allowing people to sink-in, become vulnerable, and connect deeply with themselves, each other and the world at large. The potluck scene is convivial. Kids are running around, playing in the dirt, bumping into community elders. People mingle, laugh, argue, share, cry and create new connections. Simply put, every Farm Forum is beautiful.

At the forum, we wrangle and tangle with real-life issues in the food system. We work with other organizations, local and national, to enrich the forum, like the The Rocky Mountain Farmers Union, Slow Money, Promotores Verdes, Boulder County, Masa Seed Foundation, and more. People are making new connections across a wide range of sectors, including public servants from Boulder County and City, the U.S. Department of Agriculture and Natural Resources Conservation Service, Colorado State University, 30+ farmers and ranchers, directors and founders of companies and non-profits, Savory Institute, Rodale Institute, Natural Grocers, university students and down-to-earth people that care about living well in community. We thank Patagonia, Boulder County Farmers Market, Cured, Moxie Bread Company, Slow Money for their continued support.

Past Forums and Impact:
A 4-month dive into the practices, economies and politics of carbon farming.
Galvanized 120 public comments to revise Boulder agricultural land use code, which the county responded to by changing a variety of policy restrictions preventing local and regenerative agriculture.
Held listening sessions to design a Center for Regenerative Agriculture & Food Hub in Boulder, CO.
Helped Slow Money fund, a 0% community loan fund, promote and to invest in local food economy.
Hosted Fibershed, and worked on building the regenerative supply chain for fiber with a representation from local wool producers and makers.

Upcoming Community Forums:
June - Summer Solstice Celebration.
July - Reimagining Agrarian Culture.
August - How to be a Backyard Carbon Farmers with City of Boulder & Eco-Cycle.
September - Equinox Celebration.
October - Exploring how we can best support regional farmers and ranchers with UpRoot, Slow Money, Boulder County Farmers Market and more.
November - Designing a Healthy Soils Bill for Colorado with National Young Farmers Coalition.
December – Winter Solstice Celebration.
January – Connecting Landless Farmers to Land Owners.
*Forums are subject to change. Check Instagram for updates @madagriculture.
Field Notes

In A New Water Paradigm, Michal Kravcik radically declared, “while attention thus far has focused on the impact of climate changes on the water cycle, the altered paradigm recommends concentrating attention on the impact of changes in the water cycle on climate changes.” Regenerative agriculture helps restore the water cycle to mitigate climatic change. We need to shift from strategies of channeling, cementing, and expelling water away from landscapes to storing water in landscapes. Soils have incredible capacity to store water.

Investing in soil health with cover crops and compost enables rapid and deep infiltration. The keyline plow is a mechanical technique to increase infiltration and reawaken the water cycle. The keyline plow reawakens the hydrologic connectivity between valleys and ridges, allowing water to flow widely across the landscape. Below, we are testing the synergistic effect of compost and keyline design to re-store where we are testing the impact of compost & keyline design to activate a state-change in ecosystem health. The compost plots include high-fungal compost from David Johnson and A1 Compost. These techniques, in turn, reduce irrigation demand from groundwater or imported water saving farmers time and money, while freeing up resources for recharge, in-stream flows, and revenue from water rights leasing.

The project is a collaboration with the City of Boulder and Marcus McCauley. Lauren Kolb and Brett KenCairn of City of Boulder have a vision for healing public lands with regenerative agriculture, and it’s been a blast working and learning together. For more, see pages 33 & 34, and check out Bill Zeedyk’s Zuni Bowls, P.A. Yeoman’s keyline techniques, and the system visions of Zimbabwe’s Allan Savory and Australia’s Peter Andrews that reimagine our relationship with water to restore abundance over drought.

Thoughts without action are dead. Practice is required to manifest the virtuous visions of the head and the heart. Practice is story and community at work. Practicing the alternative economy can be hard. Our level of idealism is extremely high. At the same time, we have to be pragmatic to work within the system, inviting and often dragging it into a better future. Reaching into systems we don’t agree with can be hard. Questions abound. Do we work in supply chains that support concentrated feed operations for livestock? Do we support farmers that use pesticides as a tool? Do we work with producers that grow for commodity markets? The answer is ‘yes’ to all.

We work with everyone ready to take step toward healing and entering the process of reconciliation, renewal and regeneration. Regeneration is a way, not a place; a process, not a destination. The regenerative movement provides an onramp for everyone committed to healing the land and their relationship to it. We are ‘Mad’ because we work across and between the categories that so often divide us. We work on the basis that love of land and place is common ground, and the need for healthy food is the matter that binds us, to the land and to each other.

Our goal in Practice is to help farmers and ranchers thrive economically, communally and ecologically with regenerative agriculture. We help producers vision, design and actuate regenerative farm plans. We have three catalytic levers that we use to activate farm plans. They include: 1) support with wisdom, community and technical assistance, 2) access to public and private capital, and 3) access to new markets that de-commoditize food. In the next issue we will walk you through our model and theory of change.

We always look for ways to work with nature, not against it. We begin by asking, “what does the land want to be?”, which necessitates a deep looking into nature’s cycles of place. In this issue’s Field Notes, we offer vignettes of our work to restore the water cycle, create carbon markets, live at the edge, and collaboration with a city and a farmer embodying it all.
In ecology, there is a concept called the edge effect. It happens on both a macro and micro level, and physically and metaphysically in our conscience. The edge effect is a phenomenon where, at the boundaries of two connected yet different places, the highest frequency of diversity, resilience, and permanence takes place. The edge effect is an area where transition, succession and balance occur right before our eyes. The edge effect gives us an opportunity to observe as we walk through doors on landscape breaks or soil boundaries on a map, a place within a place. The edge effect is a principle in ecology that states: at the edges of biomes, landscape breaks and ecological habitat transitions, diversity is at its height. At the edge of two overlapping ecosystems, you can find species from both of the ecosystems, as well as unique species that aren’t found in either ecosystem but are specially adapted to the conditions of the transition zone between the two edges. It is a concept derived from observing a natural phenomenon that occurs across the globe. To put it simply, where two things come together, something that wasn’t possible alone, is now possible.

In agricultural practice, we can mimic this ecological principle when designing large or small-scale farming systems. Planting a diverse cover crop that serves as a biological safe zone, insect pollinator habitat, wind break, snow catchment or even wildlife habitat is one practice that can be used to mimic the edge effect. One example of this is when producers plant the dryland corners of their irrigated circle pivots into a cover crop. Another example is to strip crop, alternating the crop to be harvested with a cover crop, which is not harvested. This can be used in between one’s garden rows at home too. I have also seen a field of cover crops that were strip cropped with pollinator specific species in strips! Now that is radical. Cover crops should be used as an intention. Webster’s third definition of intention states: the object for which a prayer is offered and Webster states that a cocktail is: a mixture of agents usually in solution that is taken or used especially for medical treatment or diagnosis. This can be taken quite literally when determining which cover crop species to select in increasing the overall health of your ecosystem, and even more specifically, your soil’s ecosystem. A bare soil is “naked, hungry, thirsty and running a fever” (Archuleta, SH LLC).

Transition zones and transformative events have something in common. They define what a person or a place truly is and give it its unique pattern between wet and dry, forest and grassland, sky and mountain, plant root and soil. You are the person who you were as a child. You may change in physical appearance or spiritual growth, but you are that person. A given place is also still the same place once management has degraded it and it can again be reborn unto itself or true expression of wholeness with the right understanding and care. Ultimately, it is within our ability to listen to nature and let it be what it wants, what it needs to be.

The last thing I would like to say about the edge effect is that this phenomenon can also be taken to heart metaphysically in one’s choices in life. We often hear the cliche “living on the edge.” In a former life, I used to map soils in remote areas of the country. Often, we were asked (paid) to go to the edges of our comfort zone, by pushing field work to the edge of the twilight between day and night (in Montana we called this magic time “bear-thirty”). The edge was found venturing out in early spring, on the days that were still held onto by winters tight grip. We would drive to the edge of our ability, up steep roads or high marks on a ridge with our ATV’s. We would push ourselves physically to dig another three inches, testing the edge of our strength and endurance and curiosity.

Have you ever been to the edge but not jumped? What is the feeling of the unknown? How does one come to know when it is time to make a change in your life? Dare to live outside your comfort zone, push yourself to farm in ways you never dared, and be radical in your experiences seeking the edge effect in your life.
Marcus McCauley

Marcus McCauley is a regenerator of human and landscape health. The first time Marcus invited me to try his "life-changing chicken", I laughed. Then I tried one of his pasture-raised broilers coated in a Picaflor Live-Culture sauce and forgot all about laughing. The more I get to know Marcus and the way he raises food, I am convinced that his chicken truly changes lives. It's not just that I've never tasted a chicken wing with such deep and tasty flavor, and it's not just that the live ferment in the sauce brings probiotics to my gut, but I have rarely believed so deeply in the food that I eat. Chickens follow sheep in a rotational grazing system on McCauley Family Farms, the same place where most of the organic peppers are grown. When the recipe calls for ingredients not grown by Marcus himself, he sources them as locally and fairly as possible, because he’s a farmer, too, and he holds community with those that supply his product.

Mad Agriculture and Marcus have partnered up to help the City of Boulder regenerate a neighboring property that was devastated by overgrazing. The City of Boulder is building an initiative to restore public lands through regenerative agriculture. Together, we created a vision for the land, put it into an actionable Carbon Farm Plan, then connected Marcus to funding from the National Resource Conservation Service through, and this summer (!) he will reintroduce the positive impact of well managed animals on the landscape. Cover crops, compost, keyline contouring, and plant diversity are just a few of the regenerative practices we implemented in tandem to restore vitality to this place. Below, our collective work with the City of Boulder, Eco-Cycle and Marcus McCauley was showcased for citizens. Both photos on these pages were taken in the same location, just six months apart. The power of regenerative agriculture is clear. As a farmer and as a brand, Marcus McCauley and Picaflor embody what it means to radically reimagine how to eat food.
These days it’s hard to be a farmer growing cash crops, like corn, wheat, beans and more. The combination of rising input costs and rock-bottom commodity prices is devastating the well-being of farming families. The farm economy is grim: net farm income has reached a new low since 1983. Farmer suicide rates are tracking this depression in farm economy.

Meanwhile, Big Ag continues to thrive on the hard work of American farmers, encouraging production systems that compete in a race to the bottom as cheaper, faster, more efficient options. Big Ag is constantly profit-seek-ing, peddling their latest trick to farmers, promising an edge on yield, pest control or precision management - all band-aids for treating symptoms of a busted farm economy. Meanwhile, Farm Bill subsidies are doubling down to scaffold a production system of cheap and nutrient-poor calories. The neglect and willful externalization of the Earth has reached its apex, undermining the soil and the communities that steward it.

A rising tide of farmers are rebuilding our agricultural system by reinvesting in soil health, the foundation of healthy food and human wellbeing. Healthy soils are rich in carbon, the central cog of the soil system that moderates chemical, physical, and biological structure and function. Soil carbon can be increased by managing planting for capture of sunlight energy, convert atmospheric CO2 into sugar, and feed the soil by pumping these sugars into the ground with their roots system. This biological pump is the basis for creating healthy soils. Carbon farming is a rising movement within regenerative agriculture that focuses on carbon as the central element on which all agriculture depends. Carbon farming is the use of agriculture to sequester and store carbon in plants and soil - nature’s technology to rebalance the economy of soil, and in turn, the global carbon cycle.

In the money economy, how do farmers realize a return from all this investment in soil? Farmers certainly can realize cost-savings associated with improved soil fertility and water holding capacity, as well as a potential for increased yields. But, what if farmers could get paid for the carbon they are sequestering in soil?

Enter Nori. Nori is a new carbon market that pays farmers for agricultural drawdown of CO2. Nori is the first drawdown marketplace. They are creating the exchange platform and network of buyers that want to offset their carbon footprint by purchasing certified reduction credits.

Carbon offset markets have existed before, but Nori is unlike any other, adopting all of the pieces of previous markets that work, and dropping what doesn’t. First, they only focus on CO2 that has been taken out of the atmosphere, which is critical to solving climate change. Second, Nori is 100 percent transparent so anyone can see how many Carbon Removal Certificates have been sold and for what amount, to ensure they will never be sold again. Lastly, Nori is using methodologies that cut the costs of a typical carbon project by 75 percent or more. In total, Nori creates an additional revenue stream that is measured, reported, and verified to meet the goals and needs of credit purchasing organizations.

At Mad Ag, we’re working with farmers from Montana to Illinois to help them get paid for storing more carbon in their soils through Nori. Currently, we’re helping NORI’s pilot launch (slated for early 2020), by bringing on 13,000 acres of carbon-sequestering farmland onto the marketplace. Mad Ag helps guide farmers through the entire process, from monitoring and reporting to setting up third-party verification.

One farmer we are working with in Colorado is Mark Lewis is at Lewis Family Farm: a 354-acre organic broad-acre alfalfa, hemp, hay, grain and lentil operation. Mark’s mission is “to be an exemplary carbon farm, reversing climate change and producing delicious food. We want to be a beacon of change in a landscape of monocultures, impelling those around us to shift to carbon farming.”

With practices such as perennial plantings and compost application, Mark has increased soil organic matter from 0.75 percent soil organic carbon in 2013 to 0.99 percent SOM in 2018. This may not seem like much, but it is! This is a rate of 1.57 tons of CO2 sequestered per acre every year. An average car emits 4.3 tons of CO2 every year. Across Mark’s 276 acre farm, he’s helping to sequester 432 tons of CO2 per year.

At a Certified Reduction Credit (CRC) value of $10, Mark’s drawdown efforts could add about $15,600 per year, and at $35 per CRC, additional revenue could be nearly $15,200 per year. In the business of farming where margins are razor thin, that can be the difference between the black or red at the end of a growing season.

While Nori holds promise for rewarding farmers, the solution is still under development. For example, not all the associated costs have been completely ironed out, so we are wading in cautiously to ensure the farmers we work with are not putting additional risk on their operation through our due diligence process. Also, measuring soil carbon in an accurate and cost-effective way is not simple. We are currently working with a variety of folks to better understand how to measure and monitoring soil carbon. Our colleagues include Mark Easter and Keith Paustian at Colorado State University with the use and refinement of the COMET-Farm tool. We are also working with Quick Carbon, a project of Yale University, led by Ph.D candidate Daniel Kane and Charles Bettigole. Quick Carbon is working on the research and development of a rapid and inexpensive handheld tool for measuring soil carbon using spectrophotometry.

There are also a suite of risks in the carbon market. There is always a danger in converting ecological value into monetary value; that is, valuing the land for its carbon, when in truth, the land also holds sacred value. Implicit in a carbon market, is the transition of valuing the soil for its intrinsic value to its utilitarian purpose of solving climate change. Of course, we can debate this for ages. We are hopeful that NORI will help expand how we value good agriculture, rewarding farmers that invest in the soil, creating true wealth for all.
Farming is good fences
Farming is sacrifice
Farming is listening, observing and doing what is right
Farming is peaceful
Farming is quiet, but not absent of sound
Farming is good clean water
Farming is respect for things that are greater than us and for the things that will be here long past our journey
Farming is love
Farming is love for all things that are living, for things that were once living, and for things that never lived
Farming is having compassion for an animal that was harvested so that the cycle can continue
Farming is a way of life it is survival it is a existence
Farming is knowing that the cost of an animal is nothing, yet everything at the same time
Farming is sharing
Farming is giving more than we take
Farming is listening more than we talk
Farming is the insects, the wood rats and the beavers
Farming is seed
Farming is soil
Farming is the forest, the pasture and the wetlands
Farming is the hay that we put up
Farming is the grass that is in rest that is not taken
Farming is the cover crop which provides more than we could ever see
Farming is a wire
Farming is a footstep
Farming is a life
Farming is living a life that inspires
When I was a boy, the local seed co-ops would give farmers an all-mesh seed cap with every seed purchase. We made these hats with Dedicate Brands as a reminder of those days, and to re-inspire regional agrarian community that gathers around and honors seedtime. The all-mesh hat provide shade from the sun and is breathable to keep your head cool in the heat of summer. Supplies are limited.

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Philip Taylor
This issue is dedicated to Rich Andrew of Andrews Family Farm.

His constant generosity has given Mad Agriculture the space to grow and experiment as an organization. Mad Agriculture and Andrews Family Farm have collaboratively started an organic research farm to explore the crops and practices that will carry humanity forward for the next forty generations.