

Research Update

Oklahoma State University • Department of Agricultural Economics • Winter 2019



DEPARTMENT OF
AGRICULTURAL ECONOMICS
College of Agricultural Sciences and Natural Resources

ABOUT THE COVER

Cow/Calf producers in Oklahoma are the subjects of our featured research project, with an emphasis on producer adoption of calf management practices. This calf is enrolled in the Oklahoma Quality Beef Network (OQBN), a third-party calf health management protocol verification program.

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From the Interim Department Head



We hope you enjoy this 2019 issue of the Research Update, which highlights research for the Oklahoma cattle industry. The featured research project is using surveys of cow/calf producers in Oklahoma to examine the producers' adoption of research-based recommended management practices and how adoption rates have changed. Another purpose of the survey is to determine what incentives or constraints are impacting practice adoption.

This research data can then be used by Extension personnel to provide relevant objective, science-based Extension programming for producers, and also programming reaching beginning and/or future producers. In this issue, we also list 43 peer-reviewed articles published by our faculty members over the past year. We provide a listing of graduate student dissertations and theses completed over the past year. Finally, we provide a listing of all active experiment station (Hatch) research projects developed by faculty members. These "Hatch" Research Projects provide the foundation for research efforts of faculty members with an experiment station appointment.

Our research program is an important component in the Department of Agricultural Economics. We aim to provide practical, empirical knowledge that will increase the efficiency and productivity of Oklahoma agriculture and rural communities and improve the well-being of all Oklahomans, including producers, ranchers, policymakers, emerging and existing businesses, and the public. Research projects are determined by our faculty members after reviewing current research efforts in our profession.

A handwritten signature in black ink that reads "Raymond Joe Schatzer". The signature is written in a cursive, flowing style.

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MEETING THE NEEDS



To ensure that Extension programs are successful, they must provide relevant information that benefits those being served.

To create beneficial programs, Extension personnel need to learn as much about their clientele and their needs as possible. For example, why do cow/calf producers in Oklahoma use certain herd and operation management practices? What influences producers to adopt certain management practices and not others? Are these producers willing to institute recommended practices, both in managing their herds and their operations, to determine whether they are more beneficial? If not, why not?

RESEARCHERS

These and other questions are the focus of an extensive research project by members of the agricultural economics department faculty: Kellie Raper, Professor and Livestock Economist; and Derrell Peel, Professor, Charles Breedlove Professor and Livestock Economist. Other faculty have contributed to these efforts as well, including Eric DeVuyst, Professor and Neustadt Chair in Agricultural Economics; and Damona Doye, Chair of Agricultural Finance, Regents Professor, and Director of the Oklahoma Cooperative Extension Service. Together, they are working to learn more about current producer practices and new practice adoption rates.

They are also working with Dave Lalman, Professor and Harrington Chair, and other members of the Division of Agriculture Department of Animal and Food Sciences, who are sharing data regarding some of the practices being used by producers and providing hands-on demonstrations of recommended practices.

ISSUES

Value-added programs are continually promoted by Extension personnel as avenues for improving cow/calf profitability, but producer adoption of value-added practices lags in spite of research that validates the value of these practices. Many producers surveyed previously indicated they did not have the technical education to implement some management practices. Identifying producer characteristics that increase the likelihood of value-added practice adoption and addressing constraints that may be preventing adoption are critical to developing successful outreach efforts.

Few researchers examine management practice adoption in the beef industry at the cow/calf level, and most focus on individual management practices. Little research

has been done on the likelihood of bundling (to jointly adopt some practices) various management practices together and what effect bundling has on adoption of other recommended practices.

Previous research indicates that Extension's educational programming is effective in influencing best management practice adoption, which can help producers both manage costs and generate more gross income per cow. Extension strategies to increase profitability of cow/calf enterprises, such as influencing best management practice adoption, are crucial to increasing the overall profitability of the industry in Oklahoma.

In Oklahoma, anecdotal evidence suggests cow/calf management practices and willingness to adopt new practices may differ widely across the state, though such differences may be driven by other demographics.

PROJECT

This project is currently in the middle of a four-year grant with the United States Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA).

A survey was developed to solicit information regarding producer adoption of management and marketing practices, in addition to acquiring producers' demographic information. A primary purpose is to survey cow/calf producers to get a better understanding of what specific management and marketing practices they are using and understand why they choose to use certain practices and not others.

The project also explores the relationship between cow/calf producers' demographic characteristics and the number of value-added management practices implemented. An increased understanding of the impact of producer demographics on practice adoption can inform Extension personnel as to which producer populations would benefit from targeted educational programming regarding value-added management practices.

Previous research suggests recommended practices for producers to institute in their operations. The project survey has provided some statistics on whether those producers who adopt some of these practices perceive any benefits.

Practices included in the survey can be broken down into four categories: basic (castration, horn management, and deworming); preconditioning (bunk training, vaccination

protocol, and 45-day weaning); marketing (age and source verification and non-antibiotic use); and calf management records (vaccination records, other medical records, calf birth dates, and individual calf identification).

An inaugural survey was conducted in 2009; followed by a second in 2018, addressing 2017 practices. A third survey is planned at the end of the grant in 2021/2022.

Survey sampling, mailing, and data collection are done through the United States Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS) Oklahoma City office to ensure a representative sample of Oklahoma's cow-calf operations. The surveys are promoted pre- and post-mailing by Extension, in news releases, and at multiple state, regional, and county meetings.

OBJECTIVE

The overall goal of this project is to examine cow/calf producer adoption of research-based recommended management practices, to see how adoption rates have changed, and to determine what incentives or constraints are impacting practice adoption.

Ultimately, the goal is to increase adoption rates of basic, but critical, recommended practices. Crucial to that process is to establish a benchmarking system for assessing adoption rates of key production and management practices – now and in the future. Then new avenues must be implemented to reach producer audiences beyond the existing audiences.

Each survey provides a “snapshot in time” of which practices are being used and shows if positive changes have occurred for producers from instituting recommended practices. A long-term goal is to repeat the survey every five years after the grant work is done.

RESULTS

Results from the first two surveys of Oklahoma cow/calf producers on value-added practice adoption indicate that multiple demographic variables influence a producer's likelihood of practice adoption. For non-adopters, two primary constraints impede adoption, including lack of technical education on the details of implementation and doubt regarding returns from the practice.

Results also suggest that educated, larger producers who continued training in management practices are more

likely to adopt recommended management practices. Less educated, lower income, smaller producers, the audience that may benefit most from improved management practices, are shown in the survey results to be the least likely to implement these practices. Generally, the greater the percentage of household income derived from cattle, the higher the likelihood of adoption of basic recommended practices.

The similarity in Oklahoma cow/calf operator demographics among 2007 and 2017 Census of Agriculture respondents, previously published survey research, and the current survey respondents indicates that the data are representative of Oklahoma cow/calf producers.

Ongoing research has resulted in multiple academic journal articles, student research presentations at regional and national academic conferences, and dissertation and thesis research chapters. This research serves as the basis for objective, science-based Extension programming.

This survey has also provided data for use in Extension programs to target future industry leaders and progressive producers who participate in industry tours, including county organizations and out-of-state organizations.

Extension programming efforts also reached beginning and/or future producers through hands-on efforts for beginning or inexperienced producers and through field tours with Hispanic youth. Programs have also reached traditional Extension audiences through Extension meetings and television segments. Additionally, program efforts reached veterinarian students who may advise cattlemen in the future.

Examples of these efforts include the following workshops, one that has become a staple at Oklahoma State University's Hispanic Youth Academy and the other at the 4-H Roundup as shown in the photographs





provided.

*Unidos
Youth*

Workshop:

*Where's the
Beef? Cow and
Calf Production,*

*Management and
Economics (K. Raper,
D. Peel, J. Talley, and D.
Lalman)*

4-H RoundUp Workshop:

*Where's the Beef? Managing Beef
Calves for Better Value*

*(Dr. David Lalman, Animal Science;
Dr. Kellie Raper, Agricultural Economics;
Dr. Derrell Peel, Agricultural Economics; Dr.
John Michael Riley, Agricultural Economics; Dr.
Paul Beck, Animal Science)*

IMPACT

Having verified the likely target audience, further research should identify additional constraints, specifically the perceived costs of investing in human capital, to the adoption of specific value-added practices and develop Extension programming designed to help producers to overcome impediments. This study provides the initial assessment from which to build future studies.

For Extension specialists, results can help in targeting likely adopters and developing methods to overcome barriers to adoption by producers less likely to adopt.

The ultimate impact of influencing best management practice adoption, is to increase the overall profitability of the cow/calf industry in Oklahoma.

PUBLICATIONS

Raper, K; Doye, D. and Peel, D. "Why Aren't Calf Management Records Kept by More Beef Producers?" Journal of the NACAA: vol 11 pt 2.

Raper, K., Yang, R., Lusk, J. What do Consumers Know About Hormone Use in Livestock Production? Master Cattleman Quarterly, vol 38.

Raper, K; Selk, G. "Why Have a Calving Season?" Master Cattleman Quarterly: vol 40

Demographic Factors Affecting the Adoption of Multiple Value-Added Practices by Oklahoma Cow/Calf Producers. Journal of Extension, vol 51, number 6.

SOURCES OF FUNDING

Funding for this project comes from a USDA–NIFA Hatch Grant and through an Agriculture and Food Research Initiative Competitive Grant from the NIFA.

Funding for the first two surveys came from the Oklahoma State University Agricultural Economics and Animal Science and Food Departments and the Oklahoma Cooperative Extension Service at Oklahoma State University.

CONTACT

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GRADUATE PROGRAM

Doctor of Philosophy | Master of Science
Master of Agriculture in Agribusiness



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The Department of Agricultural Economics has a long tradition of being one of the best departments in the U.S. working on the most relevant and applied issues in agricultural and food industries. Students completing degrees have excelled throughout the world in teaching, research, extension, government service, and business. The department has an environment conducive to considerable interaction among students and faculty.



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Publications

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Departmental
Journal
Articles

Graduate
Student
Dissertations
& Thesis

Current
Hatch
Projects

2018 Departmental Journal Articles

“LOOK AT ME, I’M BUYING ORGANIC”: THE EFFECTS OF SOCIAL PRESSURE ON ORGANIC FOOD PURCHASES

Authors: Seonwoong Kim, Jayson Lusk, Wade Brorsen
Source: Journal of Agricultural and Resource Economics
Subject: Marketing
Keywords: conspicuous consumption, consumer, social desirability, social status

A QUICK LOOK AT PRODUCER CATTLE HANDLING FACILITY ACCESS

Authors: Kellie Raper, Derrell Peel
Source: Master Cattleman Quarterly, Volume 41

2017 OQBN PREMIUMS BY WEIGHT CLASS AND GENDER

Authors: Kellie Raper
Source: Master Cattleman Quarterly, Volume 39

21ST CENTURY ECONOMIC DEVELOPMENT: TELEWORK AND ITS IMPACT ON LOCAL INCOME

Authors: Roberto Gallardo, Brian Whitacre
Source: Regional Science, Policy, and Practice, 10(2): 103-123
Subject: Community & Rural Development
Keywords: telework, work from home, economic development, Spatial Durbin Error Model

A LOCAL FOOD SYSTEM GLOSSARY: A ROSE BY ANY OTHER NAME

Authors: Rodney Holcomb, Clinton Neill, Eric Bendfeldt, J.M. Lelekacs, Margarita Velandia, Timothy Woods, H.L. Goodwin Jr., Ron Rainey
Source: Choices, 33,3
Subject: Agribusiness

A PROFILE OF CATTLE FEEDING: BEYOND THE AVERAGES

Authors: Anna Stehle, Derrell Peel, John Michael Riley
Source: Western Economics Forum Journal, vol 16, issue 2, pgs 62-77
Subject: Marketing

ALTERNATIVE POLICY RESPONSES TO INCREASED USE OF FORMULA PRICING

Authors: Wade Brorsen, James Fain
Source: Journal of Agriculture & Food Industrial Organization, 16:1
Subject: Marketing
Keywords: agent-based modeling, captive supplies, cattle, market power

ANAEROBIC DIGESTER PRODUCTION AND COST FUNCTIONS

Authors: Cortney Cowley, Wade Brorsen
Source: Ecological Economics, 152:347-357
Subject: Environment, Production Economics

AUTOMATIC SECTION CONTROL TECHNOLOGIES AND GPS AUTO-GUIDANCE SYSTEMS ADOPTION IN COTTON PRODUCTION

Authors: Dayton M. Lambert
Source: Journal of Agricultural Science, 10(7):282 – 294
Subject: Production Economics

2018 Departmental Journal Articles

CALENDAR SPREAD OPTIONS

Authors: Juheon Seok, Wade Brorsen, Barthelemy Niyizibi
Source: Agricultural Finance Review , 78(5):551-570
Subject: Marketing, Quantitative Methods
Keywords: calendar spreads, corn, futures, panel unit root tests, options

CATTLE PRODUCER WILLINGNESS TO AFFOREST PASTURELAND AND SEQUESTER CARBON

Authors: Dayton M. Lambert
Source: Forest Policy and Economics, 92:43–54
Subject: Production Economics

CONSUMER DEMAND FOR GENETICALLY MODIFIED RICE IN URBAN CHINA

Authors: Zhihao Zheng, Shida Henneberry, Chuanzhong Sun, Rodolfo Nayga
Source: Journal of Agricultural Economics, Vol. 69, Issue 1, Page 705-725
Subject: International Trade and Development
Keywords: consumer demand, GMO Rice, China

CURRENT MARKET CONDITIONS FOR VETERINARY SERVICES IN THE U.S.

Authors: Clinton Neill, Rodney Holcomb, Wade Brorsen
Source: Applied Economics, 50:6501-6511
Subject: Labor Economics, Marketing
Keywords: supply/demand, veterinary economics

DETERMINING A GEOGRAPHIC HIGH RESOLUTION SUPPLY CHAIN NETWORK FOR A LARGE SCALE BIOFUEL INDUSTRY

Authors: Dayton M. Lambert
Source: Applied Energy, 218:266–281

DEVELOPMENT OF A DISTRIBUTED HYDROLOGIC MODEL FOR A REGION WITH FRAGIPAN SOILS TO STUDY IMPACTS OF CLIMATE ON SOIL MOISTURE: A CASE STUDY ON THE OBION RIVER WATERSHED IN WEST TENNESSEE

Authors: Dayton M. Lambert
Source: Geosciences, 8(364)
Subject: Environment

DO FARMERS MARKETS BOOST MAIN STREET? DIRECT-TO-CONSUMER AGRICULTURAL PRODUCTION IMPACTS ON THE FOOD RETAIL SECTOR

Authors: Dave Shideler
Source: Journal of Food Distribution Research, 49(2)
Subject: Community & Rural Development
Keywords: local food, retail, DTC, direct-to-consumer, Main Street

ECONOMETRIC ERROR NULLIFIES FINDING OF BROADBAND SPEED ON COUNTY-LEVEL EMPLOYMENT

Authors: Brian Whitacre, Rafayet Alam, Bento Lobo
Source: Information Economics & Policy, 44: 58-60
Subject: Community & Rural Development
Keywords: broadband, speed, employment

ECONOMIC IMPACT OF DROUGHT- AND SHADE-TOLERANT BERMUDAGRASS VARIETIES

Authors: Chanjin Chung, Tracy Boyer, Palma Marco, Monika Ghimire
Source: HortTechnology
Subject: Agribusiness, Horticulture

ECONOMICS OF THE GREENSEEDER HAND PLANTER

Authors: John Ng'ombe, Wade Brorsen, W.R. Raun, Jhagman Dhillon
Source: Southern Agricultural Economics Association annual meeting, Jacksonville, Florida
Subject: Production Economics
Keywords: developing countries, maize

EFFECTS OF OPTICAL SENSING BASED VARIABLE RATE NITROGEN MANAGEMENT ON YIELDS, NITROGEN USE AND PROFITABILITY FOR COTTON

Authors: Dayton M. Lambert
Source: Precision Agriculture
Subject: Production Economics

ESTIMATING BILATERAL MARKET POWER OF PROCESSORS AND RETAILERS IN THE U.S. BEEF INDUSTRY

Authors: Chanjin Chung, Seongjin Park, Jungmin Lee
Source: Agribusiness: An International Journal
Subject: Agribusiness, Marketing

FEEDER CATTLE PRICE FUNDAMENTAL

Authors: Derrell Peel, John Michael Riley
Source: Western Economics Forum Journal, vol 16, issue 2, pgs 6-19
Date: 2017
Subject: Community & Rural Development
Keywords: civic engagement, broadband, fixed vs. mobile internet, mobile phones

HIERARCHICAL BAYESIAN ESTIMATION OF A STOCHASTIC PLATEAU RESPONSE FUNCTION: DETERMINING OPTIMAL LEVELS OF NITROGEN FERTILIZATION

Authors: Frederic Ouedraogo, Wade Brorsen
Source: Canadian Journal of Agricultural Economics, 66(1):87-102
Subject: Production Economics, Quantitative Methods
Keywords: greenseeker, nitrogen, precision agriculture

I WILL GIVE YOU MY VOTE BUT NOT MY MONEY: PREFERENCES FOR PUBLIC VERSUS PRIVATE ACTION IN ADDRESSING SOCIAL ISSUES

Authors: Bailey Norwood
Source: Applied Economic Perspectives and Policy
Subject: Policy

INFLUENCE OF COVER CROP AND TILLAGE SYSTEM ON THE OPTIMAL NITROGEN RATE FOR TENNESSEE COTTON CONSIDERING RISK

Authors: Dayton M. Lambert
Source: Journal of Cotton Science, 22:211 – 220.
Subject: Production Economics

2018 Departmental Journal Articles

INVESTIGATING THE GREENHOUSE GAS EMISSIONS OF GRASS-FED BEEF RELATIVE TO OTHER GREENHOUSE GAS ABATEMENT STRATEGIES

Authors: Bailey Norwood
Source: Rangeland Journal.
Subject: Policy

INVESTMENT ANALYSIS OF COVER CROP AND NO-TILLAGE SYSTEMS ON TENNESSEE COTTON

Authors: Dayton M. Lambert
Source: Agronomy Journal, 110:331 – 338
Subject: Production Economics

NITROGEN FERTILIZER RECOMMENDATIONS BASED ON PLANT SENSING AND BAYESIAN UPDATING

Authors: Brandon McFadden, Wade Brorsen
Source: Precision Agriculture
Subject: Production Economics
Keywords: Nitrogen, precision agriculture, wheat
Keywords: recruitment, undergraduate

NOT EVERYBODY PREFERS ORGANIC FOOD: UNOBSERVED HETEROGENEITY IN U.S. CONSUMERS' PREFERENCE FOR ORGANIC APPLE AND MILK

Authors: Seonwoong Kim, Wade Brorsen, Jayson Lusk
Source: Applied Economics Letters, 25:9-14
Subject: Marketing
Keywords: organic food

OKLAHOMA QUALITY BEEF NETWORK SEES STRONG PREMIUMS IN 2017

Authors: Kellie Raper, Derrell Peel, Eric DeVuyst
Source: Master Cattleman Quarterly, Volume 37

OPTIMAL COMMODITY ADVERTISING IN BILATERAL OLIGOPOLY

Authors: Chanjin Chung
Source: Theoretical Economic Letters
Subject: Agribusiness, Marketing

OPTIMAL FORECAST EVALUATION: FERTILIZER PRICES

Authors: Seonwoong Kim, Wade Brorsen
Source: Applied Economics Letters, 25:9-14
Subject: Marketing, Quantitative Methods
Keywords: diammonium phosphate, fertilizer, forecasting, prices, urea

PREFERENCE EVALUATION OF GROUND BEEF BY UNTRAINED SUBJECTS WITH THREE LEVELS OF FINELY TEXTURED BEEF

Authors: Bailey Norwood
Source: PLOS ONE
Keywords: beef, finely textured beef, consumer preferences

PRICE DETERMINANTS OF BRED COWS

Authors: James Mitchell, Derrell Peel, Wade Brorsen
Source: Journal of Agricultural and Applied Economics, 50(1):64-80
Subject: Grades and Standards, Marketing
Keywords: cattle, hedonic prices

PUTTING LOCAL FOOD DOLLARS TO WORK: THE ECONOMIC BENEFITS OF LOCAL FOOD DOLLARS TO WORKERS, FARMS AND COMMUNITIES

Authors: Dave Shideler, Allie Bauman, Dawn Thilmany McFadden
Source: Choices, 33(3)
Subject: Community & Rural Development
Keywords: local food economic benefit workers farm communities

REDUCING CO2 FLUX BY DECREASING TILLAGE IN OHIO: OVERCOMING CONJECTURE WITH DATA

Authors: Dayton M. Lambert
Source: Journal of Agricultural Science, 10(3):1-15

SHORT COMMUNICATION: SIMILAR WHEAT VARIETIES CAN IMPART DIFFERENT FLAVORS

Authors: Bailey Norwood
Source: Journal of Cereal Science

THE 'HURDLES' TO GREATER ADOPTION OF ANAEROBIC DIGESTERS

Authors: Cortney Cowley, Wade Brorsen
Source: Agricultural and Resource Economics Review, 47(1):132-157
Subject: Environment, Policy, Production Economics
Keywords: manure, technology adoption

THE 'LIABILITY OF NEWNESS' IN THE FOOD/AGRIBUSINESS SECTOR

Authors: A. Johnson, Clay Dibrell, Ruth Inman, Rodney Holcomb
Source: Journal of Agribusiness, 36,2:183-198
Subject: Agribusiness
Keywords: food business, legitimacy

VARIABLE-RATE APPLICATION ON FERTILIZER USE IN COTTON PRODUCTION

Authors: Dayton M. Lambert
Source: Journal of Agricultural Science, 10(10):40-52
Subject: Production Economics

WHAT DO CONSUMERS KNOW ABOUT HORMONE USE IN LIVESTOCK PRODUCTION?

Authors: Kellie Raper, Ruoye Yang, Jayson Lusk
Source: Master Cattleman Quarterly, Volume 38

WHY AREN'T MORE CALF MANAGEMENT RECORDS KEPT BY BEEF PRODUCERS

Authors: Kellie Raper, Damona Doye, Derrell Peel
Source: Journal of the NACAA, Volume 11 pt 2

WHY HAVE A CALVING SEASON?

Authors: Kellie Raper, Glenn Selk
Source: Master Cattleman Quarterly, Volume 41

2018 Graduate Student Dissertations & Thesis

ECONOMIC ANALYSIS OF STRUCTURAL CHANGE IN FEEDLOT CATTLE DEATH LOSS

Author: Mark Buda
Advisor: Dr. Kellie Raper
Graduation Date: Spring 2018
Degree: Ph.D.

CREATIVE COMPONENT - HUMAN RESOURCE MANAGEMENT PRACTICES IN AGRICULTURAL COOPERATIVES

Author: Zachary Crossan
Advisor: Dr. Phil Kenkel
Graduation Date: Spring 2018
Degree: M.Ag.

PRECISION AGRICULTURE AND INFORMATION TECHNOLOGY: THE VALUE OF IMPLEMENTING A WHOLE-CHAIN TRACEABILITY SYSTEM TO TRANSFER INFORMATION IN THE BEEF INDUSTRY AND USING EYE-TRACKING TECHNOLOGY TO IMPROVE CONJOINT ANALYSIS

Author: Candi Ge
Advisor: Dr. Brian Adam
Graduation Date: Spring 2018
Degree: Ph.D.

MARKET FAILURE IN DISEASE CONTROL: BOVINE VIRAL DIARRHEA VIRUS (BVDV) AND THE ECONOMIC FEASIBILITY OF ENHANCED CONTROL IN THE BEEF CATTLE INDUSTRY

Author: Courtney Hurt
Advisor: Dr. Derrell Peel
Graduation Date: Spring 2018
Degree: M.S.

THREE ESSAYS ON BROADBAND ADOPTION

Author: Jacob Manlove
Advisor: Dr. Brian Whitacre
Graduation Date: Spring 2018
Degree: Ph.D.

THE EFFECTS OF STATE PRIDE AND PROXIMITY TO STATE BORDERS ON CONSUMER DEMAND FOR STATE LABELED PRODUCTS

Author: Meagan Osburn
Advisor: Dr. Rodney Holcomb
Graduation Date: Spring 2018
Degree: M.S.

AN EXPLORATION OF THE EFFECTS OF BEGINNING DEBT LEVELS AND LOW CROP COMMODITY PRICES ON THE POST FINANCIAL DOWNTURN FINANCIAL PERFORMANCE OF REPRESENTATIVE CROP, LIVESTOCK, AND DIVERSIFIED FARMS IN OKLAHOMA

Author: Joe Stefenoni
Advisor: Dr. Rodney Jones
Graduation Date: Spring 2018
Degree: M.S.

THE INFLUENCE OF PERCEPTION, RECESSION AND INCOME STRATA ON CONSUMER DEMAND FOR PROTEIN SOURCES

Author: Ruoye Yang
Advisor: Dr. Kellie Raper
Graduation Date: Spring 2018
Degree: Ph.D.

FERAL HOGS, THE RAINFALL INDEX ANNUAL FORAGE PROGRAM, AND PECAN IRRIGATION

Author: Abby Biedenbach
Advisor: Dr. Wade Brorsen
Graduation Date: Summer 2018
Degree: M.S.

ESTIMATING MARKET POWER OF AGRICULTURAL AND FOOD INDUSTRIES: AN ISSUE OF DATA AGGREGATION BIAS

Author: Jung Min Lee
Advisor: Dr. Chanjin Chung
Graduation Date: Summer 2018
Degree: Ph.D.

THREE ESSAYS IN ENERGY, ENVIRONMENTAL AND REGIONAL ECONOMICS

Author: Kangil Lee
Advisor: Dr. Brian Whitacre
Graduation Date: Summer 2018
Degree: Ph.D.

ECONOMICALLY OPTIMAL TIMING OF INSECT CONTROL IN FOOD PROCESSING FACILITIES: A REAL OPTION APPROACH

Author: Suling Duan
Advisor: Dr. Brian Adam
Graduation Date: Fall 2018
Degree: Ph.D.

FINANCIAL LITERACY REPRESENTATION OF OKLAHOMA STATE UNIVERSITY STUDENTS

Author: Hannah McReynolds
Advisor: Dr. Rodney Jones
Graduation Date: Fall 2018
Degree: M.S.



Current Hatch Projects

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Sponsor: National Institute of Food and Agriculture
PI/PD: Chanjin Chung

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Sponsor: National Institute of Food and Agriculture
PI/PD: Philip Kenkel

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Sponsor: National Institute of Food and Agriculture
PI/PD: Kellie Raper

RURAL COMMUNITY ECONOMIC RESILIENCY IN THE FACE OF CHANGING FOOD SYSTEMS, MINING AND CLIMATE VARIABILITY

Sponsor: National Institute of Food and Agriculture
PI/PD: David Shideler

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Sponsor: National Institute of Food and Agriculture
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Sponsor: National Institute of Food and Agriculture
PI/PD: John Michael Riley

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Sponsor: National Institute of Food and Agriculture
PI/PD: Kellie Raper

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Sponsor: National Institute of Food and Agriculture
PI/PD: F. Bailey Norwood

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Sponsor: National Institute of Food and Agriculture
PI/PD: Brian Witacre

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Sponsor: National Institute of Food and Agriculture
PI/PD: Kellie Raper

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Sponsor: National Institute of Food and Agriculture
PI/PD: Brian Witacre

ENHANCING RURAL ECONOMIC OPPORTUNITIES, COMMUNITY RESILIENCE, AND ENTREPRENEURSHIP | 8271

Sponsor: National Institute of Food and Agriculture
PI/PD: David Schideler

ENHANCING RURAL ECONOMIC OPPORTUNITIES, COMMUNITY RESILIENCE, AND ENTREPRENEURSHIP | 9964

Sponsor: National Institute of Food and Agriculture
PI/PD: Dayton Lambert

MARKETING AND DELIVERY OF QUALITY GRAINS AND BIOPROCESS COPRODUCTS | 7005

Sponsor: National Institute of Food and Agriculture
PI/PD: Brian Adam

THE ROLE OF AGRICULTURAL POLICY IN FARM RISK MANAGEMENT AND DISASTER MITIGATION | 9667

Sponsor: National Institute of Food and Agriculture
PI/PD: Amy Hagerman

BILATERAL OLIGOPOLY AND PRICE TRANSMISSION IN THE U.S. BEEF INDUSTRY | 9580

Sponsor: National Institute of Food and Agriculture
PI/PD: Chanjin Chung

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Sponsor: National Institute of Food and Agriculture
PI/PD: Lixia Lambert

ECONOMIC AND ENVIRONMENTAL IMPACTS OF OKLAHOMA AGRICULTURAL PRODUCTION AND AGRICULTURAL TECHNOLOGY INFORMATION SYSTEMS | 9609

Sponsor: National Institute of Food and Agriculture
PI/PD: Jeffrey Vitale

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