Christopher T. Bastian

Bio sketch: I received my B.S. in Farm and Ranch Management and M.S. in Agricultural Economics from the University of Wyoming. I received my Ph.D. in Agricultural and Resource Economics from Colorado State University. Before receiving my Ph.D. and becoming a faculty member at UW in the fall of 2005, I served as the Agricultural Marketing Specialist from 1993 to 2005. I delivered extension education to agricultural producers in Wyoming and the West related to commodity marketing, integrated resource management, value-added agriculture and risk management. I have received the Outstanding Extension Award from the American Agricultural Economics Association twice (1997 & 2007) and three regional awards in extension from the Western Agricultural Economics Association (1997, 2005, 2006). I also received the Western Agricultural Economics Outstand Published Research Award, along with my coauthors, in 2014.

My Vision for This Position: My training gives me the skills to do work in both the traditional agricultural business and natural resource and environmental economics areas. If we view these two traditional fields within the discipline of agricultural economics as a Venn diagram, I am interested in exploring research at the intersection of these two fields. My scholarly activities focus on natural resource-based business economics issues utilizing knowledge and tools from both of the fields mentioned earlier.

Teaching Responsibility and Philosophy: My current teaching responsibilities include agribusiness management, agricultural commodities and futures markets, and advanced agricultural market theory. As someone who has spent years studying economic theory and being avid about its power to provide a useful framework for solving problems, I have become passionate about the importance of students grasping its major concepts. After all, if students understand the theory, they have a set of tools that can help them solve many of the agribusiness or natural resource problems they may face in the future. Unfortunately, students often do not share my passion for understanding theory, and they frequently express resistance to class material heavily laden with theory. How can college teachers overcome this dilemma and have educational impact? I believe you have to motivate learning theory or course concepts through applications that give students a glimpse of the value in applying course content. This is a lesson driven home to me by years of providing extension education to agricultural producers outside the formal classroom in Wyoming and the western region. I draw from my experiences both as a former Extension Specialist and as a classroom instructor to deal with this dilemma of wanting to teach theory and the students being opposed to having "too much theory," in a course. Some of this must be paying off as I was nominated for the Lawrence Meeboer Outstanding Teaching Award for the College of Agriculture and Natural Resources in 2007 and 2015, and I have been nominated for the Outstanding Adviser Award for the College of Agriculture and Natural Resources in 2009, 2010, and 2015. I received the UW Mortar Board "Top Prof" Award in 2011. I was also nominated for the UW Each Student, A Person Award in 2012. I received the College of Agriculture and Natural Resources Oustanding Adviser Award in 2013. These awards are chosen by the students, which tells me I must be doing something right, at least in the eyes of some students.

Current Grant/Research Projects:

2014 - 2015 "Small Ruminant Movements During Production and Marketing Alternatives in the Intermountain West." Peck, D. E. (PI), Co-PIs: C. T. Bastian, and A. M. Nagler. Cooperative Agreement with USDA Animal Plant and Health Inspection Service (APHIS). Amount: $70,000. Duration of Project: October 1, 2014 through September 30, 2015.

1. *In collaboration with APHIS, Center for Epidemiology and Animal Health (CEAH), define research questions and data collection instruments associated with determining direct and indirect contact rates and movement distances from which the direct and contacts are generated for goat and sheep operations in selected areas within the Mountain West Region.*
2. *Develop formal procedures and data collection methods that will be used in determining direct and indirect contact rates and movement distances from which the direct contacts are generated for the study population. The data collection methods and/or instruments developed for this project may serve as a template for future data collection projects associated with any of the production types listed on page one of the work plan.*
3. *Determine the movement frequency (direct contacts) and movement distance from which the direct contacts are generated for goat and sheep operations included in the study population.*
4. *Determine the movement frequency and movement distance for goat and sheep shipments distributed through alternative livestock markets. We have developed sheep and goat production, marketing and movement surveys that will be delivered to producers this spring.*

This work is being extended in the following grant as we broaden our scope to the feeding sector and other aspects of production and marketing that could impact potential livestock disease contraction and related economics.

2015-2016 "Animal Disease Economics Research: Small Ruminant Feedlots, Wildlife-Livestock Interactions, and Foreign Animal Disease Outbreaks." Peck, D. E. (PI), Co-PIs: C. T. Bastian, B. Schumaker, and A. M. Nagler. Cooperative Agreement with USDA Animal Plant and Health Inspection Service (APHIS). Amount Requested: $60,000. Submitted 4/15/2015. Duration of Project: June 1, 2015 through May 31, 2016.

2015 -2017 "Genetics and Genomics Research for Beef Cattle: Where's the Economics (for Wyoming and Beyond)?" Ballenger, N. S. (PI), Co-PIs: M. A. Andersen, C. T. Bastian, K. Cammack, and B. Feuz. Submitted to UW AES competitive grants program. Amount Requested: $84,877. Submitted: 9/5/2014. Duration of project January 1, 2015 through December 31, 2017.

Beef cattle and calves are Wyoming's most important source of agricultural receipts, and cow-calf and some summer stocker operations are the dominant industry segments in the state (Wyoming Agricultural Statistics 2012). Wyoming therefore has a strong interest in understanding the benefits to cow-calf operations (vis-a-vis other industry segments) of alternative investments in beef cattle genetics/genomics research. It's also important for Wyoming to know how technologies adopted outside the state (e.g. at the feedlot level or in other cow-calf environments) affect Wyoming producers through

the marketing channels, and how the benefits of technologies adopted on Wyoming ranches are transmitted through the livestock marketing chain to other market segments and other states. The competitiveness of Wyoming beef producers may depend in part on how successful they are in responding to demand for genetic traits sought by feedlot operators.

In summary, the proposed research will provide insights into the linkages between genetics and genomics research and genetic technologies that support beef production strategies. The overarching goal is to explore and better understand the benefits and distribution of benefits from public investments in beef genetics/genomics research. This effort involves the integration of information about scientific advances in genetics and genomics research, emerging genetic technologies, and the adoption and economic impacts of genetic technologies within the vertically segmented beef marketing system.

Ongoing - *I continue to extend our experimental economics work related to markets, negotiation and subsidy incidence through* ***the Lowham Research Endowment.***

We will utilize experimental economics techniques in the following projects which were just awarded and extend our work using the Lowham Research Endowment.

2015-2017 "Can We Help Producers Bargain for a Better Price?" Bastian, C.T. (PI), Co-PIs: L. S. Smutko, C. Jones-Ritten, A.M. Nagler and B.M. Feuz. Submitted to USDA AMS Federal State Marketing Improvement Competitive Grants Program. Amount Requested: $65,045. Submitted: 5/12/2015. Duration of project 9/30/2015 through 9/29/2017.

In many sectors, agricultural producers increasingly rely on negotiated contracts in input and commodity markets. While production contracting is suited to link markets increasingly driven by product quality, differentiation, traceability, and timeliness, potential problems relate to disparities in bargaining power paired with pricing risk and potential for contract failure. Further, research indicates sellers are often at a disadvantage in privately negotiated transactions. These risks may result in lower prices received by producers or missed opportunities in profitable contract sales. Outreach and education can aid agricultural producers in gaining the knowledge and skills necessary to negotiate profitable resilient bargaining outcomes and capture opportunities in evolving markets.
The proposed research aims to address risks and opportunities for producers that accompany private negotiations through the following linked objectives:
1) gather information on producer experiences, strategies, and needs expressed for developing skills in contract and price negotiation via focus groups;
2) conduct experimental sessions with agricultural professionals, both extending previous work and to measure the impact of negotiation training on market outcomes, specifically, prices received by producers; and
3) provide educational material to improve producer skills in price and contract negotiation. Expected outcomes include a better practical understanding of price negotiations at the agricultural firm level and an expansion of fundamental knowledge regarding bargaining behavior in agricultural markets. Expanding current education efforts to include potential marketing and pricing risks in private negotiations should help producers in a range of sectors capitalize on opportunities in agri-food supply chains increasingly linked through contractual agreements.

2016 - 2017 "Investigating Potential Impacts of Non-Attainment Risk on Conservation Exchange Outcomes." Hansen, K. (PI), Co-PIs: C. Jones-Ritten, C. Bastian, A. Nagler. Amount Requested: $74,317. Submitted 9/30/2015. Duration of Project: January 1, 2016 through December 31, 2017).

Top Research Questions:

- While pay-for-performance motivates conservation outcomes, landowners risk implementing conservation practices that may fail to result in measurable habitat improvements and therefore not generate tradeable credits. In cases where this non-attainment risk is significant, how should a market-based conservation program be structured to both incentivize landowners to participate and increase measurable conservation benefits?

- Considering the incentives created by conservation practice costs coupled with non-attainment risk, how does conservation market design—for example, whether conservation credit trades are agreed to before conservation practice costs are incurred (production-to-demand) or conservation credit costs are incurred before trading occurs (advance production)—impact the supply of tradeable credits and other market outcomes (such as price or relative buyer/seller earnings)?

- Would requiring conservation credit buyers (that is, those seeking to offset development impacts) to reimburse mitigation credit sellers for conservation practice costs improve the supply of habitat, given non-attainment risk?

Approach

We propose a simplified private negotiation laboratory market to assess the impact of delivery methods, non-attainment risk, and reimbursement requirements on exchange outcomes. Experimental procedures follow standard practices (Davis and Holt 1993) and relate to previous research (Menkhaus et al. 2003; Menkhaus et al. 2007; Nagler et al. 2013; Phillips et al. 2014; and others).