



Members, Governor's Task Force on Climate Change

July 31, 2020

Dear Task Force Members,

I am writing on behalf of the Michael Fields Agricultural Institute (MFAI), to offer our thoughts about issues and opportunities at the intersection of climate change and agriculture. The Michael Fields Agricultural Institute is a non-profit organization focused on advancing sustainable agriculture on a state and federal level. Founded in 1984 in East Troy, Wisconsin, our mission is to nurture the ecological, social, and economic resilience of food and farming systems through education, research, policy, and market development. We have many years of working to support practices that build soil health and both mitigate and help farmers adapt to climate change.

Climate change mitigation and adaptation is essential to the livelihoods of Wisconsin farmers. We encourage the state to energetically create policies that support agricultural practices that increase continuous living cover on farmlands, with the numerous benefits that result. Farmers and landowners can help lead carbon mitigation and carbon capture efforts by prioritizing climate-resilient practices like managed grazing, use of cover crops, and inclusion of small grains like wheat, oats, rye, and barley in crop rotations - the deep roots of which can sequester carbon. Advancing such practices in Wisconsin will require state investments but will pay back in greater farmer financial resilience in the face of extreme weather and market volatility. The greater water infiltration associated with these practices will also reduce taxpayer costs to repair roads, bridges, and culverts otherwise subject to major damage during extreme rain events. All of them offer the potential to build markets and agricultural enterprises that reinforce these practices, stabilizing our rural communities while creating climate change resilience.

Grass-based agriculture, cover crops, and inclusion of small grains in rotations can build organic matter and increase microbial biomass, resulting in improved soil health. Increased diversity in above- and below-ground biomass supports soil life, leading to improved soil structure, reduced soil erosion, improved water infiltration, and bolstered system resilience. Other documented benefits include reducing pesticide and synthetic fertilizer use by breaking pest/disease cycles associated with the predominant methods of corn and soybean production.

The state needs to invest in strategies that support grass-based agriculture, greater use of cover crops and diverse crop rotations, and increased inclusion of small grains in crop rotations. We include policy recommendations below for each of these approaches.

Fund Technical Assistance

Grass-based farmers and farmers interested in small grains alike need more technical assistance to support their transitions. For example, in the past, one of the most effective strategies for supporting grass-based farming was demonstrated when Wisconsin used Grazing Lands Conservation Initiative funding to offer matching grants to counties to hire consultants that supported farmers with managed grazing plan development. Accurate plans are essential to support farmers' adopting grazing practices that are also financially rewarding and thus sustainable into the future. For cover crops and small grains adoption as well as grazing, UW-Madison training for agricultural educators should focus on these strategies.

Increase Local and Regional Processing Capacity and Local Sustainable Value Chains

Reports have shown that demand for grass-fed products is increasing, with retail sales growing from \$17 million in 2012 to \$272 million in 2016 (Stone Barns, 2017). Similarly, the market for

beverages from craft brewing and distilling and baked goods made from local grains has grown tremendously in recent years.

Local and regional processing and storage facilities are critical infrastructure that provide affordable processing capacity for grass-based meat and dairy products and products using small grains. For example, COVID has exposed the urgent need for federally-inspected livestock processing plants, and Wisconsin's managed graziers can attest to the extreme stress they experience in trying to access them, with slaughter reservations backed up for many months. Increasing such facilities can allow an increase in small farmers' profitability through the sale of high-quality products to neighboring communities. Support must also include technical assistance provided by supply chain specialists, marketing and branding services, and innovation centers that facilitate the development of new product lines and provide innovation grants. Increasing entrepreneurial support for farmers throughout a local and sustainable value chain allows for job creation and attracts new generations of aspiring sustainable producers, especially groups that have been historically denied access to capital and state-sponsored resources.

We advocate for the creation of a center, analogous in technical expertise in value chain development to that of the Dairy Business Innovation Center that was instrumental in reviving Wisconsin's dairy industry over a decade ago. This center, likely most appropriately situated at the Department of Agriculture, Trade, and Consumer Protection, would provide funding for business planning, market feasibility studies, brand development, and value chain market development for products based on climate-resilient practices.

Finally, value-added and processing enterprises require capital. We are working with partners to explore the merit of providing bonding authority to Agricultural Enterprise Areas to allow participating farmers to engage in enterprise development associated with climate friendly practices. We would welcome an investigation by the Wisconsin Economic Development Corporation and DATCP into this possibility and other ways to build economic development around climate resilience. We also encourage the Department of Natural Resources to explore the use of Clean Water state revolving loan funds to provide capital to private banks to support climate resilient practices.

Devote University Resources to Support Resilient Agriculture

The University of Wisconsin system has many opportunities and a compelling obligation to support this work. A few of many examples of needed research: multi-year research on breeding of small grains like wheat, oats, rye and barley to resist fungal diseases and help farmers navigate the challenges of growing these important climate-resilient crops in the humid Upper Midwest; market analyses and local value-chain development for small grains and grass-based agriculture; research about profitability of cover crops to inform incentives needed to expand farmers' adoption; and research to develop financing and risk management strategies for all of these farming practices.

The University's Extension system should establish long-term priorities in training agricultural educators in all of these areas, including having the capacity to advise farmers accurately about economic risks and opportunities associated with climate change and ways to mitigate their risk through climate-resilient practices.

Create Incentives and Markets to Support Planting Continuous Living Cover

The two neighboring states of Iowa and Illinois have instituted very successful programs to reduce by \$5/acre farmers' crop insurance premiums on cover crops acres, and we encourage Wisconsin to undertake the same program. A farmer survey conducted by MFAI in winter of 2019 showed that approximately two thirds of farmers who had planted cover crops previously said that such a proposal would increase the acreage or frequency of their cover crops planting in the future, and two thirds of those who had not previously planted cover crops said that it would motivate them to do so. A legislative proposal to support this initiative was included in the complement of water quality bills introduced by the Speaker's Task Force on Water Quality earlier this year; with the full support of a large number of agricultural and conservation groups, it unanimously passed both chambers' Agriculture Committees, the full Assembly, and the Joint Finance Committee. COVID

interfered with a Senate vote, but strong support for this initiative was demonstrated in this legislative session.

Farmers across the state continue to express considerable interest in the creation of markets that allow for the sale of carbon credits offset by carbon captured and stored through agricultural practices; we encourage the Wisconsin Economic Development Corporation to explore such markets for grass-based agriculture. Wisconsin invests millions of dollars each year in developing export markets, which in recent years have been demonstrably unstable; for every dollar spent on developing export markets, the state should spend at least that amount in developing local and regional infrastructure for climate resilient practices.

Wisconsin Economic Development Corporation should also explore developing policies such as New York State's Farm Brewery Law that incentivizes brewers to increase percentages of locally grown hops, malting barley, and similar small grains. This law has dramatically increased the acreage of small grains produced in the state as well as enhancing the crafts beer industry along the supply chain.

Develop the Power of State Purchasing to Create Demand for Sustainable Products

Wisconsin can follow the [Good Food Purchasing Program](#) model that uses public institutions such as school districts, hospitals, and parks departments to procure local food that is grown according to ecological and social values. This model can increase supply chain transparency and allow institutions to source local products that support Wisconsin grain and grass-based producers that implement climate resilient practices. The creation of labels that enhance awareness of the carbon footprint of local products can add to increased transparency.

The immediate COVID-19 pandemic magnifies the need for a resilient food supply chain that is grounded in providing quality foods to keep our bodies and land healthy while being accessible to our local communities. Climate change is an ongoing crisis to which Wisconsin must respond strategically and with appropriate policies and funding to support a just, resilient, and sustainable agriculture system.

Thank you for your consideration of our views,

Sincerely,



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