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POLICY BRIEF

Managed Grazing and Grassland: Policy Trends and Opportunities for Renewal in Wisconsin

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SUMMARY

Grasslands, including prairie and pasture, have declined precipitously on private lands, with tremendous environmental and social costs. This decline reflects the unequal policy support provided to grasslands and managed grazing in comparison with row crops. This policy brief provides an overview of the policy tools and implementation capacity that supports and constrains managed grazing and grasslands in Wisconsin. It is designed as a resource for stakeholders and decision-makers to support the need for policy attention to grasslands and grazing. Grassland area declined 39% over the past two decades in Wisconsin. Institutional support has likewise declined. Wisconsin lost its statewide grazing specialist when the federal Grazing Lands Conservation Initiative funding ended in 2013. Risk reduction subsidies for corn and soy far outpace the support for pasture. Lands that received prescribed grazing practices through the federal Natural Resources Conservation Service declined after 2005 but remained steady in the past decade. These results reveal the policy disadvantage for grasslands and managed grazing in comparison with row crop agriculture for milk and meat production. We end with recommendations for statewide planning, prioritizing grasslands and grazing in agricultural and conservation programs, and support for supply chains and land access. These strategies are critical for renewing our commitment to grasslands, farmers, and consumers in Wisconsin.

Benefits of Managed Grazing and Grasslands

Producers, researchers, conservationists, and citizens are recognizing the potential of managed grazing. Grazing livestock on grassland offers a relatively profitable and low-cost opportunity for farmers, whose access to high quality forage reduces their feed and manure management costs. Demand for grass-fed products is increasing. The deep roots of perennial grasslands hold and build soils, sequester carbon, help soak up water before it floods our communities, and capture and filter nutrients, keeping them out of our drinking water and air. Managed well, perennial grasslands can support wildlife such as birds, pollinators, and other organisms that make a home in our diverse countryside. Managed grazing systems have great potential to revitalize native ecosystems and meet the needs of consumers and producers alike.

Declining Grass: Trends in Pasture and Grasslands

Pasture, other grasslands, and savannah have declined substantially in Wisconsin and throughout the Midwest. These losses have continued in recent decades. Wisconsin had 1.1 million acres of non-woodland pasture in 2017, a decline of 39% from 1.9 million acres in 1997.[1] Grassland not including pasture decreased 12% in this time (310,000 acres in 2016, down from 350,000 acres in 2001.[2]) Pasture is located on 45% of Wisconsin farms but only makes up 7% of Wisconsin farmland. In addition, about 15% of Wisconsin farms have woodlands that are grazed.[3] These declines are contributing to problems in agricultural production, water quality, pollinator habitat, and farmer communities.

Declines in Federal Support for Grasslands and Grazing

End of the Grazing Lands Conservation Initiative (2004-2012)

Federal funds that support grazing networks and education have declined due to the end of funding for the Grazing Lands Conservation Initiative (GLCI) in 2012. The GLCI supported technical assistance and education for graziers and their service providers. The GLCI was initiated in 1991 and offered by Wisconsin NRCS starting in 1999. In 2004, the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) took over administration of GLCI funds allocated to Wisconsin.[4] At its peak in 2010, the program provided a combined total of just over $1 million in federal and state funding for competitive grants for managed grazing education, technical assistance and research. The program consistently received more grant requests than funding available. Under GLCI, technical assistance providers created and revised over 2,200 grazing plans for farmers in Wisconsin between 2004 and 2012. The Wisconsin match program was repealed in 2013 under Wisconsin Act 20.[5]

Grassland Cost-Sharing

The federal government provides cost-sharing to farmers through Farm Bill programs. The most notable programs are the Conservation Reserve Program (CRP), Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Grasslands Reserve Program (GRP), and the Regional Conservation Partnership Program (RCPP). In Wisconsin, acres receiving NRCS support for prescribed grazing declined by 55.4% between 2005 and 2020.[6]

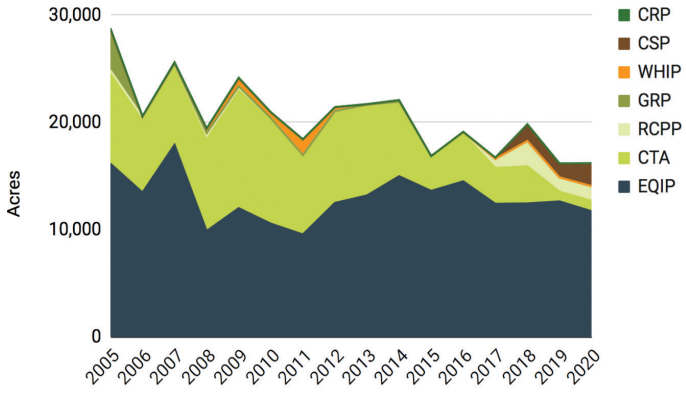

Figure 1. *Any grazing land conservation practices including prescribed grazing, forage planting, road access, and fencing by NRCS in Wisconsin. The programs are the Environmental Quality Incentives Program (EQIP), Conservation Technical Assistance (CTA), Regional Conservation Partnership Program (RCPP), Grassland Reserve Program (GRP), Wildlife Habitat Incentive Program (WHIP), Conservation Stewardship Program (CSP), and Conservation Reserve Program (CRP).[6]*

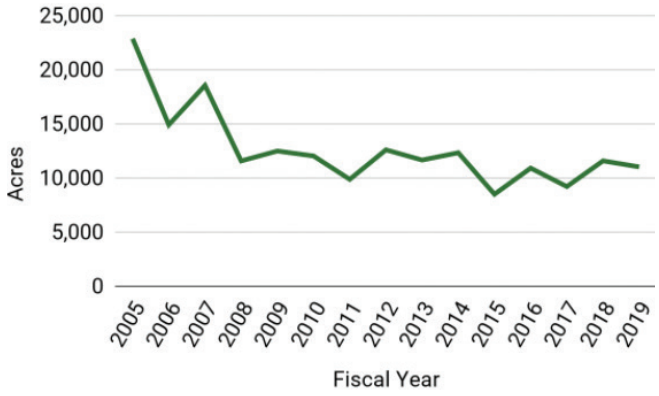

Figure 2. *Prescribed grazing practices by the Natural Resources Conservation Service in Wisconsin.[6]*

Wisconsin farmers received a total of $24.3 million from the NRCS for pasture obligations from 2010 to 2019 through the Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP). This is a small fraction (6%) of total EQIP and CSP expenditures in Wisconsin.

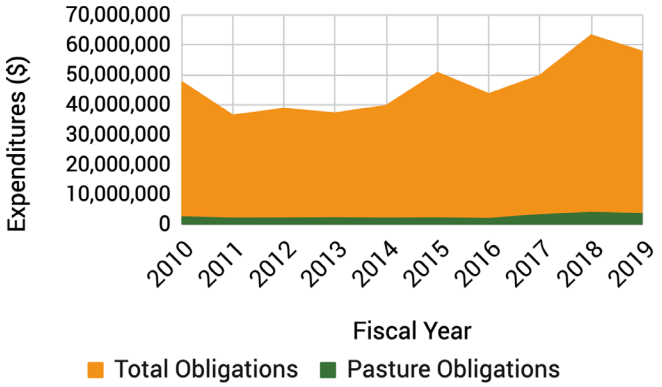

Figure 3. *NRCS total and pasture-related funding obligations by fiscal year through EQIP and CSP contracts.*

In FY20, NRCS applied conservation practices to 18,763 acres of grazing land to improve the resource base. Through EQIP, NRCS obligated $968,461 for prescribed grazing across a count of 352 practices in FY20.[7]

Conservation Reserve Program Bottoms Out

The CRP is the largest federal program managed by the Farm Services Agency that provides an incentive to farmers to plant land into grassland cover. CRP allows for grazing one out of every three years in Wisconsin. Adjustments to the program and the rising price of corn reduced the impact of and interest in the CRP between 2007 and 2020. CRP acreage in Wisconsin declined from 33,515 acres in 2007 to 921 acres in 2020, a 97.25% decrease.[8]

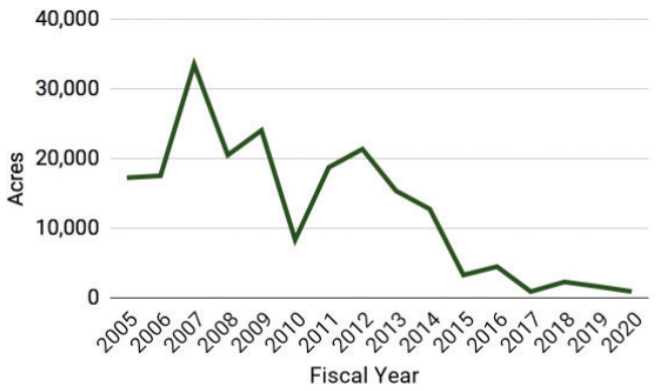

Figure 4. *Conservation Reserve Program area in Wisconsin[8]*

The End of the Grassland Reserve Program and Purchase of Agricultural Conservation Easements

Conservation easements are perpetual or long term agreements that restrict development and can promote working land uses like grazing. The 2002 Farm Bill introduced the Grassland Reserve Program (GRP), a voluntary easement program under which participants limit housing development and cropping to protect grasslands and their grazing and biodiversity benefits. Wisconsin had 22 GRP easements totalling 3,875.5 acres when the program was ended and brought under the Agricultural Conservation Easement Program (ACEP).[9] Since then, 17 additional ACEP Agricultural Land Easements have been created in Wisconsin, totalling 1,299 acres, including some grazing lands.[10] Wisconsin briefly had a state Purchase of Agricultural Conservation Easements initiative to protect farmland from development.

Grazing Under-Supported by Federal Subsidies and Insurance Payments

Commodity subsidies and crop insurance provide substantial support for row crops such as corn and soybeans. Crop insurance buffers farmer income against corn and soybean revenue changes as well as risks like flooding and drought. In contrast, the support provided for pasture is less developed. For instance, Whole-Farm Revenue Protection, a crop-neutral revenue insurance policy, was created in the 2014 Farm Bill and can help graziers, but program rules, low payouts, farmer lack of familiarity, and paperwork requirements have hindered adoption. Insurance payments in Wisconsin averaged $104 million per year for corn, $35 million for soybeans, and $6 million for forage and pasture from 2010 to 2019.[11] Commodity subsidies averaged $91 million per year for corn, $445 million for soybeans, and $0 for pasture and forage from 2010 to 2018.[12]

Similarly, federal dairy programs have failed to address problems of oversupply. Without market signals that limit annual increases in milk production relative to

demand, small and medium dairy farmers are being pushed out of the market. Milwaukee Journal Sentinel's journalist Rick Barrett documented the crisis in a Pulitzer Center series "Dairyland in Distress". The reports were sobering before the COVID-19 pandemic, and only worsened after. In 2018, Wisconsin led the nation in farm bankruptcies, and lost 700 dairy farmers – nearly two per day. In April 2019 he documented a loss of three per day. On average, milk costs $17-22 per hundredweight (about 12 gallons) to produce, while the price farmers receive averages $15.[13] Economic research indicates that if a federal growth management policy was adopted, an average Wisconsin grazing dairy would realize a Net Farm Operating Income increase of up to 74%, and depending on the policy design, average annual milk prices would increase between $0.73/cwt and $1.41/cwt. for farms that stayed within production limits.[14]

State and Local Funds, Plans, and Taxes

From 1999 through 2014, Wisconsin received yearly federal and sometimes state funding for the GLCI, which provided technical assistance, education, and research related to grazing. While Wisconsin no longer has any statewide grants or incentives specifically for grazing and pasture, some grant programs for water quality and wildlife provide funds for creation of grazing and pasturelands or grasslands.

Wisconsin does not currently have a statewide grazing plan. In 2002, Wisconsin released a statewide plan for agriculture[15] that included mentions of grazing, but no plan to incentivize or increase grazing in the state. The Wisconsin DNR is in the process of developing a grazing program for state lands. Some county land and water resource management plans have mentioned the benefits of grazing and grasslands and have set goals to promote grazing.

Wisconsin's 2013 nutrient reduction strategy[16] noted that pastureland was a potential source of nutrient runoff and that prescribed grazing was a best management practice for non-point pollution control. In the 2017-2019 implementation progress report[17], the Wisconsin DNR showed that they increased the area of permanent prescribed grazing in the state by 272 acres using soil and water resource management funds.

Some local governments also provide grazing support. Counties have the ability to cost-share managed grazing practices and provide technical assistance if it is identified as a local priority. For instance, Washburn County offers cost-share[18] for fencing, livestock access lanes, stream crossings, watering facilities, and pasture establishment to promote rotational grazing. Other counties such as Columbia, Dane, Lincoln, and Marathon have programs that provide planning and technical assistance as well as funding for farmers wanting to transition to grazing or pasture.

Agricultural land including grazing land has lower tax rates in Wisconsin, but prairie without grazing or haying is subject to higher taxes. Farmers who graze woodlands pay a lower tax rate than woodland owners without grazing. Woodlands enrolled in the state Managed Forest Law cannot have grazing due to resource concerns.

Organizations Supporting Grazing and Grasslands

GrassWorks[19], Wisconsin's statewide member-based grazing organization, provides leadership and education to farmers and consumers for the advancement of managed grazing. GrassWorks offers a Grazing Guidebook[20], presentations, newsletters, field days and pasture walks. They host a statewide grazing conference[21] annually and support regional and local grazing networks.[22] A number of organizations provide pasture walks, education, and information on grazing in their programming and publications. For instance, the Wisconsin Farmers Union typically partners with several Resource Conservation & Development councils (RC&Ds) to host pasture walks for peer-to-peer learning on grazing practices and information

for the general public. Pasture walks, education, and information are also provided by some County Land Conservation Departments, Natural Resources Conservation Service (NRCS), the Midwest Organic and Sustainable Education Service (MOSES), the University of Wisconsin–Madison Division of Extension, and Trout Unlimited. The Dairy Grazing Apprenticeship program, a recognized federal workforce development certification, is based in Wisconsin and serves multiple states. The UW–Madison Center for Integrated Agricultural Systems (CIAS) was created by graziers to meet their research and training needs. CIAS currently holds field days, produces information resources, and organizes courses for the Wisconsin School for Beginning Dairy and Livestock Farmers[23], typically taught in-person and remotely broadcasted on how to start and succeed in grass-based dairy and livestock farming. The UW–Madison Marshfield Ag Research Station houses dairy heifers that can be used for dairy grazing research, but the UW does not have a dedicated grazing herd. Several UW staff and faculty researchers and their groups focus on grazing and grassland research.

Grassland management and conservation are also supported by conservation and hunting organizations. An annual prairie conference is coordinated by The Prairie Enthusiasts. Several organizations provide information, prairie walks, and management training to landowners including Pheasants Forever, The Prairie Enthusiasts, and the Wisconsin DNR. Prescribed burn trainings are provided by The Prairie Enthusiasts, Fox Valley Technical College, Madison Area Technical College, The Aldo Leopold Foundation, and the Wisconsin Prescribed Fire Council. Regional networks include the Southern Driftless Grasslands, Central Wisconsin Grassland Conservation Area, and the Mississippi Valley Conservancy.

Staff Supporting Grazing

State and federal staffing support for grazing has declined in NRCS, Wisconsin's Department of Agriculture, Trade, and Consumer Protection, UW-Madison College of Agricultural and Life Sciences, and UW-Madison Division of Extension, but increased at Wisconsin DNR. These staff numbers do not include researchers.

County land and water conservation staff also help support graziers. The Natural Resources Conservation Service (NRCS) in Wisconsin has 96 Certified Prescribed Grazing Planners[28] who spend a portion of their time on grazing and are employed through NRCS, counties, nonprofit organizations, and private consulting groups. NRCS has a State Grazing Lands Specialist.

Grass-fed and Organic Labels and Certifications

Consumer demand for organic and grass-fed beef is rapidly increasing. The Nielsen Marketing Research firm found that sales of organic and non-organic grass-fed beef doubled each year between 2012 and 2016. In contrast, conventional beef sales increased by just 7% each year. Despite the market potential for the grass-fed industry, there is little governmental support for American producers.[29]

STAFF DEDICATED TO GRAZING IN 2020, NOT INCLUDING RESEARCH		NOTES
0.3[24]	University of Wisconsin–Madison Division of Extension	The Extension grazing research specialist retired in 2014.
0.5[25]	UW–Madison Center for Integrated Agricultural Systems	Number of staff that are working on Wisconsin School for Beginning Dairy and Livestock School.
0.25[26]	Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP)	DATCP had a full-time person supporting 50% grazing and 50% organic farming, from 2006 through 2014. .
2.5[27]	Wisconsin Department of Natural Resources	Number of staff hours dedicated to grazing has been on the rise at the DNR over the past 2.5 years as development of a statewide DNR public lands grazing program progresses.

Grass-based dairy and meat is often labeled or certified to inform consumers. Some labels are connected to formal governance systems through certification. For instance, milk and meat that are certified organic by the U.S. Department of Agriculture must have cows on pasture 120 days per year for 30% of their diet. Wisconsin had 453 organic dairy farms selling milk from cows with sales of $126 million as of 2016.[30] A total of 586 organic farms sold $16 million in products from beef and other cattle. Wisconsin had 51,870 acres of certified organic pastureland/ rangeland in 2016, a 35% increase from 2011.[30]

A few programs require 100% grass-fed, such as Organic Plus Trust and American Grassfed Association (AGA). There are currently 39 farms certified by the Organic Plus Trust and 2 farms certified by the AGA in Wisconsin.[31] [32]

Midwest Organic Services Association (MOSA), based in Viroqua, Wisconsin, offers Grass-Fed Beef and Grass-Fed Dairy certifications, which require at least 60% of each animal's feed to be from pasture. MOSA also offers Transitional Organic Verification cost-sharing for those who require support transitioning to an organic production system.

Public Lands Grazing

The DNR allows conservation grazing in some wildlife management areas across the state. They also have a collaborative project with university extension and private graziers called Grazing Public Lands in Wisconsin.[33] The fact sheet for the program can be found here.[34] This project evaluates the opportunities and challenges of rotationally-grazed livestock for conservation on public grasslands.

Tribal Grazing

Several Native Nations pasture livestock to promote food sovereignty and provide healthy food and connections to land. For instance, the Oneida Nation educational farm Tsyunhehkwa[35] has a herd of cattle. The Oneida Nation Farms and Agriculture Center raises steers, cow-calf pairs, and grass-fed bison.[36] The Forest County Potawatomi own and operate a farm called Bodwéwadmi Ktëgan, where they raise pastured chickens, hogs, grass-fed cattle and bison. The Ho Chunk Nation had a bison herd and may again in the future. The Menominee Nation has allocated land for farming operations, is actively developing a food production initiative including grazing, and building an agricultural degree program at the College of Menominee Nation.

Land Access Assistance for New Farmers

Wisconsin does not have a dedicated statewide program to provide land access assistance to new farmers. However, many land trusts, farm organizations, universities, and local state and federal staff assist people in accessing land to become farmers. The University of Wisconsin–Madison's internationally known Land Tenure Center closed in 2018.

Conclusion and Recommendations

Well managed grasslands, savannas, and other forms of perennial agriculture have a presently underutilized ability to increase farmer profitability, grow strong, diverse rural communities, revitalize biodiversity, build soil health, keep water clean, and sequester carbon. We recommend federal, state, and local governments, civil society organizations, and the private sector consider these actions in order to support a transition to perennial agriculture:

Coordinate statewide planning

- Develop a statewide grasslands and grazing plan to help guide agencies and entities in coordinating their efforts.

Prioritize grasslands and grazing in agricultural and conservation programs

- Deploy USDA's existing conservation programs to focus on practices that sequester carbon and improve water quality, including managed grazing, perennials, and agroforestry.
- Expand the support for grassland and managed grazing in local, state and federal cost-share, grant, and loan programs to support grass-based livestock, clean water, flood mitigation, soil carbon, and habitat for wildlife and pollinators.
- Improve training about grass-based livestock systems for producers and public, private sector, and tribal advisors and conservationists.
- Encourage conservation easements that secure grasslands while making managed grazing land more accessible and supporting public recreation opportunities.
- Establish a Perennial Crop Advisor Program within state and federal agencies to train crop advisors on how best to incorporate grasslands and other forms of perennial agriculture into existing cropping systems.
- Enhance local technical assistance delivery through additional resources for county conservation departments, university extension, and other local technical advisors.
- Prioritize perennial and grassland agriculture in cross-agency agricultural and conservation initiatives that support resilience to climate change.
- Develop and communicate quality standards for grass-based agriculture to achieve desirable environmental and social outcomes.

Enhance supply chains and farmer opportunities for grass-based milk and meat

- Develop grassland value-added supply-chains by supporting regional processors, aggregators, distributors, and marketers focused on grassland products and their stories.
- Establish funding mechanisms to assist small businesses engaged in establishing supply chains and markets for grasslands and other forms of perennial agriculture.
- Increase support for Tribal climate-smart perennial agriculture and forestry through support for market development and purchasing of food for tribal members and nontribal consumers.
- Explore efforts to better align supply and demand to rebalance the market and reduce overproduction.
- Encourage beginning and historically underserved farmers by providing stipends for mentor farmers, programs offering low-interest loans, land access assistance, and tax incentives, in order to ensure just transitions to perennial agriculture.

Taking these steps will help us transition toward agriculture that better supports farmers, eaters, ecosystems, and rural economies alike.

ENDNOTES

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Grassland 2.0 is a collaborative group of farmers, researchers, and public and private sector leaders working to develop pathways for increased farmer profitability, yield stability and nutrient and water efficiency, while improving water quality, soil health, biodiversity, and climate resilience through grassland-based agriculture.

The project is based at UW–Madison and the work is supported by the Sustainable Agriculture Systems Coordinated Agricultural Program grant no. 2019-68012-29852 from the USDA National Institute of Food and Agriculture.