



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

— JOURNAL OF —

Agricultural and Resource Economics

Volume 35 • **Number 3** • **December 2010**

- Optimal Control of Invasive Insect Species T. J. Richards, P. Ellsworth,
R. Tronstad, and S. Naranjo
- Readdressing the Fertilizer Problem N. D. Paulson and B. A. Babcock
- Quality Risk and Profitability in Cattle Production E. J. Belasco, T. C. Schroeder,
and B. K. Goodwin
- A Hedonic Analysis of Retail Egg Prices J. B. Chang, J. L. Lusk,
and F. B. Norwood
- Animal Welfare Regulation in the California Poultry Industry W. J. Allender
and T. J. Richards
- Second-Order Ambiguity in Very Low Probability Risks P. A. Kivi and J. F. Shogren
- Comparing Parts with the Whole J. C. Bernard and D. J. Bernard
- U.S. Import Tariff on Brazilian Ethanol S. Devadoss and M. Kuffel
- Aligning Incentives for Contract Dairy Heifer Growth N. J. Olynk and C. A. Wolf
- COOL and U.S.-Mexican Tomato Trade W. A. Johnecheck, P. E. Wilde,
and J. A. Caswell
- Feasibility of a Woody Biomass-Based Ethanol Plant J. Wu, M. Sperow, and J. Wang
- Quantile Regression Estimates of Confidence Intervals O. Isengildina-Massa, S. H. Irwin,
and D. L. Good
- Effects of Information Formats in Stated Choice Experiments J. P. Hoehn, F. Lupi,
and M. D. Kaplowitz



The Journal of the Western Agricultural Economics Association

EDITOR

Gary W. Brester, *Montana State University*

Co-editors

Joseph A. Atwood, Vincent H. Smith, and Myles J. Watts
Montana State University

EDITORIAL COUNCIL (2010–2012)

Oral Capps, Jr. <i>Texas A&M Univ.</i>	Catherine Kling <i>Iowa State Univ.</i>	Mary K. Muth <i>RTI International</i>	Ted C. Schroeder <i>Kansas State Univ.</i>
Colin A. Carter <i>Univ. of Calif., Davis</i>	Jeffrey T. LaFrance <i>Washington State Univ.</i>	Philip G. Pardey <i>Univ. of Minnesota</i>	J. Scott Shonkwiler <i>Univ. of Nevada, Reno</i>
Dillon M. Feuz <i>Utah State Univ.</i>	David K. Lambert <i>Kansas State Univ.</i>	Paul M. Patterson <i>Arizona State Univ.</i>	James Vercammen <i>Univ. of Brit. Columbia</i>
Joseph W. Glauber <i>U.S. Dept. of Agriculture</i>	Jayson L. Lusk <i>Oklahoma State Univ.</i>	Nicholas E. Piggott <i>North Carolina State Univ.</i>	Brian D. Wright <i>Univ. of Calif., Berkeley</i>
Steve F. Hamilton <i>Cal Poly State Univ.</i>	Dale J. Menkhaus <i>Univ. of Wyoming</i>	Rulon D. Pope <i>Brigham Young Univ.</i>	Amalia Yiannaka <i>Univ. of Nebraska</i>
Matthew T. Holt <i>Purdue Univ.</i>			

Judith L. Harrison, Technical Editor
Bozeman, MT (WordDoctor@aol.com)

Amy L. Johnson, Editorial Assistant
Bozeman, MT (jare_ea@montana.edu)

The *Journal of Agricultural and Resource Economics* is published by the Western Agricultural Economics Association three times per year, in April, August, and December.

Copyright © 2010 by the Western Agricultural Economics Association.

An article, note, or other material appearing in the *Journal of Agricultural and Resource Economics* may not be republished in full or in part without permission from the editor.

Editorial Policy

The *Journal of Agricultural and Resource Economics* seeks to publish creative and scholarly economic studies in agriculture, natural resources, and related issues. Manuscripts dealing with the economics of food and agriculture, natural resources and the environment, human resources, and rural regions are encouraged. The *Journal* seeks to provide a forum for topics of interest to those performing economic research as well as to those involved with economic policy and education. Submission of comments on articles previously published in the *Journal* is welcomed.

Editorial Communications

All initial submissions and accompanying editorial correspondence should be submitted electronically at our *JARE* internet website. (Refer to Author Guidelines, inside back cover of this journal issue, for full information.)

PRINTED BY THE SHERIDAN PRESS, INC., HANOVER, PA

AUTHOR GUIDELINES FOR SUBMITTING MANUSCRIPTS TO *JARE*

Contributors are requested to use the following guidelines in preparing manuscripts for submission. Please note that the *JARE* accepts only electronic submission submitted in PDF format at <http://www.jareonline.org> (additional information on submissions is provided below).

1. *Author Certifications.* Authors submitting manuscripts to the *JARE* certify that the material in the manuscript (or modification thereof) has not been published, is not being published, and is not currently being considered for publication elsewhere. Authors also certify that the material in the manuscript, to the best of the author's knowledge, does not infringe upon other published material protected by copyright. Authors also certify they have read and agree to the policy on data access and estimation procedures outlined below.
2. *Data Access and Estimation Procedures.* Authors are expected to document their data sources, data transformations, models, and estimation procedures as thoroughly as possible. Authors are also expected to make data available at cost for replication purposes for up to five years.
3. *Title Page.* Provide the title of the manuscript and author(s)' name(s) centered and in boldface type. At the bottom of the same page, provide professional title(s), institutional affiliation(s), acknowledgments of colleague reviews and assistance, and institutional support as an unnumbered footnote. **Do not place the name(s) of the author(s) on the first page of the text.** The title page will be removed from the manuscript before it is sent to reviewers.
4. *Abstract.* Include an abstract of 100 words or less, followed by up to eight key words (or short phrases) listed in alphabetical order.
5. *Text.* Suggested manuscript length is no more than 25 text pages (not including reference list, tables, and graphics). Double space all text, including the abstract, acknowledgments, footnotes, and references. Use a 12-point Times Roman font and allow 1" margins on all sides. **Do not use right-justified margins or end-of-line hyphenation feature.**
6. *Style, Grammar, and Punctuation.* The *JARE* uses *The Chicago Manual of Style* by the University of Chicago Press, and *Webster's Third New International Dictionary* for style, format, and spelling.
7. *Footnotes.* Use superscript Arabic numbers within the text, numbered consecutively throughout the manuscript. Footnotes can be placed at the bottom of the page or assembled as endnotes at the end of the manuscript.
8. *References/Text Citations.* In a reference section immediately following the manuscript text, list all works cited in the text, alphabetized by author last name. Refer to current issues of the *JARE* for format. For within-text citations (either parenthetical or as part of narrative), spell out up to three author last names; use first author's name followed by "et al." for works with four or more authors. Include the publication year with all text cites. When citing a direct quotation, include page number(s) from the author's work.
9. *Figures and Tables.* Place each figure and table on a separate page at the end of the manuscript. Whenever possible, preferred (but not required) software for figure generation is Microsoft Excel. **Do not place figure title/caption within the figure graphics box.**
10. *Math/Equations.* Consecutively number equations throughout the text. When displaying equations, place equation number within parentheses at flush-left margin; center the equation. Use *italic* typeface for all *variables*, and use **boldface** (no italics) for all **vectors** and **matrices**.
11. *Publication Costs.* Authors submitting manuscripts are expected to assume obligation for payment of page charges at the time their manuscripts are published. Current page charges are \$60/printed page for WAEA members and \$70/printed page for nonmembers.
12. *Submissions.* All submissions to the *Journal of Agricultural and Resource Economics* must be submitted electronically to the editorial team at the *JARE* URL: <http://www.jareonline.org>. To ensure author anonymity, the *JARE* accepts submission only in PDF format. Each submission will be stripped of author and institutional identification by the editorial team before it is sent to reviewers. Receipt of manuscripts will be acknowledged by e-mail.

Gary W. Brester, Editor
Journal of Agricultural and Resource Economics
Department of Agricultural Economics and Economics
P.O. Box 172920 / Montana State University
Bozeman, MT 59717-2920
Phone (406) 994-7883 • e-mail gbrester_JARE@montana.edu

Western Agricultural Economics Association, Inc.

<i>President</i>	Larry W. Van Tassell, University of Nebraska
<i>President-Elect</i>	Russell Tronstad, University of Arizona
<i>Past President</i>	Michael A. Boland, University of Minnesota
<i>Directors</i>	Christopher T. Bastian, University of Wyoming (2008–2011) Eric A. DeVuyst, Oklahoma State University (2008–2011) Christopher S. McIntosh, University of Idaho (2009–2012) Jonathan K. Yoder, Washington State University (2009–2012) Catherine M. Keske, Colorado State University (2010–2013) Hikaru H. Peterson, Kansas State University (2010–2013)

Membership and Journal Subscription

WAEA, Inc. calendar-year membership dues are \$55 for regular members in the U.S., Canada, and Mexico; \$45 for senior (retired) members, \$25 for junior (student) members, and \$80 for families in the U.S., Canada, and Mexico; \$75 for regular members overseas, \$60 for senior (retired) members, \$40 for junior (student) members, and \$110 for families overseas. Lifetime membership is available for those who are at least 55 years of age. All members receive this journal. Individuals wishing to receive only the electronic version of the journal may pay per-year discounted dues of \$40 for regular members, \$30 for senior (retired) members, and \$5 for junior (student) members.

Library and other institutional subscription prices are \$125 in the U.S., Canada, and Mexico; \$130 in all other countries.

Applications for membership, payment of dues, subscription charges, changes in address, and other inquiries should be addressed to:

Western Agricultural Economics Association, Inc.
555 E. Wells Street, Suite 1100
Milwaukee, WI 53202

Visit us on the internet at <http://www.waeonline.org>

JOURNAL OF

Agricultural and Resource Economics

Volume 35

• **Number 3** •

December 2010

Articles

Market-Based Instruments for the Optimal Control of Invasive Insect Species: *B. Tabaci* in Arizona / Timothy J. Richards, Peter Ellsworth, Russell Tronstad, and Steve Naranjo / 349

Readdressing the Fertilizer Problem / Nicholas D. Paulson and Bruce A. Babcock / 368

Quality Risk and Profitability in Cattle Production: A Multivariate Approach / Eric J. Belasco, Ted C. Schroeder, and Barry K. Goodwin / 385

The Price of Happy Hens: A Hedonic Analysis of Retail Egg Prices / Jae Bong Chang, Jayson L. Lusk, and F. Bailey Norwood / 406

Consumer Impact of Animal Welfare Regulation in the California Poultry Industry / William J. Allender and Timothy J. Richards / 424

Second-Order Ambiguity in Very Low Probability Risks: Food Safety Valuation / Paul A. Kivi and Jason F. Shogren / 443

Comparing Parts with the Whole: Willingness to Pay for Pesticide-Free, Non-GM, and Organic Potatoes and Sweet Corn / John C. Bernard and Daria J. Bernard / 457

Is the U.S. Import Tariff on Brazilian Ethanol Justifiable? / Stephen Devadoss and Martin Kuffel / 476

Aligning Incentives for Contract Dairy Heifer Growth / Nicole J. Olynk and Christopher A. Wolf / 489

Market and Welfare Impacts of COOL on the U.S.-Mexican Tomato Trade / Wendy A. Johncheck, Parke E. Wilde, and Julie A. Caswell / 503

Economic Feasibility of a Woody Biomass-Based Ethanol Plant in Central Appalachia / Jinzhuo Wu, Mark Sperow, and Jingxin Wang / 522

Quantile Regression Estimates of Confidence Intervals for WASDE Price Forecasts / Olga Isengildina-Massa, Scott H. Irwin, and Darrel L. Good / 545

Stated Choice Experiments with Complex Ecosystem Changes: The Effect of Information Formats on Estimated Variances and Choice Parameters / John P. Hoehn, Frank Lupi, and Michael D. Kaplowitz / 568

Other

JARE Editors' Report / 591

WAEA 2009 Award Winners / 592

WAEA Past Presidents / 594

WJAE / *JARE* Past Editors / 595