

# Milton Geiger

University of Wyoming Extension/School of Energy Resources  
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## PROFESSIONAL EXPERIENCE

### Academic Professional Experience

- Assistant Extension Educator/Energy Extension Coordinator* July 2014-Present  
University of Wyoming Extension/School of Energy Resources Laramie, WY
- Extended-term and promotion track
  - 100% Extension appointment with split funding arrangement through the School of Energy Resources
  - Based in Department of Agricultural and Applied Economics
  - Supervised in UW Administration
  - Focus: Engage Wyoming communities, businesses, agricultural producers, and households in the areas of energy conservation, efficiency, and renewable energy
- Associate Extension Educator/Energy Extension Coordinator* September 2009-June 2014  
University of Wyoming Extension/School of Energy Resources Laramie, WY
- Three-year term appointment, renewed in 2012
  - Based in UW Extension Administration
- Graduate Research and Teaching Assistant* August 2007-August 2009  
University of Wyoming Research/Teaching Assistantship Laramie, WY

### Other Professional Experience

- Ranch hand* Summer 2007 and 2008  
Taylor Ranch, Inc. Busby, MT
- Rural Energy Coordinator/Co-op Development Specialist* May 2005-June 2007  
USDA Rural Development Sheridan, WY
- Led a food and energy system technical and financial assistance program
- Loan Specialist* January 2004-May 2005  
USDA Rural Development Casper and Sheridan, WY
- Approved and review loan and grant applications for housing and business interests
- AmeriCorps/Student Conservation Association Volunteer* July 2003-November 2003  
National Park Service Gatlinburg, TN
- Aided with native brook trout restoration project as part of fisheries team
- Laborer* December 2000-January 2001  
Michigan Sugar Company Croswell, MI

## EDUCATION

### Degrees

*M.S. Agricultural and Applied Economics* 2009

*M.A. Environment and Natural Resources (Dual degree)* 2009

University of Wyoming – Laramie, WY

- Major advisors: Roger Coupal and Don McLeod

*B.A. Environmental Economics* 2003

Colgate University – Hamilton, NY

- Magna cum laude and Distinction in Liberal Arts Core Curriculum

### Certifications

*LEED Green Associate #10691797* – Green Building Certification Institute: Expires 2016

*Certified Energy Manager #20933* – Association of Energy Engineers: Expires 2016

*Renewable Energy Professional #119* – Association of Energy Engineers: Expires 2015

*Certified in the Use of RETScreen #2* – Association of Energy Engineers: Expires 2014

*Accredited Installer* – International Ground Source Heat Pump Association: Expired 2013

*Competent Toastmaster (CTM)* – Toastmasters International: Indefinite 2007

### Additional Coursework for Credit

*Survey of Public Administration, POLS 5000* 2014

University of Wyoming, 3 credit

*Forest Management, RNEW 2100* 2010

University of Wyoming, 3 credits

### Additional Non-credit Coursework

*Executive Energy Leadership Institute* 2012

National Renewable Energy Lab

- Highly selective ongoing program for applied energy professionals

## SELECTED HONORS AND AWARDS

*Epsilon Sigma Young Professional* 2014

*Epsilon Sigma Phi Innovative Program* 2013

- Exploring Energy and Efficiency Alternatives curriculum

*University of Wyoming Outstanding Master's Thesis* 2010

- Recognizes best Master's thesis completed across all disciplines

*Western Agricultural Economics Association Graduate Travel Award* 2009

- Competitive grant supporting research and travel to WAEA annual meeting

*School of Energy Resources Graduate Fellowship* 2007- 2009

- Two-year graduate funding award

- Haub School of Environment & Natural Resources Plummer Scholarship* 2007-2009
- Five semester funding award for students studying environmental issues
- Andrew & Connie Vanvig Graduate Fellowship* 2008
- Recognizes most outstanding Department of Agricultural and Applied Economics graduate student
- USDA Rural Development Certificate of Merit* 2005 & 2006
- Cash award for the development of a website and outreach materials related to renewable energy and value-added agriculture
- Colgate University Campus Life Award* 2003
- Organizer of inaugural Green Summit
- Alumni Memorial Scholar* 1999-2003
- Offered to top 5% of incoming freshman class

## SELECTED PUBLICATIONS

### Refereed

- Foulke, T, Geiger M., Hess, B. An Analysis of On-Farm Feed and Fuel from Dryland Camelina. *Journal of the American Society of Farm Managers and Rural Appraisers*. 75:1 p 42-56. 2012.
- Geiger, Milton, R. Coupal, and D. McLeod. Potential impacts of federal regulation of greenhouse gas emissions on Wyoming's energy-derived tax revenue. *Rocky Mountain Geology* 45:2 p 181-191. 2010.

### Peer Reviewed/Evaluated

- Geiger, M. Energy extension is central to sustainability. *Rural Connections* 8:2 p 33-39. 2014
- Foulke, T, M. Geiger, B. Hess. Is Biodiesel from Camelina Right for You?. *University of Wyoming Extension Bulletin*. B-1249. 2013
- Geiger, M. A few tips for boosting the energy efficiency of your greenhouse. *University of Wyoming Barnyards and Backyards*. Summer 2013.
- Rashford, Benjamin S., N Macsalka, and M. Geiger. Renewable Energy Investment Analysis: What is the Payback? *University of Wyoming Extension Bulletin*. B-1235. 2013
- Geiger, M. Navigating through the Fog: An update of incentives for energy efficiency and renewable energy. *Barnyards and Backyards*. Winter 2013.
- Hamlen, S and Geiger, M (eds). Exploring Energy Efficiency & Alternatives. *Montana State University MontGuide*. 2012.
- Jackle, A., M. Geiger, C. McDonough, and J Lovato J ed. Commercial Wind Energy Development in Wyoming: A Guide for Landowners, Second Edition. *University of Wyoming Cooperative Extension Bulletin*. B-1226. 2011.
- Geiger, M and T Russell. Heating and Cooling with Renewable Energy: An Introduction to Geothermal Heat Pumps. *University of Wyoming Cooperative Extension Bulletin*. MP-125. 2011.
- Geiger, M. Solar Electric: Making Wyoming's sunny skies work for you. *University of Wyoming Barnyards and Backyards*. Summer 2011.

- Geiger, M. Electric Transmission Line Payments on Public Lands in Wyoming. *University of Wyoming Extension Bulletin*. B-1214. 2011
- Geiger, M. Solar thermal: A cost-effective renewable energy. *University of Wyoming Barnyards and Backyards*. Fall 2010.
- Rashford, Benjamin S., N Macsalka, and M. Geiger. The Effect of Altitude on Small Wind Turbine Power Production. *University of Wyoming Extension Bulletin*. B-1217. 2010
- Geiger, M. Geothermal Heat Pumps: A better way to heat and cool your home. *University of Wyoming Barnyards and Backyards*. Spring 2010.

#### Thesis

- Geiger, M. *Federal Greenhouse Gas Regulation and Wyoming's Energy Derived Tax Revenue*. M.S. Thesis in Department of Agricultural and Applied Economics: August, 2009.

#### Educational Videos

- Geiger, M., D. Keto, and A. Garrelts. Our Built Environment – Green Buildings. *Exploring the Nature of Wyoming*. 2014.
- Geiger, M., D. Keto, and A. Garrelts. Wyoming Champion Trees. *Exploring the Nature of Wyoming*. 2014.
- Geiger, M., D. Keto, and A. Garrelts. Airmail & Airway Beacons in Wyoming. *Exploring the Nature of Wyoming*. 2014.
- Geiger, M., D. Keto, and A. Garrelts. Solar-Thermal Energy Opportunities in Wyoming. *Exploring the Nature of Wyoming*. 2014.
- Geiger, M., D. Keto, and A. Garrelts. Natural Gas Powered Vehicles. *Exploring the Nature of Wyoming*. 2013.
- Geiger, M., D. Keto, and A. Garrelts. Sheridan Research and Extension Center. *Exploring the Nature of Wyoming*. 2013.
- Geiger, M., D. Keto, and A. Garrelts. State Wildlife Management Areas. *Exploring the Nature of Wyoming*. 2013.
- Geiger, M., D. Keto, and A. Garrelts. Splash Dams. *Exploring the Nature of Wyoming*. 2013.
- Geiger, M., D. Keto, and A. Garrelts. Small Hydropower Systems. *Exploring the Nature of Wyoming*. 2013.
- Geiger, M., D. Keto, and A. Garrelts. Wyoming's Solar Resource. *Exploring the Nature of Wyoming*. 2012.
- Geiger, M., D. Keto, and A. Garrelts. Solar Stock Watering Systems. *Exploring the Nature of Wyoming*. 2012.
- Geiger, M. and A. Garrelts. Flooding. *Exploring the Nature of Wyoming*. 2011.
- Geiger, M. and A. Garrelts. Saratoga Hot Springs. *Exploring the Nature of Wyoming*. 2011.
- Geiger, M. and A. Garrelts. Niobrara Oil Shale. *Exploring the Nature of Wyoming*. 2011.
- Geiger, M. and J. Thompson. Renewable Energy, Solar PV & Net Metering. *Barnyards & Backyards*. 2011.

Geiger, M. and J. Thompson. Renewable Energy, Solar PV & Net Metering. *Barnyards & Backyards*. 2011.

#### Active Websites

Geiger, M. and S. Hamlen. *Exploring Energy Efficiency & Alternatives*. [www.e3a4u.info](http://www.e3a4u.info). 2013

Geiger, M. and A. Tanaka. *Wyoming Renewables*. <http://renewables.uwyo.edu>. 2011.

#### Inactive Websites

Geiger, M. *USDA Rural Development – Wyoming Intranet*. 2004.

### **SELECTED PRESENTATIONS**

#### National/Regional

Geiger, M. Engaging Rural Electric Associations in Energy Extension Programs. Western Extension Leadership Development VII. Maui, HI: June 5, 2014.

Geiger, M. *Exploring Energy Efficiency and Alternatives Curriculum*. The Power of Extension. Washington, D.C.: May 7, 2014.

Geiger, M. and S. Hamlen. *E<sup>3</sup>A: Exploring Energy Efficiency & Alternatives: Three day training*. Fairbanks, AK. April 14-16, 2014.

Geiger, M. and S. Hamlen. *E<sup>3</sup>A: Exploring Energy Efficiency & Alternatives: A curriculum to engage Extension field faculty in energy education*. National Extension Sustainability Summit. Park City, UT: October 2, 2013.

Geiger, M and S. Hamlen. *E<sup>3</sup>A: Exploring Energy Efficiency & Alternatives*. University of Nebraska Bioenergy Webinar: July 26, 2013.

Hamlen, S. and Geiger, M. *E<sup>3</sup>A: Exploring Energy Efficiency & Alternatives*. Energy Extension Summit: Fort Collins, CO: April 30, 2013

Geiger M. and S. Hamlen. *Exploring Energy Efficiency & Alternatives*. Western Rural Development Council: Our Energy Future Forum. Salt Lake City, UT: September 25, 2012.

Hamlen, S. Geiger, M. *E3A – An Introduction to Renewables & the User Guide Resources: Two-day training*. Bozeman, MT: January 30-31, 2013.

Geiger, M. *Characteristics of a Viable Small Hydropower Project*. Four States Irrigation Council. Fort Collins, CO: January, 13 2012.

Geiger M. *Clean Energy: Strengthening rural communities from both sides of the meter*. Western Rural Summit. Las Vegas, NV: April 20, 2010.

Geiger M. *Wind Energy: Options for landowners*. Montana Farm Bureau Young Ag Leaders Conference. Helena, MT: October 3, 2009.

Geiger M., R. Coupal, and D. McLeod. *Federal Greenhouse Gas Regulation and Wyoming's Energy Derived Tax Revenue*. Western Agricultural Economics Association Annual Meeting. Lihue, HI: June 25, 2009.

Geiger M., R. Coupal, and D. McLeod. *Greenhouse Gas Regulation and Wyoming's Energy Economy: Impacts on the Public Sector*. PowerGen. Orlando, FL: December 3, 2008. (Poster)

## Statewide

- Geiger M. *Agriculture and Energy – A consuming producer*. Annie’s Project. Laramie, WY: November 11, 2014.
- Geiger M. *Solar Gardens – Can they grow in Wyoming*. US Green Building Council: WY Engage Biennial Meeting. Jackson, WY: October 17, 2014.
- Geiger, M. *Renewable Energy for Your Farm and Ranch*. Wind River Ag Summit. Fort Washakie, WY: September 18, 2014.
- Geiger, M. *Agriculture and Energy: Wind and hydropower*. Wyoming Business Council Ag LEAD. Rock Springs, WY: September 18, 2014.
- Geiger, M. *Energy and Agriculture: A pyramid for action*. Living and Working the Land. Sheridan, WY: September 3, 2014.
- Geiger, M. *Overview of UWE and SER Activities*. Wyoming Infrastructure Authority Local Forum. Sheridan, WY: June 24, 2014.
- Geiger, M and M. Smith. *Heating and cooling with renewable energy*. Washakie County Conservation District Energy forum. Worland, WY: April 5, 2014.
- Geiger, M. *Federal Small Hydropower Regulations*. Webinar. March 11, 2014.
- Russell, T. and M. Geiger. *Energy Efficiency and Alternatives for Homes and Beyond*. Fremont County Farm and Ranch Days. Riverton, WY: February 13, 2014.
- Geiger, M. *Harvesting your own energy*. WESTI Ag Days. Worland, WY: February 4, 2014.
- Geiger, M. *Economic considerations of irrigation motors, pumps, and system design*. High West Energy Irrigation Energy Workshop. Pine Bluffs, WY: January 20, 2014.
- Geiger M. and A. Garrelts. *Agriculture and Energy – A consuming producer?!?*. Annie’s Project. Lusk, WY: January 21, 2014.
- Budowle, R. and M. Geiger. *Conservation and Efficiency Revolving Fund*. University of Wyoming Forum on Sustainable Business. Laramie, WY: October 9, 2013.
- Geiger M. *Solar-Powered Livestock Water Pumping: Technical and Economic Feasibility*. Powell Research and Extension Center Field Day. Powell, WY: July 19, 2013.
- Geiger M. *Here Comes the Sun: Solar electric and thermal opportunities*. US Green Building Council-Wyoming. Webinar and live. Laramie, WY: July 17, 2013.
- Geiger M. *Solar-Powered Livestock Water Pumping: Technical and Economic Feasibility*. Sheridan Research and Extension Center Field Day. Sheridan, WY: June 15, 2013.
- Geiger M and S. Kane. *Harnessing Energy Efficiency and Renewable Energy for Business Profitability*. Gro-Biz. Cody, WY: February 21, 2013.
- Geiger M. *Harvesting your own energy*. Laramie Conservation Expo. Laramie, WY: February 13, 2013.
- Geiger, M. *Micro and small hydropower for the home, farm, or ranch: A brief overview*. WESTI Ag Days. Worland, WY: February 6, 2013.
- Geiger, M. *Wyoming’s Energy – Placing our resources in context*. Sweetwater County Library Series. Rock Springs, WY: December 6, 2012.
- Geiger, M. *Integrating Renewable Energy and Efficiency into the SE WY Beef Cattle Operation*. Southeast Wyoming Beef Production Convention. Torrington, WY: November 20, 2012.

- Geiger, M and S. Bilo. *Solar Electricity for Home, Farm & Ranch: Using the Sun To Produce Electricity*. E3A Webinar. November 13, 2012.
- Geiger, M. *The Interaction of Agriculture & Energy in Wyoming*. Wyoming Business Council Ag LEAD. Green River, WY: September 20, 2012.
- Geiger, M. *Understanding Incentives: An overview of federal, state, and utility financial incentives for renewable energy and energy efficiency*. E3A Webinar. July 17, 2012.
- Geiger, M. and J. Jacobsen. *Harvesting your own energy*. LocalFest. Pinedale, WY: May 24, 2012.
- Geiger, M. *Micro-hydropower for the home, farm, or ranch: A brief overview*. E3A Webinar. May 6, 2012.
- Geiger, M and H. Hill. *Renewable Energy for the Farm, Ranch and Home*. Afton, WY: April 24, 2012.
- Geiger, M. *Solar Heating & Cooling for High Tunnels – Technical and Economic Considerations*. Wyoming Farmer's Market Association. Laramie, WY: April 28, 2012.
- Geiger, M. *Solar Stock Water Pumping: Technical and Economic Feasibility*. Wyoming Association of Conservation Districts. Lander, WY: November 17, 2011.
- Geiger, M. *Renewable Energy for the Farm, Ranch and Home*. Sundance, WY: October 27, 2011
- Geiger, M. *Renewable Energy for the Farm, Ranch and Home*. Wind River Reservation, WY: October 20, 2011
- Geiger, M. *Agriculture and Energy – A consuming producer*. Wyoming Department of Agriculture AgiriFuture. Laramie, WY: October 13, 2011.
- Geiger, M. *Generating Electricity from the Wind and Sun and Solar Powered Livestock Watering Systems*. Soil and Water Conservation Society Agriculture and Energy. Laramie, WY: September 29, 2011.
- Geiger, M. *Opportunities with Micro and Small Hydroelectric Systems*. Soil and Water Conservation Society Agriculture and Energy. Laramie, WY: September 29, 2011.
- Geiger, M. *Energy Efficiency and Renewable Energy Assistance from the University of Wyoming*. Small Business Development Center. Webinar: June 29, 2011.
- Geiger, M. *Wind Energy in Wyoming*. 4-H Showcase Showdown. Laramie, WY: June 28, 2011
- Geiger, M. *Renewable Energy – Options in Wyoming*. Wyoming Energy Institute for Teachers. Laramie, WY: June 27, 2011.
- Geiger, M and C. McDonough. *Understanding Government Influence & Intervention on Wind Energy Development*. Campbell County Energy Exposition. Gillette, WY: June 15, 2011.
- Geiger, M. *Understanding Incentives and Financing for Energy Efficiency and Renewable Energy*. Financing and Selling the Hidden Benefits of Home in the Platte Valley. Torrington, WY: May 12, 2011.
- Geiger, M. *Energy Efficiency and Renewable Energy for Small Ag*. Sheridan Local Foods Expo. Sheridan, WY: April 30, 2011.
- Geiger, M. *Making Your Farm/Ranch More Energy Efficient: Ideas & Incentives*. Wyoming Resource Conservation and Development Energy Conference. Wheatland, WY: April 28, 2011.
- Geiger, M. *Renewable Energy – What, why, and where in Laramie, Wyoming*. Laramie Local Foods Expo. Laramie, WY: April 10, 2011.

- Geiger, M and C. McDonough. *Understanding Government Influence & Intervention on Wind Energy Development*. Wyoming Water & Natural Resource Law Review. Cheyenne, WY: April 8, 2011.
- Geiger M. *Exploring Feasibility – Finding a market, business structure, and incentives*. Small Hydro Symposium. Worland, WY: March 8, 2011.
- Geiger, M and A. Waller. *Renewable Energy for the Farm, Ranch and Home*. Gillette, WY: February 16, 2011.
- Geiger, M and A. Waller. *Renewable Energy for the Farm, Ranch and Home*. Buffalo, WY: February 15, 2011.
- Geiger, M and A. Waller. *Renewable Energy for the Farm, Ranch and Home*. Sheridan, WY: February 15, 2011.
- Geiger, M. *Energy and Irrigation – Exploring Unique Energy Efficiency and Small Hydroelectric Opportunities*. Fremont County Farm and Ranch Days. Riverton, WY: February 8, 2011.
- Geiger, M. *Alternative Energy Resources & Grants*. Fremont County Farm and Ranch Days. Riverton, WY: February 8, 2011.
- Geiger, M. *Energy and Irrigation Districts – Exploring Unique Energy Efficiency and Small Hydroelectric Opportunities*. WESTI Ag Days. Worland, WY: February 1, 2011.
- Geiger, M. *Alternative Energy for the Farm, Ranch and Home – Investigating Cost Effective Projects*. WESTI Ag Days. Worland, WY: February 1, 2011.
- Geiger, M. *Renewable Energy – What, why, and where in Laramie, Wyoming*. UW Retirees. Laramie, WY: November 17, 2010.
- Geiger, M., R. Coupal, and D. McLeod. *Federal Limits on Greenhouse Gas Emissions – A poorer Wyoming?*. Laramie Lyceum. Laramie, WY: October 12, 2010.
- Geiger, M. *Weatherizing and Renewable Energy: “Looking before you leap”*. AARP Operation Energy Save. Cheyenne, WY: September 10, 2010.
- Geiger, M. *Renewable Energy Opportunities: Options in Wyoming*. Laramie County Fair. Cheyenne, WY: August 12, 2010.
- Geiger, M. *Energy Efficiency in the Home: Feeling good about saving some green*. Laramie County Fair. Cheyenne, WY: August 12, 2010.
- Geiger M. *Remote Solar & Wind Electric Stock Water Pumping: Technical Overview*. Powell Research and Extension Center Field Day. Powell, WY: July 8, 2010.
- Geiger M. *Addressing Energy Cost & Uncertainty: Opportunities in Renewable Energy & Energy Efficiency*. Goshen Conservation District. Torrington, WY: June 22, 2010.
- Geiger M. *Remote Solar & Wind Electric Stock Water Pumping: Technical Overview*. Goshen Conservation District. Torrington, WY: June 22, 2010.
- Geiger M. *Renewable Energy Opportunities: Options in Wyoming*. Lusk, WY: May 14, 2010.
- Geiger M. *Distributed Energy: Small-scale energy independence*. Voices of the Valley. Saratoga, WY: April 28, 2010.
- Geiger M. *Renewable Energy Opportunities: Options in Wyoming*. Douglas, WY: April 24, 2010.
- Geiger M. *Renewable Energy: Viable Approaches for Wyoming Communities*. Wyoming Sustainability Summit. Laramie, WY: April 12, 2010.



- Geiger, M and M. Northam. *Wyoming's Energy Resources: Seizing Opportunities*. UW Retirees. Laramie, WY: March 17, 2010.
- Geiger M. *Addressing Energy Cost & Uncertainty: Opportunities in Renewable Energy & Energy Efficiency in Sublette County*. Pinedale, WY: March 8, 2010.
- Geiger M. *Biodiesel: A Market Update*. Fremont County Farm & Ranch Days. Riverton, WY: February 12, 2010.
- Ehmke, C. and M Geiger. *Renewable Energy & Energy Efficiency Incentives*. Fremont County Farm & Ranch Days. Riverton, WY: February 12, 2010.
- Geiger M. *Renewable Energy: On-Farm Opportunities*. Riverton, WY: December 7, 2009.
- Geiger, M. *The Interaction of Energy and Agriculture in Wyoming*. Wyoming Business Council Ag LEAD. Green River, WY: December 14, 2009.
- Geiger, M. *Cooperative Extension Service and Energy: An Expanded Role*. Roping the Wind. Casper, WY: November 18, 2009.
- Geiger, M. *Energy and Agriculture: Thoughts for Albany County*. Albany County Stock Growers. Laramie, WY: November 10, 2009.
- Geiger, M. *Wind Energy and Wyoming Agriculture*. Wyoming Board of Agriculture. Douglas, WY: October 15, 2009.
- Geiger, M., R. Coupal, and D. McLeod. *Federal Limits on Greenhouse Gas Emissions – Impact on Casper's Economy?*. Casper Chamber of Commerce Quarterly Luncheon. Casper, WY: September 30, 2009.
- Geiger, M and J. Guthmiller. *USDA Rural Development: Overview of Section 9006 and Value Added Producer Grant Programs*. Joint Wyoming and Montana Economic Development Association Meeting. Cody, WY: May 9, 2007.
- Geiger, M. *USDA Rural Development Programs: Opportunities for Agriculture*. Sheridan Chamber of Commerce. Sheridan, WY: May 8, 2007.
- Geiger, M. *USDA Rural Development Programs: Opportunities for Agriculture*. Wyoming Ag Lenders Conference. Worland, WY: May 4, 2007.
- Geiger, M. *USDA Rural Development Programs: Wind Energy Associations*. Slater Wind Association. Wheatland, WY: April 21, 2007.
- Geiger, M. *USDA Rural Development Programs: Wind Energy Associations*. Chugwater Wind Association. Chugwater, WY: April 20, 2007.
- Geiger, M and J Rogers. *Landowner Cooperative Wind Associations*. Laramie, WY: March 22, 2007.
- Geiger, M. *USDA Rural Development Programs: Opportunities for Ag and Energy*. Wyoming Stock Growers and Wool Growers Winter Conference. Casper, WY December 5, 2006.
- Geiger, M. *USDA Rural Development Programs: Bioenergy*. Northeast Wyoming Resource Conservation & Development. Upton, WY: August 2, 2006.
- Geiger, M. *USDA Rural Development Programs: Value-Added Agriculture*. Wyoming Mobile Slaughter Steering Committee. Sheridan, WY: March 7, 2006.
- Geiger, M. *USDA Rural Development Programs: Energy Programs for Rural Electric Cooperatives*. High Plains Power Board of Directors. Riverton, WY: February 24, 2006.

- Geiger, M. *USDA Rural Development Programs: Energy Programs for Wind Energy Assessment*. Wyoming Wind Working Group. Laramie, WY: February 13, 2006.
- Geiger, M. *USDA Rural Development Programs: Solar stock watering systems*. UW College of Engineering Solar Stock Water Conference. Laramie, WY: February 8, 2006.
- Geiger, M. *USDA Rural Development Programs: Value-added Agriculture*. Ag Innovative Marketing Expo. Casper, WY: February 7, 2006.
- Geiger, M. *USDA Rural Development Programs: Wind Energy Applications*. Wyoming Wind Working Group. Wheatland, WY: February 7, 2006.
- Geiger, M. *USDA Rural Development Programs: Overview of Value-Added Producer Grant Program*. Wyoming Business Council. Torrington, WY: February 6, 2006.
- Geiger, M. *USDA Rural Development Programs: Wind Energy Applications*. Wyoming Wind Working Group. Kaycee, WY: February 2, 2006.
- Geiger, M. *USDA Rural Development Programs: Wind Energy Applications*. Wyoming Wind Working Group. Rock Springs, WY: February 1, 2006.
- Geiger, M. *USDA Rural Development Programs: Value-added agriculture*. UW Cooperative Extension Service WESTI Ag Days. Worland, WY: January 31, 2006.
- Geiger, M. *USDA Rural Development Programs: Energy Programs for Rural Electric Cooperatives*. Wyoming Rural Electric Association. Riverton, WY: January 12, 2006.
- Geiger, M. *USDA Rural Development Programs: Value-added agriculture*. USDA Rural Development. Casper, WY: January 3, 2006.
- Geiger, M. *USDA Rural Development Programs: Biodiesel and Ag Diversification*. USDA Rural Development. Riverton, WY: December 6, 2005.
- Geiger, M. *USDA Rural Development Programs: Energy Programs*. Roping the Wind. Cody, WY: September 14, 2004.

#### On-Campus

- Budowle, R. and M. Geiger. *Conservation and Efficiency Revolving Fund*. Sustainability Exchange. Laramie, WY: November 18, 2014.
- Geiger M. *Energy Efficiency 101*. University of Wyoming Foundations of Sustainability (ENR 1300). Laramie, WY: October 15, 2014.
- Geiger M. and R. Budowle. *Conservation and Efficiency Revolving Fund*. University of Wyoming Executive Council. Laramie, WY: January 9, 2014.
- Geiger M. *Sunny Wyoming: Solar Electric and Thermal Opportunities*. Architectural Engineering Institute: Wyoming Chapter. Laramie, WY: November 13, 2013.
- Skrabut S. and M. Geiger. *eXtension.org –Recognizing value*. UWE In-Depth Training. Casper, WY: November 7, 2013.
- Budowle, R. and M. Geiger. *Conservation and Efficiency Revolving Fund*. University of Wyoming Deans and Directors. Laramie, WY: November 5, 2013.
- Geiger M. and R. Budowle. *Conservation and Efficiency Revolving Fund*. University of Wyoming Vice Presidents. Laramie, WY: October 18, 2013.

Geiger M. and R. Budowle. *Conservation and Efficiency Revolving Fund*. University of Wyoming School of Energy Resources. Laramie, WY: July 17, 2013.

Budowle, R. and M. Geiger. *Conservation and Efficiency Revolving Fund*. University of Wyoming College of Business. Laramie, WY: June 21, 2013.

Budowle, R. and M. Geiger. *Conservation and Efficiency Revolving Fund*. University of Wyoming Haub School of Environment and Natural Resources. Laramie, WY: June 20, 2013.

Geiger M. *Energy Extension – What its all about*. University of Wyoming Campus Sustainability Committee. Laramie, WY: February 4, 2013.

Geiger, M and A. Jackle. *Wind Energy: Landowner Development Issues*. University of Wyoming Community Economics. Laramie, WY: February 15, 2012.

Geiger, M. *Wyoming’s Energy – Placing our resources in context*. University of Wyoming ENR: Energy and Environment summer class. Laramie, WY: May 17, 2011.

Geiger, M. *Renewable Energy – Economics vs. Sustainability?*. University of Wyoming ENR 4600/5600. Laramie, WY: April 4, 2011.

Geiger, M. *The Economics of Small Renewable Energy – Understanding Cost and Uncertainty*. Wyoming American Society of Civil Engineers- Wyoming. Laramie, WY: March 29, 2011.

Geiger, M. *An Overview of Renewable Energy: Options in Wyoming*. University of Wyoming GEOG 1020. Laramie, WY: April 4, 2011.

Geiger, M. *Renewable Energy –Resources for Wyoming Educators*. University of Wyoming Extension In-Depth. Laramie, WY: September 10, 2010.

## SELECTED GRANTS AND CONTRACTS

### Funded

*Net-Zero Prototype Houses for Wyoming Homebuilders (2014-2015)*. Co-PI: A Denzer & J Gardzelewski M Geiger (Investigator). UW President’s Office \$250,000 Grant Initiative: \$26,506.

*Sustainable biofuel feedstocks from beetle-killed wood: Bioenergy Alliance Network of the Rockies (BANR) (2013-2018)*. PI: Paustian, K. (Colorado State University) and D. Tinker (UW). USDA National Institute for Food and Agriculture: \$279,573 (\$10,000,000).

*Exploring Small Hydroelectric in Wyoming (2013-2015)*. PI: M. Geiger. Wyoming Business Council – State Energy Office: \$20,000.

*Exploring Small Hydroelectric in Montana (2013-2015)*. PI: M. Geiger. Montana State University Extension: \$10,000

*Enhancing the Exploring Energy Efficiency and Alternatives (E3A) Curriculum (2013-2015)*. PI: M. Geiger. Sponsor: USDA Western Sustainable Agriculture Research Education: \$42,277.

*An Economic/Ecological Analysis of Externalities Associated with Energy Development in Wyoming and the Intermountain West (2012-2013)*. Co-PI: D Aadland and J Tschirhart, M. Geiger (Investigator). University of Wyoming Center for Energy Economics and Public Policy: \$6,000 (\$148,980).

*Energy Audits and Renewable Energy Assistance under the Rural Energy for America Program (2011-2014)*. Co-PIs L. Stewart and M. Geiger. USDA Rural Development Rural Energy for America Program: \$100,000.

*Energy Audits under the Rural Energy for America Program (2011-2014).* Co-PIs S. Stanfill and M. Geiger. USDA Rural Development Rural Energy for America Program: \$60,000.

*Exploring Cost Effective Renewable Energy in Wyoming: Developing Web-based Feasibility Tools (2011-2013).* PI M. Geiger. University of Wyoming Cooperative Extension Service Internal Grant: \$42,000.

*Incorporating enhanced solar energy collection and storage in hoop house design and production (2011-2014).* PI M. Geiger. USDA: Wyoming Specialty Crop Grant Program: \$17,648.

*Economic and Fiscal Impact of a 3,000 megawatt wind energy development in Platte County, Wyoming (2010-2011).* PI D. Taylor, M. Geiger (Investigator). *Pathfinder Wind Energy, LLC*: \$50,000.

*Equipping Extension Educators to Address Producers Needs in Energy Education (2010-2012).* Co-PI S. Hamlen (Montana State University) and M. Geiger. USDA: Western Sustainable Agriculture Research Education: \$99,956.

*Renewable Energy in Wyoming – Education for Individual Action (2008-2010).* PI B Rashford, M. Geiger (Investigator). University of Wyoming Cooperative Extension Service Internal Grant: \$59,000.

*Fish Hatcheries of the Northeastern US: A societal metaphor for the human relationship between our environment, our economic system, and our technology (2003).* PI M. Geiger. Colgate University Alumni Memorial Research Grant: \$859.

*An Examination of the Environmental, Ethical, and Economic Underpinnings of United Nations World Heritage Sights in Australia and New Zealand (2001).* PI M. Geiger. Colgate University Alumni Memorial Research Grant: \$4,141.

Not-funded

*Assessing the Effectiveness of Solar/Wind-Powered Livestock Watering Systems (2014).* PI M Geiger. Wyoming Department of Agriculture. \$19,271.

*Installation of a Geothermal Greenhouse at the Sustainable Agriculture Research and Extension Center (SAREC) in Lingle Wyoming (2014).* PI B Lee. University of Wyoming Office of Research and Economic Development. \$25,000.

*Geothermal Greenhouse for specialty crop production (2013).* Co-PI J. Edwards and M Geiger. Wyoming Department of Agriculture Specilaity Crop Program. \$15,000.

*WyoWindEd – Establishing a Wyoming Wind Applications Center and Wind for Schools Program (2010).* Co-PI M Geiger and J. Naughton. National Renewable Energy Laboraroty Wind for Schools: \$180,000.

**SELECTED SERVICE AND ADMINSTRATIVE ACTIVITIES**

University and Extension

Co-Institutional Leader for eXtension.org – University of Wyoming:	2013-Present
Campus Sustainability Committee – University of Wyoming	2010-Present
Thesis Committee outside member: Drew Pope – University of Wyoming	2014-Present
- Joint Environment and Natural Resource M.A./Juris Doctorate	
Extension Sustainability Summit 2015 Panning Committee	2014-Present

National Energy Extension Summit 2015 Planning Committee	2014-Present
Western Extension Director's Association: Centennial on the Summit	2014
- Invited attendee	
Inaugural Extension Sustainability Summit Planning Committee	2012-2013
Inaugural National Energy Extension Summit Planning Committee	2012-2013
Wyoming Sustainability Summit Planning Committee	2010

### Community Service

United Presbyterian Church LOGOS Table Parent – Laramie, WY	2014-Present
Board Member Big Hollow Food Co-op, Inc. – Laramie, WY	2011-Present
- Vice chair 2012-2013	
- Chair 2013-Present	
Jaycees – Sheridan, WY	2005-2007
- Vice-President Jaycees 2006-2007	
Big Brothers/Big Sisters – Sheridan WY	2005-2007
Firefighter Hamilton Volunteer Fire Department – Hamilton, NY	2000-2003
- Level II structural firefighter	

### **PROFESSIONAL DEVELOPMENT**

Western Extension Leadership Development VII San Diego, Ca and Maui, HI: 2013-2014.  
 Association of Energy Engineers. Certified Energy Manager. Orlando, FL: December 9-13, 2013.  
 Harvesting Clean Energy. Corvallis OR: January 17-19, 2013  
 Association of Energy Engineers. Renewable Energy Professional Training. Atlantic City, NJ: February 5-9, 2012.  
 Association of Energy Engineers. Certified RETScreen User Training. Philadelphia, PA: March 29-31, 2012.  
 Colorado State University Wind Energy Conference. Sterling, CO: February 18, 2010.  
 American Wind Energy Association Small Wind. Detroit, MI: November 4-6, 2009.  
 Rocky Mountain Farmers Union Small Wind Meeting. Cheyenne, WY: September 7, 2006.  
 Intermountain Harvesting Energy Network. Loveland, CO. February 27-29, 2006.  
 Agricultural Outlook Forum: Prospering in Rural America. Washington, DC. February 16-17, 2006.  
 Farm Foundation: Energy from Agriculture. St. Louis, MO. December 14-15, 2005.

### **PROFESSIONAL ASSOCIATIONS**

Association of Energy Engineers  
 United States Green Building Council: Wyoming Chapter  
 Epsilon Sigma Phi  
 - Wyoming chapter treasurer 2012-Present  
 Association of Natural Resource Extension Professionals