

## **Biographical Sketch, Erin (Tegtmeier) Meier**

### Education

- Master of Science in Sustainable Agriculture, Iowa State University, 2003
- Bachelor of Science, Geography with Engineering Cognate, cum laude/departmental distinction, University of Illinois, Urbana-Champaign, 1988

### Relevant Recent Professional Experience

2018-Present, Director, Green Lands Blue Waters, Minnesota Institute for Sustainable Agriculture, University of Minnesota – Saint Paul, MN

- Green Lands Blue Waters is an initiative focused on shifting the agricultural landscape in the Upper Mississippi River Basin to more acres in continuous living cover (CLC) to improve water quality, soil health, agricultural and community resilience, and the long-term stability of the Basin and the Gulf of Mexico. GLBW operates in partnership with land grant and other universities and environmental/agricultural agencies and nonprofits in Minnesota, Wisconsin, Iowa, Illinois, Missouri, and Louisiana.

2004-2018, Executive Director, University of Minnesota Southeast Regional Sustainable Development Partnership, University of Minnesota Extension - Rochester, MN

- Forged, designed and sustained numerous mutually-beneficial partnerships, bridging the cultures of rural Minnesota communities and academia, to foster rural sustainability and multi-county regional resilience through applied research and systems-oriented change
- Managed collaborative partners, projects and finances, accounting for nearly \$750,000 in project-related funding for over 70 projects and directing ~\$1.5 million cumulatively in University of Minnesota program funding

2001-2004, Research Assistant to Dr. Michael Duffy, Department of Economics and Leopold Center for Sustainable Agriculture, Iowa State University - Ames, IA

- Provided research on economic, policy, sustainable agriculture and farm structure questions posed to the Leopold Center and Dr. Duffy

1989-2001, GIS Analyst, Cartographer & Project Manager Assistant  
TAMS Consultants, Inc. (then an AECOM/Earth Tech company)  
1989-1991 in New York/1994-2001 in Chicago

## Relevant Recent Grants Received

### Current:

- Principal Investigator: Developing and deploying a perennial grain crop enterprise to improve environmental quality and rural prosperity, Sustainable Agriculture Systems Coordinated Agricultural Program grant no. 2020-68012-31934 from the USDA National Institute of Food and Agriculture, September 2020 – August 2025
- Principal Investigator: Legislator and Candidate MRN Outreach and MRRI Pledge Events, Mississippi River Network, March 2020 – July 2021
- Principal Investigator: Green Lands Blue Waters FY2021, Walton Family Foundation, July 2020-June 2021
- Principal Investigator: Green Lands Blue Waters, McKnight Foundation, December 2018-December 2022

### Past:

- Principal Investigator: Green Lands Blue Waters Increasing Continuous Living Cover in the Upper Midwest via Research, Policy and Implementation, Walton Family Foundation, July 2018-June 2020
- Co-Principal Investigator: Green Lands Blue Waters, McKnight Foundation, December 2016-October 2018
- Co-Principal Investigator: Green Lands Blue Waters, Walton Family Foundation, July 2016-June 2018

## Relevant Recent Papers and Publications

Spratt, E., Jordan, J., Winsten, J., Huff, P., van Schaik, C., Grimsbo Jewett, J., Filbert, M., Luhman, J., Meier, E., & Paine, L. (2021). *Accelerating regenerative grazing to tackle farm, environmental, and societal challenges in the upper Midwest*. Journal of Soil and Water Conservation January 2021, 76 (1) 15A-23A  
<https://www.jswconline.org/content/76/1/15A>

Galzki, J. C., Mulla, D. J., & Meier, E. (2017). *Mapping Potential Foodsheds Using Regionalized Consumer Expenditure Data for Southeastern Minnesota*. Journal of Agriculture, Food Systems, and Community Development, 7(3), 181-196.  
<https://doi.org/10.5304/jafscd.2017.073.013>

# Laura K. Paine

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Columbus, WI 53925

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## Formal Education

### **Certified Educator in Holistic Management, 2005. Holistic Management International**

*Two-year training in teaching strategic planning, goal-setting, and decision-making for farmers & businesses.*

### **Masters of Science in Horticulture, 1992. University of Wisconsin-Madison (UW)**

*Commercial vegetable production, a living mulch system for organic asparagus production.*

### **Bachelors of Arts in Botany, 1976. Southern Illinois University, Carbondale**

*Minors in Anthropology and Art. President's Scholar. University High Honors.*

## Continuing Education

### **NRCS Technical Service Provider (TSP), 2014 - present.**

*Grazing planning certification.*

### **Lean Business Planning, October-November, 2012. Small Business Development Center, U.W. Madison**

*Six-week program on using the lean business planning model for starting a small business.*

### **Strategic Planning, November, 2011. UW Extension**

*Three-day workshop on facilitating strategic planning for organizations and businesses.*

### **Certified Professional Agronomist, 2000 to present. American Society of Agronomy**

*Twenty continuing education credits required annually on a balanced range of agronomic topics.*

## Relevant Employment

### **Outreach and Learning Hub Coordinator**

**October 2019 - present**

*GrassWorks, Inc/Grassland 2.0, University of Wisconsin College of Agricultural and Life Sciences*

- *Grassland 2.0 is an expansive, collaborative project to re-imagine Midwestern agriculture as a regenerative ecosystem that supports profitable farms, vibrant rural communities and a healthy planet by mimicking the functionality of the grassland ecosystem that once existed here (Grassland 1.0).*
  - *Responsible for the management of engagement with stakeholders by identifying, networking, and convening conversations among relevant stakeholders.*
  - *Serve as point-of-contact and resource/information hub for Grassland 2.0 project*
  - *Participate in project management by serving on the Management Team.*

### **Program Director**

**June 2015 – November 2019**

*Dairy Grazing Apprenticeship*

- *The Dairy Grazing Apprenticeship is a formal farmer training program accredited with the US Department of Labor. The program has apprentices and Masters in 12 states.*
  - *Develop management systems for day to day operations of the multi-state program.*
  - *Oversight and training of 8 Education Coordinators who work directly with Master-Apprentice pairs.*
  - *Responsible for external partner relations and partner development.*
  - *Provide Holistic Management goal setting training to apprentices.*
  - *Responsible for grant writing and project management.*

### **Grazing Educator/Grazing Broker**

**February 2014-May 2015**

*Southwest Badger Resource Conservation and Development Council*

- *Newly created position. Goals were to foster partnerships between non-farming landowners and pasture-based livestock producers to promote well-managed pastures that provide income and conservation benefits on southwest Wisconsin's highly erodible land.*

### **Grazing & Organic Agriculture Specialist/Economic Development Consultant**

**2006 to 2014**

*Wisconsin Department of Agriculture, Trade, & Consumer Protection*

- *Newly created position. Development of statewide programming in the areas of pasture-based livestock and dairy systems and organic agriculture in Wisconsin.*
- *Establishment and coordination of the Wisconsin Organic Advisory Council, a public-private*

*Resume, Laura K. Paine, March 2020*

*partnership to foster growth in the organic sector and inform state and federal policy.*

- *Administration of Grazing Lands Conservation Initiative grant program. ~\$1 million annual competitive grant program for grazing research & education, federal and state funded.*

### **Agriculture Agent & Associate Professor**

**1999 to 2006**

*University of Wisconsin Extension*

- *Tenure track position. Needs assessment and program development serving Columbia County farmers.*
- *Coordinated diverse groups at state and local levels, including, corn growers' association, grazing networks, non-farming rural landowners, master gardeners, grain marketing club.*

### **Coordinator, Agricultural Ecosystems Research Project**

**1992 to 1999**

*University of Wisconsin Agronomy Department*

- *Newly created position. Established and coordinated the Agricultural Ecosystems Research Project, a research partnership between the University of Wisconsin, College of Agriculture, the Wisconsin Department of Natural Resources, other state and federal agencies, non-profit conservation organizations, and farmers.*

### **Professional Roles and Contributions**

Member and Advisor, GrassWorks Board of Directors, 2000 to 2020.

Member, Michael Fields Agricultural Institute Board of Directors, Spring 2014 to 2019.

Member & President, Midwest Organic Services Association Board of Directors, 2010 to 2016.

Member, UW Center for Integrated Agricultural Systems Citizens Advisory Council, 2010 to present.

Member, WI Sustainable Agriculture Task Force, 2000 to present.

Member, Soil & Water Conservation Society, 1993 to Present

### **Selected Recent Peer-Reviewed Papers**

- Spratt, E., J. Jordan, J. Winsten, P. Huff, C. van Schaik, J. Grimsbo Jewett, M. Filbert, J. Luhman, E. Meier, and L. Paine. 2020. Accelerating regenerative grazing to tackle farm, environmental, and societal challenges in the upper Midwest. *J. Soil and Water Cons.* JAN/FEB 2021—VOL. 76, NO. 1.
- Paine, L.K. 2019. Training the Next Generation of Farmers using Formal Apprenticeship. Chapter in: *Skilling Up: The Scope of Modern Apprenticeship*. Deborah Williamson and Lisa Yates, editors. Urban Institute.
- Chamberlain, S.K., L. K. Paine, J. L. Harrison, and R. D. Jackson. 2012. Tradeoffs in Performance of Native Warm-Season Grass Cultivars and Locally Harvested Seed Managed for Wildlife Habitat or Livestock Production. *Agronomy Journal*, 104: 5. Pp. 1383-1391.
- Franzluebbbers, Alan J., Laura K. Paine, Jonathan R. Winsten, Margaret Krome, Matt A. Sanderson, Kevin Ogles, and Dennis Thompson. 2012. Well-managed grazing systems: A forgotten hero of conservation. *J. Soil and Water Cons.* 67: 4 pp. 100A- 104A.

### **Non-refereed Publications and Popular Articles**

- Paine, L. and A. Sullivan. 2016. Beginning Farmers in Wisconsin: 2014 Survey Summary. <https://datcp.wi.gov/Documents/DAD/BeginningFarmerSurveyReport.pdf>
- Carusi, C. R. McNair, L. Paine, E. Silva. 2013, 2011, 2009, 2007. Organic agriculture in Wisconsin: biennial status report. UW Center for Integrated Agricultural Systems ([www.cias.edu](http://www.cias.edu)).
- Paine, L.K. 2013. Growing the Pasture Grazed Dairy Sector in Wisconsin. <https://www.sare.org/Learning-Center/SARE-Project-Products/North-Central-SARE-Project-Products/Growing-the-Pasture-Grazed-Dairy-Sector-in-Wisconsin>.

### **Selected Grants, Research, & Collaboration**

- USDA AgVets Grant, 2018. For Dairy Grazing Apprenticeship. Creating a dairy farming career track for military veterans. \$954,434.
- North Central Regional Sustainable Agriculture Research and Education (SARE) Professional Development Grant, 2017. Enhancing the Quality of Work-based Beginning Farmer Training Programs Through Trainer Professional Development. \$74,107.
- Beginning Farmer and Rancher Development Grant, 2015. A pathway to livestock farming: providing access to land and a guiding hand. \$219,274. Authored on behalf of Southwest Badger RC&D.
- North Central Regional SARE Research Grant, 2008-2010. Principle investigator on a \$148,000 grant to investigate the chemistry and culinary characteristics of grass-fed milk in selected dairy products.

Jane Grimsbo Jewett

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## EDUCATION

1995 M.S. Plant Breeding & Genetics, University of Minnesota

1992 B.S. Science in Agriculture/Agronomy, University of Minnesota

## EMPLOYMENT

2019-present	Associate Director, Minnesota Institute for Sustainable Agriculture <i>Responsibilities include oversight of website and other outreach and communications tools; senior editor role for publications developed through MISA Information Exchange, grant writing, coordination of collaborative writing and project teams.</i>
2013-present	Staff lead for Midwest Perennial Forage Working Group, part of Green Lands Blue Waters. <i>Responsibilities include organizational work, convening quarterly meetings; assisting with grant proposals, projects, and publications; coordinating perennial forage sessions at GLBW conferences.</i>
1995 – present	Farmer & direct-marketer of beef, pork, lamb, poultry; practitioner of managed grazing; farmers' market vendor since 2009
2015-2019	Research Fellow, Minnesota Institute for Sustainable Agriculture
2012 – 2015	Research Fellow, Green Lands Blue Waters and Minnesota Institute for Sustainable Agriculture
2011 – 2012	Green Lands Blue Waters and Minnesota Institute for Sustainable Agriculture Program Associate
1999 – 2011	Minnesota Institute for Sustainable Agriculture, Information Exchange Program Assistant
1995 – 1999	Assistant Scientist, Forages Research, University of Minnesota

## RELEVANT PUBLICATIONS – Authored or Edited.

**Accelerating regenerative grazing to tackle farm, environmental, and societal challenges in the upper Midwest.** Elisabeth Spratt, Jane Jordan, Jonathan Winsten, Pete Huff, Caroline van Schaik, Jane Grimsbo Jewett, Meghan Filbert, Jared Luhman, Erin Meier and Laura Paine. *Journal of Soil and Water Conservation* January 2021, 76 (1) 15A-23A; DOI: <https://doi.org/10.2489/jswc.2021.1209A>

**Managed Grazing for Dairy Profits.** 2018. Tom Cadwallader, Laura Paine, Kent Solberg, James Paulson, and Douglas Gucker. Editor: Jane Jewett. Published online by Green Lands Blue Waters.

**Farm Transitions Toolkit.** 2013. Jane Grimsbo Jewett, Hannah Lewis, Alex Baumhardt, Farmers' Legal Action Group. Contributors: Robert Maggiani and Rich Myers. Editors: Brian DeVore, Jane Grimsbo Jewett, Karen Stettler, Cathy Svejksky. Land Stewardship Project, Minnesota Institute for Sustainable Agriculture, National Center for Appropriate Technology, Farmers' Legal Action Group.  
<http://www.misa.umn.edu/publications/businessandsuccessionplanning/farmtransitionstoolkit>

## **RELEVANT WEBSITE DEVELOPMENT**

**Forever Green Initiative.** 2016. <https://forevergreen.umn.edu>

**Midwest Perennial Forage Working Group.** 2013. Updated 2019-2020 with Sarah Svoboda.  
<https://greenlandsbluewaters.org/midwest-perennial-forage-working-group/>

**Minnesota Institute for Sustainable Agriculture.** 2005; revision, 2010; revision, 2015-16  
<http://www.misa.umn.edu>

## **RELEVANT GRANTS**

2019-2021	Forever Green Ration for Poultry; MN Department of Agriculture Sustainable Agriculture Demonstration Grant
2018 – 2020	Financial Check-Ups for Farmers' Market + Wholesale Vendors; Extension Risk Management Education grant
2017 – 2018	Testing Reduction of Dairy Financial Risk through Grazing and Insurance; Risk Management Agency grant
2012 - 2014	Finishing time and weights of grass-fed beef animals; North Central Region SARE Farmer-Rancher Grant

**BIOGRAPHICAL SKETCH**  
**BRADFORD L BARHAM**

Department of Agricultural & Applied Economics (AAE)  
University of Wisconsin-Madison  
[Bradford.barham@wisc.edu](mailto:Bradford.barham@wisc.edu)

**EDUCATION**

Ph.D., Economics, Stanford University, 1988  
B.A., Economics, UC San Diego, Revelle College, 1981, with honors.

**UNIVERSITY FACULTY APPOINTMENTS AND POSITIONS**

2001- Present	Professor, AAE, University of Wisconsin-Madison,
2014-2017	Faculty Director, Greenhouse Residential Learning Center, UW-Madison
2012-2014	Educational Innovation, Director, College of Agricultural and Life Sciences, UW-Madison
2004-2009	Chair, Department of Agricultural and Applied Economics, UW-Madison
1998-2006	Co-Director, Program on Agricultural Technology Studies (PATS)
1993-2001	Assistant and Associate Professor, AAE
1993-1998	Economist, Agricultural Technology and Family Farm Institute & PATS UW-Madison
1988-1993	Assistant Professor, Department of Economics, UW-Madison
1987-1988	Instructor, Department of Economics, UW-Madison

**NATURE OF ACADEMIC RESPONSIBILITIES AND BUDGET ALLOCATION**

Research - 50%, Teaching - 30%, Extension - 20%

**RESEARCH INTERESTS**

Microeconomics of economic development, technology adoption, agrarian structure, agricultural biotechnology, natural resource industries, conservation, migration, economics of specialization and diversification, and economic viability of alternative agriculture

**HONORS AND AWARDS**

2010	Vilas Associate Award
2009	American Agricultural Economics Association, 2 <sup>nd</sup> Prize Research Poster Competition
2009	Taylor-Hibbard Club, Excellent Contribution to Graduate Program
2001	Taylor-Hibbard Club, Teaching Award, awarded by graduate students in AAE.
2000	Runner-up, Best Research Project, Global Development Network
1999	John Leddy Phelan Award, Distinguished Service to Latin American and Iberian Studies, UW
1998	Pound Research Award, College of Agricultural and Life Sciences, UW

**REFEREED ARTICLES AND BOOK PUBLICATIONS (reverse chronological order)**

1. Bradford L. Barham, Ana Paula Melo, and Thomas Hertz. "Earnings, Wages, and Poverty Outcomes of US Farm and Low-Skill Workers." Applied Economics and Policy Perspectives, 42 (2) (2020): 307-331.
2. Oliver T. Coomes, Bradford L. Barham, Graham K. MacDonald, Navin Ramankutty, N., and Jean-Paul Chavas. "Leveraging total factor productivity growth for sustainable and resilient farming." Nature Sustainability, 2(1) (2019): 22-28.

3. Doris Laple and Bradford L. Barham. "How do learning ability, advice from experts and peers shape decision making?" Journal of Behavioral and Experimental Economics 80 (2019): 92-107.
4. Doris Laple, Bradford L. Barham, and Jean-Paul Chavas. "The role of extension in dynamic economic adjustments: the case of Irish dairy farms." European Review of Agricultural Economics (2019).
5. Daniel F. Mooney, Courtney Bolinson, and Bradford L. Barham. "Willingness to rent public land for rotational grazing: The importance of response behavior." Journal of Agricultural and Applied Economics 51.1 (2019): 27-48.
6. Bradford L. Barham, Jean-Paul Chavas, Dylan Fitz, and Laura Schechter, "Receptiveness to advice, cognitive ability, and technology adoption." Journal of Economic Behavior and Organization (2018): 239-268
7. Brad Barham, Irwin Goldman, Jordan van Rijn, Jeremy Foltz, and Maria Isabella Agnes. "Land-Grant University Faculty Attitudes in and Engagement with Open Source Scholarship and Commercialization." Agricultural and Environmental Letters 2:1 (2017). doi:10.2134/ael2017.03.0008.
8. Bradford L. Barham, Daniel F. Mooney, and Scott M. Swinton. "Inconvenient Truths about Landowner (Un)Willingness to Grow Dedicated Bioenergy Crops." Choices (2016). Quarter 4, available online.
9. Scott Swinton, Sophia Tanner , Bradford L. Barham, Daniel Mooney, and Theodore Skevas. "How Willing Are Landowners to Supply Land for Bioenergy Crops in the Northern Great Lakes Region?" GCB Bioenergy (available online).
10. Virginia M. Moore, Paul D. Mitchell, Erin M. Silva, Bradford L. Barham. "Cover Crop Adoption and Intensity on Wisconsin's Organic Vegetable Farms," Agroecology and Sustainable Food Systems 40, 7 (2016): 693-713.
11. Daniel Prager, Jeremy D. Foltz, and Bradford L. Barham, "Technical Change and Productivity Gains in Agricultural and Life Sciences Research," American Journal of Agricultural Economics, 97, 3 (2015): 743-761.
12. Daniel Mooney, Bradford L. Barham, and Lian Chang, "Inelastic and Fragmented Farm Supply Response for Sustainable Biofuel Crops: Ex Ante Survey Evidence from Wisconsin," Applied Economic Perspectives and Policy, first published online November 3, 2014.
13. Brock, Caroline and Bradford Barham, "Amish Dedication to Farming and Adoption of Organic Dairy Systems," in Environmental, Agricultural and Food Ethics. ed. Jim Bingen et al. Kluwer Series, (2015).
14. Bradford L. Barham, Jean-Paul Chavas, Dylan Fitz, Vanessa Rios-Salas, and Laura Schechter, "Risk, Learning, and Technology Adoption", Agricultural Economics, 46,1 (2015): 11-24.
15. Bradford L. Barham, Jeremy D. Foltz, and Daniel Prager, "Making Time for Science," Research Policy, 43,1 (2014): 21-31.
16. Bradford L. Barham, Jean-Paul Chavas, Dylan Fitz, Vanessa Rios-Felix, and Laura Schechter, "The Role of Risk and Ambiguity Aversion in Technology Adoption," Journal of Economic Behavior and Organization, 97 (2014):204-218.
17. Caroline Brock and Bradford L. Barham, "Milk is Milk: Organic Dairy Adoption Decisions and Bounded Rationality", Sustainability, 5, 12 (2013): 5416-5441; doi:10.3390/su5125416
18. Timothy D. Meehan, Claudio Gratton, Erica Diehl, Natalie D. Hunt, Daniel F. Mooney, Stephen J. Ventura, Bradford L. Barham and Randall D. Jackson (2013), "Ecosystem service tradeoffs associated with switching from annual to perennial energy crops in riparian zones of the US Midwest," PLoS ONE, 8, 11(2013): e80093. doi:10.1371/journal.pone.0080093.
19. Seth Gitter, James Manley, and Bradford L. Barham, "Early-Childhood Nutrition and Educational Conditional-Cash Transfer Programs," Journal of Development Studies, 49, 10 (2013): 1397-1411.



**James C. Paulson, M.S.**

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Caledonia, MN 55921  
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Email: [jcp@umn.edu](mailto:jcp@umn.edu)

**Education:**

- 1989 Master of Science – Dairy Science, University of Minnesota, Twin Cities
- 1978 Bachelor of Science, Animal Science, University of Minnesota, Twin Cities

**Current Position:**

- 2013-present Extension Educator and Associate Professor, University of Minnesota Extension Livestock Systems - Dairy Extension Regional Office, Rochester, MN

**Previous Academic and Professional Appointments:**

- 2007 – 2016 Extension Educator, Dairy and Assistant Professor. Extension Center for Food, Agricultural and Natural Resource Sciences, University of Minnesota Extension, Willmar, MN
- 2002 – 2006 Dairy Nutritionist and Consultant, Land O’ Lakes Feed. Plainview, MN
- 2000–2001 Director of Dairy Farm Operations and Instructor, Northeast Iowa Community College, Calmar, IA
- 1995–2000 Dairy Nutritionist and Consultant, Farmland Feed. Plainview, MN
- 1989–1995 Nutritionist and feed mill manager, Brauer Pork, Inc. Oakford, IL
- 1984-1989 Research Assistant and Graduate student, M.S., (Ph.D. ABT), University of Minnesota, St. Paul.
- 1979-1984 Assistant Scientist, University of Minnesota, Waseca SROC and St. Paul Supervision and management of University dairy research herds.

**Professional Societies and Memberships:**

- 1984 – Present American Dairy Science Association
- 1996 – Present National Dairy Shrine
- 2012 – American Shire Horse Association
- 2007 – Present Midwest Forage Association

**Professional Awards and Distinction**

- 2015 Deans Award for Distinguished Team
- 2015 Midwest Forage Outstanding Service Award
- 2010 Minnesota Holstein Association Distinguished Service Award

### **Professional Development:**

1. American Dairy Science Association Annual Meetings. 1985-2015. Various locations.
2. I-29 Consortium Team Development, Clarity, Focus, and Action: Coaching the Conversation workshop. 2014. Sioux Falls, SD.
3. Animal Agriculture and Climate Change. 2013. USDA NIFA Online Course.
4. I-29 Consortium Summer Team Development. 2008-2016. Brookings, SD.

### **Proceedings:**

1. **Paulson, J. C.** 2016. Use of Cover Crops for Forage. Proceedings of the 4-State Dairy Management Conference, Dubuque, IA.
2. Cortus E, K. Janni, J. Salfer, H. Carroll, T. Erickson, **J. C. Paulson**, and S. Pohl. Evaluating Energy Use and Conservation on Dairies in the Northern Great Plains: Outreach Efforts and Needs for Periods of Heat Stress. 2015. South Dakota State University, Brookings, SD and the University of Minnesota, St. Paul, MN.
3. **Paulson, J.C.**, J.G. Linn, M.L. Raeth-Knight, H.J. Jung. 2008. Grass versus Legume Forage for Dairy Cattle. *In*: 69<sup>th</sup> Proceedings of the MN Nutrition Conference, Shakopee, MN. Pg. 113-133.

### **Professional Meeting Abstracts:**

1. **Paulson, J.C.**, D. Holen, D. Nicolai, B. Heins. 2016. Evaluation of Five Cool Season Grasses and Alfalfa-Grass Mixtures. Journal of Dairy Science Suppl. Vol. 99, Abstract 16025. ADSA-ASAS Joint annual meeting.
2. Heins, B. J., **J.C. Paulson**, and H. Chester-Jones, Evaluation of production, rumination, milk fatty acid profile, and profitability for organic dairy cattle fed sprouted barley fodder. 2016. Journal of Dairy Science Suppl. Vol 99: Abstract 13067. ADSA – ASAS Joint Annual Meeting.
3. Ruh, K. E., Heins, B. J., and **J. C. Paulson**. 2015. Forage quality of two different pasture systems incorporating warm and cool season forages for grazing organic dairy cattle. J. Dairy Sci. 98 (Suppl. 2). Abstract. M119
4. **Paulson, J. C.**, B. Heins and D. Johnson. 2014. Seasonal Changes in DM, CP, NDF, and NDF Digestibility of Pasture Forage in Grazing Production Systems. Journal of Dairy Science Suppl. Vol. 97. Abstract 321. ADSA-ASAS-CSAS Joint Annual Meeting.
5. **Paulson, J.C.**, P. Peterson, D. Holen. 2012. Alfalfa/Grass Mixtures Yield More DM, CP, NDF and dNDF Than Alfalfa in Monocultures. Journal of Dairy Science Vol. 95 ADSA-ASAS-CSAS Joint Annual Meeting.
6. **Paulson, J.C.**<sup>1</sup>, T.M. Olson<sup>1</sup>, G. Thoma<sup>2</sup>. Does Size of Farm Affect its Carbon Footprint? University of Minnesota<sup>1</sup> and the University of Arkansas<sup>2</sup>. 2010. Midwest ADSA Joint Annual Meeting.

### **References:**

Dr. Jim Linn  
Professor Emeritus  
2642 Suzanne, Circle  
St. Paul, MN 55110  
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Dr. Hugh Chester-Jones  
Dept. of Animal Science  
SROC  
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## **Denise L. Schwab**

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### **Employment History**

- 2009 to present: ISU Extension Beef Program Specialist providing educational programming and consultation for beef producers and allied industry in sixteen counties in northeast Iowa.
- 2003-2009: ISU Extension Beef/Forage Field Specialist for eleven counties in southeast Iowa
- 1999 - 2003: ISU Extension 4-H Youth Development Specialist responsible for the leadership, design, implementation, and supervision of the statewide 4-H youth agriculture, and mechanical science curriculum areas.
- 1992 –1999: ISU Extension Livestock/Beef Field Specialist for eight central and east-central Iowa counties.
- 1989 –1992: ISU Extension County Agriculturist, Tama County Extension District, Toledo, IA
- 1985 –1989: ISU Extension 4-H & Youth Leader, Tama County Extension District, Toledo, IA.
- 1983 –1984: ISU Extension 4-H & Youth Leader, Dickinson and Emmet County Extension Districts, Spirit Lake, IA.

### **Education**

Master of Agriculture, Professional Agriculture, Iowa State University, August 1987  
Bachelor of Science, Animal Science and Agriculture Extension Education, Iowa State University, May 1983

### **Honors & Awards**

NACAA Communication Award National Finalist, 2019  
ISU ANR Extension Team Award, 2019  
ISU Distinguished Service Award, 2016  
NACAA Distinguished Service Award, 2010  
RK Bliss Award, 2008  
Epsilon Sigma Phi State Team Award, 2007  
NACAA Achievement Award National Finalist, 2006

### **Research & Publications**

Dewell, G., Lundy, E., Schwab, D.L., 2021. Caring for Cow Herds During Cold Weather, IBC 143. Available at: <https://store.extension.iastate.edu/product/16101>

Schwab, D.L., Reynolds, M.B., Vittetoe, R., 2020. Farmer Experiences with Fall Grazing Cover Crops. IBC 142. Available at: <https://store.extension.iastate.edu/product/15918>

- Euken, R., Schwab, D.L., Clark, C., 2020. Grazing wind damaged, down corn. Available at: <http://www.iowabeefcenter.org/information/GrazingDownCorn.pdf>
- Schwab, D.L., Lundy, E.L., Reynolds, M.B., Vittetoe, R., 2020. Farmer Experiences with Fall Grazing Cover Crops, IBC142. Available at: <https://store.extension.iastate.edu/Product/15918.pdf>
- Barnhart, S., Schwab, D.L., Vittetoe, R., 2019. Boosting Pasture Production, IBC 132. Available at: <https://store.extension.iastate.edu/product/15698>
- Sellers, H.J., Schwab, D.L., Arora, K., Clark, C., Dewell, G., Euken, R., Gunn, P., Lippolis, K., Loy, D., Lundy, E., Russell, J., Schulz, L., Shouse, S., Wall, P.B., 2019. Iowa Cow-calf Production – Exploring Different Management Systems; Sustainably Growing Iowa’s Beef Herds: Evaluating Systems That Provide Economic Opportunities While Protecting Soil and Water Resources, IBC 0131.
- Jamison, S., Loy, D., Lippolis, K., Lundy, E., Schwab, D.L., Reynolds, M.B., 2019. Iowa’s Pastureland and Grazing, 2013-2018, IBC 0130.
- Euken R. M. & Schwab D. L. & Sellers J., (2019) “Cost of Production Comparisons from Three Different Cow-Calf Systems in Iowa”, Iowa State University Animal Industry Report 16(1).
- Schwab D. L., (2019) “Nitrate and Sulfur in Fall Grazed Cover Crops”, Iowa State University Animal Industry Report 16(1).
- Euken R. M. & Schwab D. L. & Sellers J., (2019) “Quality of Iowa Forages for Beef Cows”, Iowa State University Animal Industry Report 16(1).
- Schwab, D.L., Vittetoe, R., 2018. Best Management Practices for Fall Grazing Cover Crops. Available at: <http://www.iowabeefcenter.org/information/FallGrazingCoverCropsBMPinfographic.pdf>
- Schwab, D.L., Vittetoe, R., 2018. Best Management Practices for Fall Grazing Cover Crops - Comments by Cooperators. Available at: <http://www.iowabeefcenter.org/information/FallGrazingCoverCrops-Comments.pdf>
- Schwab D. & Clark C. A. & Doran B. E. & Euken R. M. & Loy D. D. & Lundy E. L. & Sellers J. & Wall P. B., (2018) “Comparing Iowa 4-H Beef Carcass Programs with the 2016 National Beef Quality Audit Carcasses”, Iowa State University Animal Industry Report 15(1). doi: [https://doi.org/10.31274/ans\\_air-180814-421](https://doi.org/10.31274/ans_air-180814-421)
- Loy D. D. & Doran B. E. & Euken R. M. & Schwab D. L. & Clark C. A. & Sellers J. & Wall P. B. & Dahlke G. R. & Hoyer S. & Lundy E. L. & Schulz L. L. & Dewell G. A., (2018) “Iowa Beef Center”, Iowa State University Animal Industry Report 15(1). doi: [https://doi.org/10.31274/ans\\_air-180814-529](https://doi.org/10.31274/ans_air-180814-529)
- Gunn, P., Schwab, D., 2016. Ten Ways to Reduce Feed Costs in Cow-calf Operations, ISU Ag Decision Maker File B1-77. Available at [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm)

## Professional Memberships

- American Society of Animal Science, 1993 - present
- Professional & Scientific Council, Elected to represent Extension from 1999-2002
- Epsilon Sigma Phi, National Honorary Extension Fraternity, 1988-present
- National Association of County Agricultural Agents – 1989-present
- National Association of Extension 4-H Agents – 1983-1988

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# ALLISON VANDERWAL

CURRICULUM VITAE

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## **Contact Information**

Residential address: 19919 County Rd 5  
Springfield, MN 56087  
Work address: 5469 US-12  
Maple Plain, MN 55359  
Phone: 507-822-5921  
Email: allison@mnsca.org

## **Education**

May 2019 University of Minnesota -Twin Cities, Saint Paul, MN (GPA: 3.500 on 4.0 Scale)  
Master's Degree in Ruminant Nutrition  
August 2018 Plains Nutrition Council Feedlot Nutritionist Boot Camp, Amarillo TX  
May 2017 University of Minnesota- Twin Cities, Saint Paul, MN (GPA: 3.384 on 4.0 scale)  
Bachelor of Science in Animal Science  
May 2013 Springfield Public High School, Springfield, MN (GPA: 3.6 on 4.0 scale)

## **Professional Membership**

Oct 2018 – 2020 American Registry of Professional Animal Scientists (ARPAS)  
2017 – 2020 American Society of Animal Science (ASAS)

## **Academic and Professional Appointments**

May 2020 – Present Executive Director, Minnesota State Cattlemen's Association  
Beef Quality Assurance Coordinator, Minnesota Beef Council  
July 2019 – April 2020 Ruminant Nutrition Research Coordinator, Iowa State University, Ames, IA  
Aug 2017 – May 2019 Graduate Research Assistant, University of Minnesota, St. Paul, MN  
May 2015 - May 2016 Beef Sales Intern, Form-A- Feed, Stewart, MN  
May 2014 - Aug 2014 Student Technician, University of Minnesota SW Experimental Station, Lamberton, MN

## **Awards**

September 2018 Second Place Poster in Minnesota Nutrition Conference Graduate Poster Competition

## **Summary of Accomplishments**

### **Research Experience**

- Dietary protein and carbohydrate sources of Midwestern feedlots diets have the potential to pair based on microbial crude protein optimal digestibility
- Effects of blended microbial feed additives on receiving cattle performance and health
- Optimizing sugar inclusion in high roughage diets for growing cattle

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- Effects of adjusting feed deliveries for a constant dry matter intake based on daily dry matter measures of feed ingredients on performance and carcass characteristics
- Heat stress mitigation strategies used by Midwestern cattle feeders
- Relative bioavailability of a bis-glycinate copper source in cattle fed an growing diet
- Determining the apparent absorption of a bis-glycinate zinc source in feeder lambs

## Presentation

**VanDerWal, A., J. Zeltwanger, A. DiCostanzi.** 2019. Optimizing sugar inclusion in high roughage diets for growing cattle. 15 minute oral presentation in the Ruminant Nutrition: Feedlot: Nutrition and Management section. Midwest Animal Science Meeting. Omaha, NE. 221

**VanDerWal, A., J. Zeltwanger, D. Paulus-Compart. A. DiCostanzo.** 2019. Effects of blended microbial feed additives on receiving cattle performance and health. 15 minute oral presentation in the Ruminant Nutrition: Supplements and Additives section. Midwest Animal Science Meeting. Omaha, NE. 334

**VanDerWal, A., J. Zeltwanger, D. Paulus-Compart. A. DiCostanzo.** 2018. Effects of blended microbial feed additives on receiving cattle performance and health. Poster presented to Minnesota Nutrition conference- *2<sup>nd</sup> place award in Graduate Student Poster Competition.* Mankato, MN Sept. 19-20.

**VanDerWal, A., J. Zeltwanger, D. Paulus-Compart. A. DiCostanzo.** 2018. Effects of blended microbial feed additives on receiving cattle performance and health. Poster presented to Plains Nutrition Council Conference. San Antonio, TX. April 5.

**VanDerWal, A., H. Larson, and A. DiCostanzo.** 2016. An In situ evaluation of crude protein degradation for common backgrounding and finishing feedstuffs fed to cattle in the Midwest region. Poster presented to University of Minnesota Undergraduate Research Symposium. Minneapolis, MN. April 29.

## Teaching

‘Feedlot Management’ Course, University of River Falls, WI (Spring 2019)

- Lecturer for 27 Junior and Seniors
- One 50 minute lecture section and two 75 minute lab sections
- Lectures included ‘Factors Impacting Feed Intake’, ‘Protein Metabolism’, ‘Health of Receiving Cattle’, Growth Promoters in Growing Cattle and Strategies’, ‘End Point Management’, Dairy Beef Production, etc.

‘Beef Production Systems Management’ Course University of Minnesota, MN (Fall 2018)

- Teaching Assistant to 12 Students
- 50 minute guest lectures on ‘Herd Health’, ‘Feedlot Profit’, ‘Feedlot Management Practices’, Receiving Nutrition and Health’, and ‘Evaluating Management Strategies’.

## Extension

University of Nebraska Lincoln and Iowa State University Feedlot Roundtable (February 2020)

- Presented a feedlot research update to Iowa producers in attendance.

Feedlot Nutritionist Information Survey (Dec 2019 - April 2020)

- Assist with developing survey questions and in charge of lining meetings up with survey personal to finalize survey and proof formatting of questions.
- Will be in charge of compiling and analyzing data

Iowa State University Beef Nutrition Showcase (Dec 2019)

- In charge of the event and took lead in contacting sponsor, speakers and developing and promoting the program

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Heat Stress Mitigation Survey (partnered with South Dakota State University and University of Nebraska Extension Programs) (July - Dec 2018)

- Assist with finding and contacting feedlots in SW Minnesota, South Dakota as well as conducting on farm surveys

Minnesota Ag in the Classroom, North Central Research and Outreach Center, Grand Rapids, MN (July 2018)

- Helped design a lesson plan on Ruminant Nutrition and the ruminant animal
- Briefed Minnesota elementary and high school teachers how to teach about the ruminant animal

Minnesota Nutrition Conference, Mankato, MN (September 2018, 2017)

- 2 day conference for industry professionals in the Midwest in the areas of beef, dairy, equine, poultry and swine.
- Assisted with set-up, registration and visual set-up at conference

## Service

Dakota County 4-H Beef Senior Interview Judge (August 2018)

- Interviewed 4-H members on their knowledge of cattle production and the current beef industry

Dakota and Washington County 4-H Livestock Quality Assurance and Ethics Training (June 2018)

- Gave two 30 sessions to 75 youth about speaking up for animal agriculture and knowledge of beef industry ethics

Beef Production Course at University of River Falls WI (May 2018)

- Hour tour given to 8 undergraduate students at the University of Minnesota's Beef Teaching Farm about research conducted at the facility

Southwest Minnesota Science Challenge (March 2017)

- Served as judge and moderator for 17 4-H junior and senior teams in a project bowl competition.

Minnesota Beef Expo (October 2016)

- Three 20 min sessions given to 20 high school students and parents (per session) on undergraduate and animal science opportunities

College of Food Agriculture and Natural Sciences (CFANS) student panel (April 2016 and 2018)

- Hour panel session and barn tour for freshman accepted into University of Minnesota's Animal Science undergraduate program

Minnesota Junior Spring Classic Beef Show Co-Coordinator (2015 - May 2016)

- Co-coordinated a three-day beef show for 150 4-H members (per year) consisting of a nutrition and fitting boot camp and show.

**JORDAN M. THOMAS**  
CURRICULUM VITAE

Division of Animal Sciences at the University of Missouri-Columbia  
920 East Campus Drive - Room S132 ASRC, Columbia, Missouri 65211  
Phone: (573) 882-1804 Email: ThomasJor@missouri.edu

**MISSION STATEMENT**

Improving the profitability and sustainability of beef cattle production systems through extension, education, and applied research in reproductive management

**EDUCATION**

**Ph.D. Animal Sciences - Reproductive Physiology**

University of Missouri, Columbia, Missouri

Date of graduation: December 2017

Dissertation title: Enhancement of long-term CIDR-based estrus synchronization protocols to optimize timed artificial insemination results for beef heifers and cows

Doctoral committee: David Patterson (chair), Michael Smith, George Seidel, John Hall, Matthew Lucy, and Scott Pook

GPA: 3.69

**M.S. Animal Sciences - Reproductive Physiology**

University of Missouri, Columbia, Missouri

Date of graduation: December 2013

Thesis title: Split-time artificial insemination: delayed insemination of non-estrous beef cows and heifers to optimize fertility in fixed-time artificial insemination protocols

Thesis committee: David Patterson (chair), Michael Smith, George Seidel, Scott Pook, and Mark Ellersieck

GPA: 3.63

**B.S. Animal Sciences**

University of Missouri, Columbia, Missouri

Date of graduation: December 2011

GPA: 3.87 (*summa cum laude* and departmental honors)

**EMPLOYMENT**

**Assistant Professor and State Cow-Calf Extension Specialist**

*Jan. 2020 – Present*

Extension responsibilities (65% of appointment) include maintaining a nationally recognized education and engagement program in cow-calf production with emphasis on reproduction and management of the beef cow. This effort includes training regional extension livestock specialists, veterinarians and veterinary students, and allied industry personnel; interacting with cattle producers and agribusiness firms; providing support for the National Center for Applied Reproduction and Genomics in Beef Cattle; and developing an applied research program in collaboration with producer herds and University of Missouri Research Centers. Research responsibilities (25% of appointment)



involve efforts related to conducting a nationally recognized research program appropriate to the needs of the beef cattle industry. This includes serving as part of a collaborative team effort aimed at providing tangible benefits to the Missouri beef cattle industry, as well as contributing to growing and maintaining a nationally recognized program in livestock reproduction. Finally, service responsibilities (10% of appointment) involve contributing to the Division's mission of providing service/outreach to the Missouri beef cattle industry and other stakeholder groups as appropriate.

**Assistant Extension Professor – MU Division of Animal Sciences** *Aug. 2018 – Dec. 2019*

Development of a nationally recognized education and engagement program in cow-calf production with emphasis on reproduction and management of the beef cow. This includes training regional extension livestock specialists, veterinarians and veterinary students, and allied industry personnel; interacting with cattle producers and agribusiness firms; providing support for the National Center for Applied Reproduction and Genomics in Beef Cattle, and developing an applied research program in collaboration with producer herds and University of Missouri Research Centers.

**Senior Research Specialist - MU Division of Animal Sciences** *Jan. 2013 – Jul. 2018*

Coordinating research efforts in estrus synchronization and timed artificial insemination of beef cows and heifers; training and supervising undergraduate, graduate, and veterinary students in reproductive management; coordinating DNA sample collection for USDA-NIFA funded project "Identification and management of alleles impairing heifer fertility while optimizing genetic gain in Angus cattle"; support and data analysis for the Show-Me-Select Replacement Heifer Program; and assisting in extension and outreach under the guidance of Dr. David Patterson.

**PEER-REVIEWED JOURNAL PUBLICATIONS (*n* = 18)**

- Ketchum JN, Bonacker RC, Andersen CM, Smith EG, Stoecklein KS, Spinka CM, and **Thomas JM**. Evaluation of later timepoints for split-time artificial insemination when using sex-sorted semen among beef heifers following the 14-d CIDR®-PG protocol. *Animal Reproduction Science* 2021;224:106649.  
<https://doi.org/10.1016/j.anireprosci.2020.106649>.
- Bonacker RC, Gray KR, Breiner CA, Anderson JM, Patterson DJ, Spinka CM, and **Thomas JM**. Comparison of the 7 & 7 Synch protocol and the 7-day CO-Synch + CIDR protocol among recipient beef cows in an embryo transfer program. *Theriogenology* 2020;158:490–6. <https://doi.org/10.1016/j.theriogenology.2020.09.033>.
- Bonacker RC, Stoecklein KS, Locke JWC, Ketchum JN, Knickmeyer ER, Spinka CM, and **Thomas JM**. Treatment with prostaglandin F2 $\alpha$  and an intravaginal progesterone insert promotes follicular maturity in advance of gonadotropin-releasing hormone among postpartum beef cows. *Theriogenology* 2020;157:350–9.  
<https://doi.org/10.1016/j.theriogenology.2020.08.018>.
- Locke JWC, **Thomas JM**, Knickmeyer ER, Ellersieck MR, Yelich JV, Pooch SE, Smith MF, and Patterson DJ. Comparison of long-term progestin-based protocols to synchronize estrus prior to natural service or fixed-time artificial insemination in *Bos indicus*-influenced beef heifers. *Animal Reproduction Science* 2020;218:106475.  
<https://doi.org/10.1016/j.anireprosci.2020.106475>.