Transition to regenerative and organic is hard for most farmers because margins are tight, capital is limited, and markets are tightly defined. The modern agricultural economy and culture is woven tightly by corporate and governmental interests that control the supply and pricing of inputs (i.e., seeds and chemicals) and outputs (i.e., commodity pricing), as well as insurance and subsidy programs that are scaffolding a faltering food system.

Mad Agriculture helps farmers design their way out of the industrial system using Carbon Farm Planning to transition to regenerative and organic agriculture. We activate Carbon Farm Plans with three catalytic levers:

**LEVER 1:** Access to affordable capital to finance the transition to organic agriculture.
**LEVER 2:** Technical assistance and training to de-risk transition with know-how and community support.
**LEVER 3:** Secure market off-take for transitional and organic crops, as well as soil carbon credits.

**THE PERENNIAL FUND**

Accelerating a Regenerative and Organic Agricultural Revolution

Humanity must radically change how we grow food and fiber to reverse climate change and heal the damage we’ve done to global ecosystems. Industrial and extractive 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 biodiversity and fertile soil. Regenerative and organic agriculture is a powerful solution that reinvests in the Earth, puts carbon back into the soil and creates healthy food and community.

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**System of Change**

**Our Solution**

**Perennial Fund**

**Investors (LPs)**

**Mad Ventures (GP)**

**Levers**

Integrated Capital to Finance Organic Transition

**Lever 1:** Financing a Regenerative Revolution with the Perennial Fund

Money is often the most important factor for decision-making on a farm or ranch. Most farmers work on razor thin margins and do not have the financial security to risk trying something new. Society is asking farmers to take enormous risk in rapidly changing their farm enterprise, crops and practices. This is not easy. Mad Agriculture already uses Carbon Farm Planning to flow USDA National Resource Conservation Service (NRCS) dollars that cost-share with farmers on conservation practices, but cost-sharing often isn’t enough for a farmer to finance the transition to regenerative and organic production. Additional capital is needed to finance operations during the “transition trough.” The Perennial Fund is born out of this need.
INVESTMENT MODEL. The Perennial Fund loans $50 to $500 per acre per year to the farmer for 3 years to transition to organic production in exchange for a 5-25% gross profit share after they’re certified organic, until 150% of the initial investment is returned. The gross revenue share is based on a percentage above the regional average costs for that crop - similar to a net profit share. It is determined by region, crops, management, and forecasted debt service coverage ratio. It’s debt that is structured to align with the realities of farm economics, enhancing the chances of a successful transition. The loan amount is determined during the Carbon Farm Planning process to facilitate a successful organic transition, and the funds can be used to cover operational costs, equipment and infrastructure.

FUND STRUCTURE & FIRST LOSS CAPITAL
It is anticipated that the Perennial Fund will be structured as a Limited Partnership. The funds used in the capital stack as the first-loss capital will be sourced from philanthropic contributions and potentially a C.I.G. grant. All philanthropic contributions will be recycled into the next fund. As the Global Impact Investing Network noted in a 2013 report, in the nascent but growing impact investment market, some investment opportunities that have strong potential for social or environmental impact are perceived as having high financial risk. Catalytic credit enhancement tools, such as first-loss capital, can encourage the flow of capital to these opportunities by improving their risk-return profiles and, thus, incenting others to invest. (See Fund Structure).

RETURNS. Based on modeling and transition case studies, we are targeting a 4% year-over-year return for 10 years, equivalent to a 9% IRR over 10 years. This includes the 3-year transition period. For each farm, we base the economics on an 8-year payback and build in 2 seasons of buffer, for a term of 10 years. This accounts for the primary risk factor that could impact performance - weather.

The Perennial Fund is Radical Capital. Why?

1) FARMER FIRST, SKIN-IN-THE-GAME & DEBT FORGIVENESS. The Perennial Fund is structured so that the loans it disburses are repaid only after the certified organic farm is operating profitably, ensuring the PFs success is outcomes based. If our team cannot help each farmer to return 150% the initial investment over 10 years, the debt will be forgiven. Yes, this is radical. Robust farmer-by-farmer due diligence is paramount, which is integral to Carbon Farm Planning. In the event the borrower violates loan covenants (e.g., abandoning organic production before the end of the term), the loans issued to projects will be secured against a variety of assets when applicable, such as farm equipment, the crop, and future earnings.

2) HIGH IMPACT FINANCING VEHICLE. Most investment in regenerative agriculture has been through farmland purchasing as an asset play, which costs, on average, $4,130 per acre. The PF enables a farmer to transition an acre for $150 to $1,500, depending on financing needs. The capital efficiency of this investment is 3x to 27x that of purchasing land, and keeps farmland ownership in the hand of farmers, not investment funds.

3) FINANCING THAT COMES WITH KNOW-HOW & GUARANTEED MARKETS. Unlike traditional lending institutions, a Perennial Fund loan comes with a road-map for organic transition, including on-the-ground technical assistance, to maximize social, environmental, and financial success of the farmer and the Perennial Fund. The farmer’s success is our success.

4) READILY SCALABLE. The most effective route to scale a regenerative revolution is to empower other organizations to replicate our solution where they have place-based knowledge and a network of trust. We do not hold any intellectual property over this model and encourage others to replicate it. We need dozens of Perennial Funds to finance the regenerative revolution in agriculture.

5) BUILT ON ECOLOGICAL PRINCIPLES. Money needs to be reinvested into the farmers that are restoring the natural capital which all of life depends on. We are building the fund on ecological principles embodied in old-growth perennial ecosystems (nature’s most mature and resilient economic expression), which are characterized by circularity, diversity, symbioses, a low-interest rate and where give and take are in equilibrium.
Lever 2: Create Successful Transition Plans using Carbon Farm Planning

Carbon Farm Planning was invented by the Marin Carbon Project, Carbon Cycle Institute and Fibershed. See this NYT Magazine feature on their success. The CFP model builds on Conservation Planning, a process developed by the USDA National Resource Conservation Service (NRCS) to help farmers and ranchers solve their resource concerns by educating, designing and cost-sharing (~50%) the implementation of conservation practices. The NRCS supports a wide variety of regenerative practices proven to enhance soil health and sequester carbon, like cover crops, no-till farming, prescribed grazing, riparian restoration, forage planting, irrigation improvement, contour buffer strips, composting and more. CFPs leverage existing and trusted networks of financial and technical resources to de-risk the transition to regenerative agriculture. CFPs are very flexible and allow deep contextualization and custom-tailored plans to meet the producer on their journey toward creating climate-beneficial agriculture.

STEP 1: FARM VISION

Every farmer has a different vision, enterprise model and resource base to pursue the transition to organic production. We start by walking the land with the producer, learning about their journey, history of operation, enterprise model and vision for farming, exchanging stories and ideas, building trust and camaraderie. We balance the urgency of dreaming big with the need to design safe steps in a risk-averse sector. In Step 1, we conduct due diligence and resource assessment across 9 domains: climate, geography, water, access, ecosystem health, infrastructure/equipment, capital, marketing & energy.

STEP 2: CARBON FARM PLANNING

We develop a 5+ year working plan that lays out crops and practices, timelines, implementation strategy, expected investment and returns in both financial and ecological terms. We use a combination of NRCS Conservation Planning, Regrarians, and Holistic Management frameworks to outline and understand the resource needs and action plan. Our plans are designed to help farmers access premium markets, reduce farm operation costs and increase net profits. Diverse crop rotations, practice toolkits, and market off-take are built into the plan to allow farmers the flexibility to respond to unpredictable weather and market conditions.

STEP 3: ACTION, MONITORING & ADAPTATION

With the CFP in place, we activate the plan with capital, combining the Perennial Fund with other sources of funding, especially the NRCS EQIP funds. Using our Adaptive Management Framework, the farm plan will be adjusted and iterated based on crop performance, environmental, market, and human factors. Carbon sequestration and ecosystem benefits are modeled with COMET-Farm, a powerful greenhouse gas accounting system developed at Colorado State University. We are also developing cost-effective verification methods with Quick Carbon, a rapid assessment tool in R&D.

Lever 3: Secure Market Premiums for Crops and Carbon

The rise of organic food consumption is rapidly creating demand for organic food supply. Over the past 20 years, annual organic food sales have soared from $3.4 to $45 billion. Though 5.5% of the food sales in the U.S. are certified organic, only 0.7% of the 911 million acres of U.S. farmland is certified organic. The U.S. has relied heavily on importing most of its organic food; meanwhile, rising distrust of foreign markets, combined with a large gap between domestic supply and demand, has created a stable and strong value premium for organic crops.

Finding organic buyers can however be difficult as the domestic market emerges. So, we will help farms secure buyers for transitional and organic crops, which is critical for the financial sustainability of the farm and sustained investment returns. We are working within the supply shed of major buyers of transitional and organic crops, including Pipeline Foods, the largest organic buyer in the U.S. Pipeline Foods has provisionally committed to forward-contracting with the farmers financed by the Perennial Fund in their supply shed.
Our due diligence process combines financial and resource assessments of each candidate farm to efficiently evaluate bankable projects. We are seeking already successful organic farmers looking to expand acreage through a variety of networks, including our Core Partners, business references, and direct outreach through field visits, conferences (e.g., MOSES, OGrain, MOA, No-Till on the Plains) and periodicals (Acres, Organic Farmer). We already have two commitments (including Vilicus Farms, see right) totaling 2,265 acres, with many others under evaluation.

Building a Portfolio of Farm Investments

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Addressable Market & Route to Scale

We believe that there are potentially 30+ million acres of U.S. agricultural land that could transition to organic agriculture in the next 10 years, with an addressable market for investment of roughly $18 billion to finance that transition. We are very open with our model and learnings, and we will work to replicate the finance model with existing networks that deliver technical and market assistance as a mode to accelerate organic and regenerative farming by scaling adoption, investment and impact. We believe that there is a strong complementarity between the Perennial Fund and other investment vehicles, particularly real estate backed funds (e.g. Iroquois, Dirt, LFF, SLM).

Summary of Terms

<table>
<thead>
<tr>
<th>Fund Structure</th>
<th>Limited Partners (Investors) invest in a closed-end structure managed by its General Partner (GP), Mad Ventures LLC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>10 Years</td>
</tr>
<tr>
<td>Return</td>
<td>Targeted 9% IRR, 4.14% Compound Annual Growth Rate (CAGR) over Term.</td>
</tr>
<tr>
<td>Fees</td>
<td>0% (Management, Transaction, and Expense) [Management supported by grant funding]</td>
</tr>
<tr>
<td>Carried Interest</td>
<td>20% of distributed net profits (carried interest or carry) generated by the Fund after return of the initial investment and a return of 9% IRR to the Limited Partners.</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>Limited Partners are the first to receive a dividend on a yearly basis until Targeted CAGR is met. The General Partner (Mad Ventures LLC) is issued a dividend in proportion to equity stake after Limited Partners in a given year.</td>
</tr>
<tr>
<td>Closing</td>
<td>Target closing date of March 31, 2020; Capital Commitments equal to at least $2,500,000 or when a total of $4,000,000 is reached.</td>
</tr>
<tr>
<td>Minimum Investment</td>
<td>$25,000 minimum, $2,000,000 maximum; Capped at $4,000,000 total investment in Fund</td>
</tr>
</tbody>
</table>
Join us in catalyzing a regenerative revolution in agriculture. Humanity and the Earth need strategic investments to catalyze change. The Green Revolution was kicked off with ~$50M from the Rockefeller, Ford and Kellogg Foundations, as society was primed for rapid adoption of industrialization during the post-war economy. A perfect storm of social, environmental and economic trends have created the climate for another major revolution in agriculture. The rural economy is suffering, climate change threatens our existence, and neoliberal capitalism and corporate control over agriculture are failing the land and people. Out of great pain, great innovation occurs. Are you in?

Core Partners

**Granular** is a software and data science platform to help increase profitability on every acre through data collection, management, analytics and visualization, with field-level insights that can help improve resource efficiency, yields, and optimize soil productivity with fertility management recommendations specific to each farm. Granular will help digitally manage the organic certification process and on-board farmers to NORI through their API. Every PF Farmer receives free access to the software platform.

**NORI** is the world’s only carbon dioxide removal marketplace. They are building a transparent and secure platform that will allow anyone in the world to pay to remove excess carbon dioxide from the atmosphere. Their voluntary marketplace will empower carbon removal suppliers to connect directly with buyers, improving efficiency and reducing costs. Every PF farmer receives free access to NORI.

**Carbon State University** will develop a state-of-the-art Carbon Farm Planning Program (CFPP) with Mad Ag and carbon farm planning experts for Carbon Farm Planning to ‘train the trainers’, combining online and on-the-ground workshops, linking the planning tools to on-the-ground technical service providers (such as Conservation Districts) and federal and state incentives programs (i.e. NRCS EQIP).

Natural Resources Conservation Service is a federal agency that works with private landowners (farmers, ranchers and foresters) to put conservation practices in place that will benefit the soil, water, air, and wildlife. They are the USDA’s principal agency for providing conservation technical assistance to private landowners, conservation districts, tribes, and other organizations.

**Quick Carbon** a Yale University project, will be used to empirically measure soil carbon and other ecological outcomes in field using an innovative rapid landscape assessment methodology, to compare and refine COMET-Farm.

**Pipeline Foods** is a global supplier of high quality, traceable Organic and non-GMO food and feed grains and ingredients for the CPG and livestock sectors. They are the largest organic commodity buyer in the U.S. focused on farmer livelihood, collaboration, sustainability, and integrity.

Advisors

**Mark Retzloff** is a pioneer in the natural organic and sustainable food and agriculture industry with a 49-year career starting and managing a number of successful companies. He is co-founder of Aurora Organic Dairy, Alfalfa’s Markets, was chairman of the Organic Food Alliance, co-founder of Horizon Organic Dairy, 11 year board member of RSF Social Finance, co-founder Naturally Boulder, previously chairman of Rudi’s Organic Bakery, and has received a Lifetime Leadership Award from the Organic Trade Association.

**Meriwether Hardie** is Chief of Staff for Bio-Logical Capital, Meriwether focuses her work on developing new models for regenerative agriculture, renewable energy, and climate positive land use strategies. In addition, Meriwether works on recruiting leadership and talent for Bio-Logical Capital and managing investor relations.

**Jeff Eschmeyer** is a Policy and Agriculture expert that has worked for and with the NRCS (former Senior Advisor to Secretary) to build and strengthen NRCS relationships with private industry and stakeholder groups to expand opportunities for innovative conservation delivery and assisting companies interested in building a more sustainable supply chain.

**Alex MacKay** is the Director of Business Development and Investor Relations at IVF. The power of Iroquois Valley Farms lies in its ability to combine innovative finance with stewardship of the land, all while providing a profit for its stakeholders.

**Calla Rose Ostrander** is a Strategic Advisor specializing in climate change and agricultural policy, science communications and movement building. Since 2013 she has worked to support the advancement of carbon farming in California, working for the partner organizations of the Marin Carbon Project, to scale Carbon Farm Planning to the state scale through strategic organization, economic development, local and state policy, and communications.

**Ryan Martens** is a serial software and social entrepreneur with more than 30 years of creation and collaboration in the Boulder startup community. With deep expertise in SaaS, Agile product development, Enterprise Lean Startup and collaboration solutions, Ryan is a skilled technical and business leader who is known for his development of shared vision and collaborative leadership skills.

**David LeZaks** leads the Regenerative Food Systems initiative at Delta Institute, a Chicago based non-profit, where he manages a portfolio of projects that focuses on building a more regenerative economy. He designs disruptive infrastructure that will unlock substantial capital flows into the regenerative agriculture sector.

**Rick Adcock** has three decades of experience in renewable energy, carbon asset development, and project finance. He recently served as CEO of Broe Infrastructure Development LLC, Vice President at MWH Global, Inc., Managing Director of MWH Infrastructure Development, Inc.; Senior Vice President for Camco North America, Inc.

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Mad Agriculture is a 501(c)3 non-profit with a mission to reimagine and restore our relationship to Earth with good agriculture. Our primary goal is to help farmers and ranchers thrive with regenerative agriculture by optimizing the creation of financial and ecological wealth. Mad Agriculture was founded in 2018 and we’re off to a strong start. We are already impacting 37,500 acres across the Great Plains in CO, MT, NE, IL and OH with our programs.

**Contact:** Brandon Welch (brandon@madagriculture.org) to learn more about the Perennial Fund. Philip Taylor (philip@madagriculture.org) to learn more about Mad Agriculture and Carbon Farm Planning.