David G. Ripplinger

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Education

PhD, North Dakota State University, September 2012.

Major: Transportation and Logistics

Supporting Areas of Emphasis: Economics and Deregulation

MS, Iowa State University, May 2003. Major: Agricultural Economics

BS, North Dakota State University, May 2001.

Major: Agricultural Economics

Professional Positions

Academic

Assistant Professor/Bioenergy and Bioproducts Economics Specialist, North Dakota State University. (2012 - Present).

Research Scientist, Department of Agribusiness & Applied Economics, North Dakota State University. (2011 - 2012).

Associate Research Fellow, Upper Great Plains Transportation Institute, North Dakota State University. (2004 - 2010).

Graduate Research Assistant, Iowa State University. (2001 - 2004).

Government

Undergraduate Research Assistant, Economic Research Service, United States Department of Agriculture. (2000).

Professional

Merchant, Cargill. (2003).

Agricultural Fellow, Office of U.S. Senator Charles Grassley. (2002).

Professional Memberships

Association of Natural Resource Extension Professionals. (2015 - Present).

National Association of Agricultural County Agents. (2015 - Present).

National Extension Energy Initiative. (2015 - Present).

Western Education and Research Activities Committee on Agribusiness. (2015 - Present).

Western Agricultural Economics Association. (2014 - Present).

American Agricultural Economics Association. (2013 - Present).

Midwest Bioenergy Outreach Group. (2013 - Present).

Transportation Research Board. (2005 - Present).

Transportation Research Forum. (2005 - Present).

TEACHING

Teaching Experience

North Dakota State University

AGEC 242, Intro/Agricultural Management.

AGEC 344, Agricultural Price Analysis.

AGEC 793, Individual Study/Tutorial.

ECS 899, Doctoral Dissertation.

Directed Student Learning

Dissertation Committee Chair

Advised: Md. Rezwanul Parvez, PhD, Environmental & Conserva Sci

Dissertation Committee Member

Advised: Dulan Samarappuli, PhD

Advised: Nurun Nahar, PhD, Agricultural & Biosystems Eng, (Completed)

Advised: Juan Vargas-Ramirez, PhD, Agricultural & Biosystems Eng

Master's Thesis Committee Chair

Advised: Nick Dolan

Advised: Asanka Wijesinghe, MS, Agribusiness & Applied Economi

Advised: Levi Helmuth, MS, Agribusiness & Applied Economi

Advised: Ryan Daly, MS, Agribusiness & Applied Economi, (Completed)

Master's Thesis Committee Member

Advised: Tyler Peterson, MS, Mechanical Engineering

Postdoc Supervision

Advised: Prithviraj Lakkakula

Advised: Aaron De Laporte

Advised: Juan Vargas-Ramirez

Advised: Kassu Wamisho

Undergraduate Research Advisor

Advised: Nick Dolan, Baccalaureate

RESEARCH AND CREATIVE ACTIVITIES

Published Intellectual Contributions

Publications: 15 journal articles, 0 abstracts, 0 proceedings, 0 books, 1 book chapters, 2 extension publications, 0 instructor's manuals and textbooks, 0 intellectual properties, 29 others.

Journal Articles

Published

- Kassu, W., Ripplinger, D. (2017). "The value of switching production options in a flexible biorefinery. Agricultural and Resource Economics Review, 46(1), 146-173.
- 2. Berti, M., Johnson, B., Ripplinger, D., Gesch, R., Aponte, A. (2017). Environmental impact assessment of double-and relay-cropping with winter camelina in the northern Great Plains, USA. *Agricultural Systems*, *156*, 1-12.
- 3. Subhashree, S. N., Igathinathane, C., Bora, G., Ripplinger, D., Backer, L. (2017). Optimized location of biomass bales stack for efficient logistics. *Biomass and Bioenergy*, *96*, 130–141.
- 4. Nahar, N., Ripplinger, D., Pryor, S. (2017). Process yield and economic trade-offs for enzymatic hydrolysis of alkaline pretreated corn stover. *Biomass and Bioenergy*, *99*, 97-105.
- 5. Kassu, W., Ripplinger, D., De Laporte, A. (2017). Wamisho Hossiso, Kassu, Aaron Laporte, and David Ripplinger. "The Effects of Contract Mechanism Design and Risk Preferences on Biomass Supply for Ethanol Production. *Agribusiness*.
- 6. Dharmadhikari, N., Farahmand, K., Lee, E., Vachal, K., Ripplinger, D. Yield Forecasting to Sustain the Agricultural Transportation UnderStochastic

Environment. Submitted: 2017. Accepted: 2017.

- 7. Whistance, J., Ripplinger, D., Thompson, W. (2016). Biofuel-Related Price Transmission Using Renewable Identification Number Prices to Signal Mandate Regime. *Energy Economics*, *55*, 19-29.
- 8. Miljkovic, D., Ripplinger, D., Shaik, S. (2016). Impact of biofuel policies on the use of land and energy in US agriculture. *Journal of Policy Modeling, 38*(6), 1089–1098. Refereed: Yes
- 9. Kassu, W., Ripplinger, D. (2016). Investment, Irreversibility, And Uncertainty In Energy Beet–Based Ethanol. *Journal of Agricultural and Applied Economics*, 48(4), 403-429.
- Bitzan, J., Ripplinger, D. (2016). Public Transit and Alternative Fuels The Costs Associated with Using Biodiesel and CNG in Comparison to Diesel for U.S. Public Transit Systems. *Transportation Part A: Policy and Practice*, 94, 17-30.
- 11. Lakkakula, P., Schmitz, A., Ripplinger, D. (2016). US Sweetener Demand Analysis: A QUAIDS Model Application. *41*(3), 533-548. Submitted: December 2015. Accepted: April 2016.
- Mattson, J., Ripplinger, D. (2012). Marginal Cost Pricing and Subsidy of Small Urban Transit. Transportation Research Record: Journal of the Transportation Research Board(2274), 77-83. Submitted: July 25, 2011. Accepted: February 13, 2012. Refereed: Yes
- 13. Ripplinger, D. (2010). Classifying Rural and Small Urban Transit Agencies. *Transportation Research Record*, 2145, 100-107.
- Mattson, J., Peterson, D., Ripplinger, D., Thoms, W., Hough, J. (2010). An
 Assessment of Demand for Rural Intercity Transportation Services in a
 Changing Environment. *Transportation Research Record: Journal of the Transportation Research Board*(2145), 108–114. Submitted: July 31, 2009.
 Accepted: February 25, 2010. Refereed: Yes

15. Ripplinger, D., Hayes, D., Goggi, S., Lamkey, K. (2009). Insuring against Losses from Transgenic Contamination: The Case of Pharmaceutical Maize. *American Journal of Agricultural Economics*, *91*(2), 322-334.

Non-Refereed Publications

Book Chapter

 Maung, T. (2013). "Economics of Biomass Feedstocks and Biofuels. Biofuel Crop Sustainability.

Extension Publication

- 1. Ripplinger, D., Wick, A., Casey, F. (2016). Economics of Soil Salinity. *NDSU Soil Health, Fact Sheet*. NDSU Ext.
- 2. Wick, A., Casey, F., Ripplinger, D. (2016). Soil Health and Agriculture Research Extension (SHARE) Farm. *NDSU Soil Health, Fact Sheet*. NDSU Ext.

Research Report

- 1. Wick, A., Casey, F., Ripplinger, D., Gasch, C. (2017). Research and extension efforts at the soil health and agriculture research extension (SHARE) farm. Soybean Council Mid-Year Report. Refereed: No
- 2. Wick, A., Casey, F., Ripplinger, D. (2016). Research and Extension Activities at the Soil Health and Agriculture Research Extension (SHARE) Farm. *Annual Report/Technical Report to the ND Soybean Council.*
- 3. Wick, A., Casey, F., Ripplinger, D. (2016). Research and Extension Activities at the Soil Health and Agriculture Research Extension (SHARE) Farm. *Annual Report/Technical Report to the ND Corn Council*.
- 4. Wick, A., Casey, F., Ripplinger, D. (2016). SHARE Farm Mid-Year Report. *North Dakota Corn Council*. North Dakota Corn Council.

- Wick, A., Casey, F., Ripplinger, D. (2015). Research and Extension Activities at the Soil Health and Agriculture Research Extension (SHARE) Farm: Tile Drainage in the Red River Valley, Quantification of Salt Removal from Leaching and Tile Drainage in Fargo Clay Soils. ND Soybean Council.
- 6. Wick, A., Casey, F., Ripplinger, D. (2015). Research and Extension Activities at the Soil Health and Agriculture Research Extension (SHARE) Farm: Tile Drainage in the Red River Valley, Quantification of Salt Removal from Leaching and Tile Drainage in Fargo Clay Soils.. ND Soybean Council.
- 7. Wick, A., Casey, F., Ripplinger, D. (2015). Research and Extension Activities at the Soil Health and Agriculture Research Extension (SHARE) Farm: Tile Drainage in the Red River Valley, Quantification of Salt Removal from Leaching and Tile Drainage in Fargo Clay Soils.. Annual Report/Technical Report to the ND Corn Council..
- 8. Wick, A., Casey, F., Ripplinger, D. (2015). Research and Extension Activities at the Soil Health and Agriculture Research Extension (SHARE) Farm: Tile Drainage in the Red River Valley, Quantification of Salt Removal from Leaching and Tile Drainage in Fargo Clay Soils.. ND Corn Council.
- 9. Ripplinger, D., Saxowsky, D., Bangsund, D. (2014). *Economic Feasibility of Irrigation Along the McClusky Canal in North Dakota: Farm-level returns* (734th ed.). Department Paper.
- Bangsund, D., Saxowsky, D., Ripplinger, D. (2014). Regional Economic Effects of Irrigation Along the McClusky Canal in North Dakota (735th ed.). Departmental Paper 735.
- 11. Wick, A., Casey, F., Ripplinger, D. (2014). Research and Extension Efforts at the SHARE Farm. ND Soybean Council.

Presentations Given

International

Vargas-Ramrirez, J. (Author & Presenter), Ripplinger, D., Wiesenborn, D., Pryor, S., ASABE 2016 Annual International Meeting, "Cradle-to-gate carbon footprint of industrial-beet sugars

for nonfood fermentations," ASABE, Orlando, FL, Conference, (Oral Presentation). (July 17, 2016 - July 20, 2016).

National

- Lin, Z. (Presenter), Schatz, B., Ripplinger, D., Teboh, J., Ostlie, M., USDA-NIFA 2016 Project Director Annual Meeting, "Soil health and water quality impacts of growing energy beets for advanced biofuel production in North-Central United States," Washington, DC, Conference, (Oral Presentation). (October 12, 2016 October 13, 2016).
- Lakkakula, P., Ripplinger, D., Southern Agricultural Economics Association Meetings, "US Sweetener Price Forecasting: Implications for Sweetener Market," San Antonio, Conference, (Oral Presentation). (February 2, 2016 February 5, 2016).
- Parvez, R. (Author & Presenter), Madurapperuma, B., Ripplinger, D., American Agricultural Economics Association, ""Modeling Land Use and Land Cover Relationships Change Analysis: An Integrated Framework," San Francisco, California, (Paper). (July 28, 2015).
- Ripplinger, D., "The Cost Structure of U.S. Public Transportation: Considering the Impacts of Climate Change," Transportation Research Forum, Atlanta, Georgia, (Paper). (March 12, 2015).
- Pryor, S. (Author & Presenter), Nahar, N., Cannayen, I., Ripplinger, D., Rijal, B., Bee, J., S1041 2014 Annual Meeting S1041: The Science and Engineering for a Biobased Industry and Economy, "Synergies of Biomass Densification and Biochemical Processing," New Orleans, LA, (Poster). (August 3, 2014 August 5, 2014).
- Ripplinger, D. (Author & Presenter), Bitzan, J., ""Public Transit and Alternative Fuels Cost Minimizing?," Western Economics Association International, Denver, Colorado, (Paper). (June 29, 2014).
- Ripplinger, D., International Biomass Conference, "Sweet Developments: Commercialization of Energy Beets in North Dakot," Orlando, Florida, (Oral Presentation). (March 26, 2014).
- Ripplinger, D., "The Cost of Alternative Biomass Collection Systems," Transportation Research Forum, San Jose, California, (Paper). (March 14, 2014).
- Ripplinger, D., "The Competitive Advantage of Industrial Sugar," Transportation Research Forum, Annapolis, Maryland, (Paper). (March 22, 2012).
- Ripplinger, D., "Economics of Sourcing Cellulosic Feedstock for Energy Production," Transportation Research Forum, Tamp, Florida, (Paper). (March 15, 2012).

Intellectual Contributions in Submission

Refereed Journal Articles

Vargas-Ramirez, J., Ripplinger, D., Wiesenborn, D., Pryor, S. Carbon footprint of industrial-beet sugars stored as raw thick juice for use as a fermentation feedstock. *Journal of Cleaner Production*. Submitted: January 2017.

Nahar, N., Ripplinger, D., Pryor, S. Process Yield and Economic Trade-offs for Enzymatic Hydrolysis of Alkaline Pretreated Corn Stover. *Biomass and Bioenergy*. Submitted: November 2016.

SERVICE & OUTREACH

Department Service

Committee Chair

Committee Chair, Graduate Policy Committee. (2016 - Present).

Committee Member

Committee Member, Graduate Policy Committee. (2014 - Present).

Committee Member, Extension and Outreach Committee. (2015 - 2017).

University Service

Graduate Program Leadership Committee. (2016 - Present).

Co-chair

Co-chair, Bio Industry Summit. (2014 - Present).

Committee Chair

Chair, Bioenergy and Products Innovation Center. (2015 - Present).

Faculty Advisor

Faculty Advisor, FarmHouse Fraternity. (2014 - Present).

Faculty Advisor, Collegiate Farm Bureau. (2014 - 2015).

Public Service

Guest Speaker

Guest Speaker, German Energy Delegation. (2015).

Guest Speaker, Wisconsin Extension Leadership Delegation. (2015).

Guest Speaker, Finnish Energy Delegation. (2014).

Guest Speaker, Kazakh Delegation. (2014).

Guest Speaker, Moldovan Energy Delegation. (2013).

Guest Speaker, Norwegian Energy Delegation. (2013).

Program Organizer

Program Organizer, Brazilian Energy Delegation. (2014).

AWARDS AND HONORS

Scholarship/Research

Best Dissertation Award, Transportation and Public Utilities Group, (Awarded). (2013).

Teaching/Extension

Program Excellence, North Dakota State University Extension, (Awarded). (2017). Brief Description: Design Your Succession Plan

Sustainable Agriculture Research and Education Fellow, National Association of County Agricultural Agents, (Awarded). (2016).