

CURRICULUM VITAE

Russell Tronstad

Education

- Ph. D. Agricultural Economics, Univ. of Illinois, May 1989.
Dissertation director: Dr. C. Robert Taylor
Dissertation title: Optimal Dynamic Marketing Strategies for Grain Producers: A Case Study of Winter Wheat.
Major Fields: Marketing and Production specialty course field exams were taken.
- M.S. Applied Economics, Montana State University, July 1985.
Thesis director: Dr. John Marsh
Thesis title: An Analysis of Monthly Wheat, Flour, and Bread Prices in a Structural and Time Series Framework
- B.S. Agricultural Business, Montana State University, June 1983.

Employment

- 2008–present University Distinguished Outreach Professor and Specialist, Department of Agr. and Resource Economics, The University of Arizona, Tucson, AZ.
Extension appointment includes improving Arizona producers' and county agents' marketing and management proficiency through workshops, seminars, lay publications, in-service training, electronic media, direct contacts, and other appropriate methods. Research activities focus on applied marketing and management issues for livestock and crop producers that will complement extension efforts.
- 2004–2008 Professor and Specialist, Department of Agricultural and Resource Economics, The University of Arizona, Tucson, AZ. *(see above)*
- 1995–2004 Associate Specialist, Department of Agricultural and Resource Economics, The University of Arizona, Tucson, AZ. *(see above)*
- 1997–1998 Visiting Scholar at the University of Alberta, Edmonton while on sabbatical leave from the University of Arizona, Tucson, AZ.
Sabbatical work focused on a value-based beef marketing project sponsored by The Canadian Beef Industry Development Fund.
- 1989–1995 Assistant Specialist, Department of Agricultural and Resource Economics, The University of Arizona, Tucson, AZ. *(see above)*
- 1989
(4 months) Research Associate, Dept. of Agricultural Economics and Rural Sociology, Auburn University, Auburn, AL.
Completed dissertation and started work on a cotton hedging/storage model.

Honors and Awards

- US Non-Provisional Patent Application, UA #18-160, May 2019, *Systems And Methods For Simulation-Based Resource And Layout Optimization*, exclusive license purchased by Grafted Growers (with S. Masoud, Y. Son, C. Kubota)
- Best Paper Award, Data Analytics and Information Systems Track, Institute of Industrial and Systems Engineering, May 2019, *Markov-Chain Monte-Carlo Sampling for Optimal Fidelity Determination in Dynamic Decision-Making*, (with S. Masoud, B. Chowdhury, and Y.J. Son)
- Finalist for paper in Data Analytics and Information Systems Track, Institute of Industrial and Systems Engineering. May 2018, *A Dynamic Modelling Framework for Human Hand Gesture Task Recognition Masoud*, (with S. Masoud, B. Chowdhury, Y.J. Son, and C. Kubota)
- Southwest Indian Agricultural Association, Tribal Agricultural Education Appreciation Award, January 2017
- WAEA President-Elect, President, and Past President, 2010 to 2013
- Journal of Agricultural and Resource Economics, Outstanding Journal Article Award, 2011.
- University Distinguished Outreach Professor Award, University of Arizona, 2008.
- Distinguished Extension/Outreach Program Group Award, member of “U.S. Livestock Identification Systems: Risk Management and Market Opportunities,” American Agricultural Economics Association, 2007.
- Distinguished Extension Project Award, project leader of “Innovations in Niche and Value-Added Marketing,” Western Agricultural Economics Association, 2006
- Extension Faculty of the Year Award, University of Arizona, 2005
- Distinguished Extension Project Award, member of “U.S. Livestock Identification Systems: Risk Management and Market Opportunities,” Western Agricultural Economics Association, 2005
- Co-Editor, Journal of Agricultural and Resource Economics, 2000–03
- Distinguished Extension Program Award, member of Managing for Today’s Cattle Market and Beyond, American Agricultural Extension Association, 1997.
- Outstanding Extension Project Group Award, member of Managing for Today’s Cattle Market and Beyond, Western Agricultural Extension Association, 1997.

United States Department of Agriculture/Agricultural Research Service National Needs Fellowship in Agricultural Marketing, August 1985–August 1988.

Service/Outreach (since 2001)

National/Regional Committees and Activities

- Editorial Board for Choices, American Agricultural Economics Association, 2017-present.
- Panel review member of Beginning Farmer Grants, 5 day trip to Washington D.C., USDA/NIFA to review proposals face-to-face, March 2015, April 2016, June 2019 and June 2020 (online).
- Chair of WAEA Graduate Student Papers / Presentations, WAEA Annual Meeting, Colorado Springs, CO, June 22–24, 2014.
- Panel review member of Small Business Innovation Research (SBIR), USDA/NIFA Small to Medium-Sized Grants, (about 40 proposals each year) 2013–2017.
- CFARE Annual Meeting in Washington D.C. for WAEA, as part of Past-President Duties, May 20–22, 2013.
- WAEA Website Redesign Committee Chair, 2012/13.
- Vice President, Western Agricultural Economics Association, 2007–08, and organizer of selected paper sessions for the 2008 and 2009 WAEA Annual Summer Meetings.
- Organizer of AAEE Selected Paper Reviews for “Extension Methods/Issues” and “Food and Agricultural Marketing,” 2004–2005.
- Director of the American Agricultural Extension Association Extension Section for the West, 2002–2005.
- Co-Editor, *Journal of Agricultural and Resource Economics*, 2000–03.
- Journal reviewer for the *American Journal of Agricultural Economics*, *Journal of Agricultural and Resource Economics*, *Review of Agricultural Economics*, *Canadian Journal of Agricultural Economics*, *Choices*, *Economic Research Service Reports*, *Journal of Agricultural and Applied Economics*, *Journal of Crop Protection*, *Journal of Regulation and Governance*, *Journal of Range Management*, *Journal of the American Veterinary Medical Association*, *International Journal of Services, Operations, and Informatics*, *Journal of Agricultural and Food Science in Finland*, *Resource and Energy Economics*.
- External Reviewer of Promotion & Tenure Packets; Associate Rank (2005, 2009, 2011, 2012, 2013, 2015, 2017, and 2018) and promotion to Full (2011, 2014, 2016–2017, 2019).
- Reviewer of Grants, 2003–14; Small Business Innovation Research proposals (5), OMAFRA/U of Guelph Emergency Management Research Theme(1), and USDA/CSREES, NRI, Market and Trade Division Grant Proposals (4).
- Steering Committee Member, Southwest Marketing Network (Initially funded by the W.K. Kellogg Foundation and currently funded by Risk Management Agency through Farm to Table in Santa Fe and the National Center for Appropriate Technology). The Network works to increase market information and networking, and access to financial assistance to small-scale and minority producers, 2002–2012.
- Director, Western Agricultural Economics Association, 1999–2001.
- Planning Committee for the 2001 North American Farmers Direct Marketing

Association Conference in Mesa, Arizona.

- Listserve Manager/Updater for the Western Extension Marketing Committee, 1995–2017.

Departmental Committees / Activities

- Department Merit Evaluation Committee Member, 2004/06, 2009/10, 2013/14, 2017/18.
- Search committee member for Assistant Professor of Agribusiness, 2016/17
- AREC Head Dr. Thompson's five-year Review Committee, 2016/17.
- Acting Dept. Head, as needed, 2008 to 2014.
- Departmental Promotion and Continuing Committee; Member, 2002–03.
- Co-Editor of *Arizona Review*, 2003–2007.
- Search committee member for Assistant Professor, 2002.
- Host for short-term visiting faculty, 2001.

College Committees and Working Groups

- Dean's Research Advisory Committee, 2017/20.
- Intra-Extension Advisory Council Committee, 2016/20.
- CALS, Promotion and Continuing Committee, 2004/06 (Chair 2006), 2013/17 (Vice-Chair in 2015 and 2016).
- Henry and Phyllis Koffler Award for Research/Scholarship/Creative Activity, 2016/17.
- Dean Dr. Burgess' five-year Review Committee, 2016/17.
- CALS Faculty Merit Based Taskforce Committee, 2015/16.
- Distinguished Professor Committee member, 2016.
- University, Promotion and Continuing Committee, Member 2007/09, Chair for 2009/10, Member for 2019/20.
- 1885 Scholars Committee member, 2012 to 2014.
- Search Committee member for two CALS Grants and Contract Business Manager Positions, 2013.
- Search Committee member for Animal Sciences, 2011 and 2012.
- Search Committee member for Extension Director, 2011–2012.
- Mentor for Cooperative Extension Faculty, 2006–present.
- Managing Editor for Univ. of Arizona Cotton Report, 2004–2008.
- Range Livestock Nutrition Working Group Member, 2004–present.
- Integrated Crop Management Team Member, 2003–present.

Other Committees

- Editorial Board for *Choices*, American Agricultural Economics Association, 2017–present.
- Arizona-Sonora Geotourism Council; National Geographic map of Geotourism for the Sonoran Desert Region, 2006–07.
- Governor's Drought Task Force; Commerce, Recreation and Tourism Working Group, 2003–05.

- RightRisk/Survivor Ag Education Team, Member 2001–2012 (collaboration of livestock risk management education between Colorado State & University of Wyoming, www.rightrisk.org).
- Arizona Council on Expanding Recreation and Tourism (ACERT), Member 2001–2008.
- Member of Agricultural and Applied Economics Association (*formerly* American Agricultural Economics Association), Western Agricultural Economic Association, Western Extension Marketing Committee, and Livestock Marketing Information Center (2001 -- present).

Publications/Creative Activity (Published or Accepted)

Scholarly Books and Monographs

Tronstad, Russell, Larry Lev, Stuart Nakamoto, DeeVon Bailey, Chris Bastian, Kynda Curtis, Ramiro Lobo, Wendy Umberger, and Ruby Ward. *Certification and Labeling Considerations for Western Agricultural Producers*, University of Arizona, Publication AZ1372, September 2005, pp. 1–52.

Western Profiles of Innovative Agricultural Marketing: Examples from Direct Farm Marketing and Agri-tourism Enterprises, **Russell Tronstad** (ed.), University of Arizona Cooperative Extension, Publication AZ1325, December 2003, pp. 1–122.

Tronstad, Russell, Satheesh Aradhyula, and Pablo Wong-González. *Agribusiness: Strategic Economic Development Vision for the Arizona-Sonora Region*. November 1997: 1–180.

Chapters in Scholarly Books and Monographs

Kubota C., C. Meng, S. Masoud, Y.J. Son, and **R. Tronstad**. 2018. “Advanced Technologies for Large-Scale Plant Factories – Integration of Industrial and Systems Engineering Approach in Controlled Environment Crop Production.” In *Plant Factory Using Artificial Light*, eds. M. Anpo, H. FukudaTeruo Wada, Elsevier Publishing, pp. 354–362.

Tronstad, R., and M. Woods. 2018. “Cooperative Extension System: Value to Society.” In G.L. Cramer, K.P. Paudel, A. Schmitz, eds., *The Routledge Handbook of Agricultural Economics*, New York, Routledge Publishing, pp. 728–747.

Tronstad, Russell, “Double Check Ranch: Creativity and Grass-Fed Beef Marketing Facilitate Family’s Ranching Visions.” *Western Farm & Ranch Transition Strategies*, Utah State University, 2013, available online at www.valueaddedag.org.

Tronstad, Russell, “Wong Farms: Pioneer Railroad Worker to Modern Cotton Corporation.” *Western Farm & Ranch Transition Strategies*, Utah State University, 2013, available online at www.valueaddedag.org.

- Tronstad, Russell.** Evaluating Market Size. In *Niche Markets: Assessment and Strategy Development for Agriculture*, Kynda Curtis (ed.), University of Nevada, Reno, Technical Report UCED 2007/08–13, 2:1–8.
- Tronstad, R.,** C. Kubota, M.A. McClure, and M. Olsen. A preliminary comparison of organic, grafted, and conventional cantaloupe production under subsurface drip irrigation. In *Niche Markets: Assessment and Strategy Development for Agriculture*, Kynda Curtis (ed.), University of Nevada, Reno, Technical Report UCED 2007/08–13, 9:1–9.
- Dyer, J, D. Lamm, L. Oberholtzer, K. Pepinsky, N. Richman, and **R. Tronstad.** *The Organic Market in the Four Corners States*, Southwest Marketing Network and Colorado State University, 2008, 1–45.
- Frisvold, George, **Russell Tronstad**, Robert L. Nichols, Mike Watson, and Eric Hequet. “Scope and Economic Impact of Sticky Cotton.” In *Sticky Cotton, Causes, Effects, and Prevention*, R. L. Nichols, E. Hequet (eds.), USDA/ARS Technical Bulletin #1915, June 2007: 5–30.
- Frisvold, George, **Russell Tronstad**, and Jeanne M. Reeves. “International Impacts of Bt Cotton Adoption.” In *International Trade and Policies for Genetically Modified Products*, R.E. Evenson and V. Santaniello (eds.), *International Trade and Policies for Genetically Modified Products*. Oxfordshire,U.K.: CABI Publishing, 2006: 191–199.
- Aradhyula, Satheesh, and **Russell Tronstad.** “Estimating Seasonality in the Mean and Variance.” In *Essays in Honor of Stanley R. Johnson*, M. Holt, and J. P. Chavas (eds.), Berkeley Electronic Press. Article 20. (September 2006): 1–23, available at <http://www.bepress.com/sjohnson/art20>.
- Tronstad, Russell,** “Challenges of Animal Identification in the West.” In *U.S. Livestock Identification Systems: Risk Management and Market Opportunities*, W. Umberger and D. Bailey (eds.), Western Extension Marketing Committee, FS#10-04, Fall 2004, 10:1–8.
- Frisvold, George, and **Russell Tronstad.** “Economic Effects of Bt Cotton Adoption and the Impact of Government Programs.” In *Economic and Environmental Impacts of Agbiotech: A Global Perspective*, N. Kalaitzandonakes (ed.), Dordrecht, The Netherlands: Kluwer Academic Press, 2003: 261–286.
- Tronstad, Russell.** “A Project that Quickly Mushroomed into a Large Direct Marketing Business: Sunfresh Farms.” In *Western Profiles of Innovative Agricultural Marketing*, R. Tronstad (ed.), Pub. AZ1325, U of AZ Coop. Extension, 2003: 55–62.

- Tronstad, Russell.** “Southwest’s Premier Family Entertainment Farm: Schnepf Farms.” In *Western Profiles of Innovative Agricultural Marketing*, R. Tronstad (ed.), Pub. AZ1325, U of AZ Coop. Extension, 2003: pp. 67–74.
- Tronstad, Russell.** “Marketing the Farm Experience and Diverse Products: Mother Nature’s Farm.” In *Western Profiles of Innovative Agricultural Marketing*, R. Tronstad (ed.), Pub. AZ1325, U of AZ Coop. Extension, 2003: pp. 75–81.
- Umberger, Wendy, Larry Lev, and **Russell Tronstad.** “Guiding Principles for Innovative Direct Marketing of Agricultural Products.” In *Western Profiles of Innovative Agricultural Marketing*, R. Tronstad (ed.), Pub. AZ1325, U of AZ Coop. Extension, 2003: pp. 119–122.
- Tronstad, Russell** and Jim Unterschultz. “Industry Opportunities and Issues for Value Based Marketing.” *Managing for Today's Cattle Market and Beyond*, Beef Industry’s Future Section, March 2002: 1–8.
- Tronstad, Russell**, Wilson Gray, and Lee Meyer. “Weather Related Sales of Livestock and Tax Implications.” *Managing for Today's Cattle Market and Beyond*, Integrated Management Section, March 2002: 1–5.
- Tronstad, Russell**, and Scott Davis, “Arizona and Its Traditional Economy.” In *Moving all of Arizona into the 21st Century Economy*, S.G. Davis, D.A. de Kok, and M.A. Worden (eds.), Prepared for the seventy-eighth Arizona Town Hall, Report prepared by the University of Arizona, May 2001: 11–30.
- Ruyle, George, **Russell Tronstad**, Diana W. Hadley, Philip Heilman and David A King. “Commercial Livestock Operations in Arizona.” In *Ecological, Cultural, and Socioeconomic Aspects of Livestock Management in the Southwest*, R. Jemison, C. Raish and D. Finch (eds.), Elsevier Science Press, Amsterdam Netherlands, 2000: 379–417.
- Leones, Julie, **Russell Tronstad**, and Jimmye S. Hillman. “The Dickey Business of Agricultural Trade Policy: Where Does NAFTA Take Us?” Invited Article for *The University of Tulsa Law Journal*, (28) Summer 1993: 559–585.
- Tronstad, Russell**, and Russell Gum. “A Profit Comparison of Range Culling Decisions in the Southwest.” In *Applications of Dynamic Programming to Agricultural Decision Problems*, C. Robert Taylor (ed.), Westview Press, 1993: 103–114.
- Ayer Harry, and **Russell Tronstad.** “Impacts on Arizona’s Economy and the Role of Transportation: Agriculture,” In *Free Trade: Arizona at the Crossroads*, V.K. Pavlakovich and M.A. Worden (eds.), Prepared for sixty-first Arizona Town Hall, Arizona Public Service Company Press, November 1992: 99–114.

Ayer, Harry, and **Russell Tronstad**. “Perceptions: How a U.S. -Mexico Free Trade Agreement Might Affect Yuma County Agriculture.” In *Yuma County in a Free Trade Environment*, B.C. Catts (ed.), Arizona Public Service Company Press, April 1992: 44–55.

Refereed Journal Articles

- Masoud, S., B.D. Chowdhury, Y.J. Son, C. Kubota, and **R. Tronstad**. 2019. “Simulation Based Resource and Layout Optimization for Grafting.” *Computers and Electronics in Agriculture*, 163:1084. Doi.org/10.1016/j.compag.2019.05.054
- Sall, I., **R. Tronstad**, and S. Aradhyula. 2019. “Beef Production Alliance Preferences for Vertical Integration: A Bivariate Nested Panel Probit Approach.” *Journal of Agricultural and Resource Economics* 44(1):165–179.
- Masoud, S., Y.J. Son, C. Kubota, and **R. Tronstad**. 2018. “Evaluation of Simulation-Based Optimization in Grafting Labor Allocation” *Applied Engineering in Agriculture* 34(3):479–489.
- Kubota C, C. Meng, Y-J. Son, M. Lewis, H. Spalholz, and **R. Tronstad**. 2017. “Horticultural, systems-engineering and economic evaluations of short-term plant storage techniques as a labor management tool for vegetable grafting nurseries,” *PLoS ONE* 12(2): e0170614. doi:10.1371/journal.pone.0170614
- Chieri Kubota, Myles Lewis, **Russell Tronstad**, and Young-Jun Son. 2014. “Scenario-based Cost Analysis for Vegetable Grafting Nurseries of Different Technology and Size.” *HortScience*, 49(7):9117–930.
- Chao Meng, Dong Xu, Young-Jun Son, Chieri Kubota, Myles Lewis, and **Russell Tronstad**. 2014. “An Integrated Simulation and AHP Approach to Vegetable Grafting Operation Design.” *Computers and Electronics in Agriculture*, 102:73–84.
- Tronstad, Russell**, “Unpleasant Lessons from the Settlement of the West: Implications for the WAEA and Other Professional Associations.” *Journal of Agricultural and Resource Economics*, 36(3) 2011:242–256 (Presidential Address, refereed but single blind review).
- Timothy J. Richards, Peter Ellsworth, **Russell Tronstad**, and Steve Naranjo, “Market-Based Instruments for the Optimal Control of Invasive Insect Species: *B. Tabaci* in Arizona.” *Journal of Agricultural and Resource Economics*, 35(3) 2010:349–367.
- Thompson, Gary, Satheesh Aradhyula, George Frisvold, and **Russell Tronstad**, “Does Paying Referees Expedite Reviews? Results of a Natural Experiment.” *Southern Economic Journal*, 76(3), 2010: 678–692.

- Frisvold, George, Jeanne M. Reeves, and **Russell Tronstad**. "Bt Cotton Adoption in the United States and China: International Trade and Welfare Effects." *AgBioForum*, Vol. 9(2), 2006:69–78.
- Tronstad, Russell**, and James Unterschultz. "Looking Beyond Value-Based Pricing of Beef in North America." *Supply Chain Management: An International Journal*, Vol 10(3), 2005:214–222.
- Tronstad, Russell**, Trent Teegerstrom, and Daniel Osgood. "The Role of Electronic Technologies for Reaching Underserved Audiences." *American Journal of Agricultural Economics*, Vol. 86(3), August 2004:767–771.
- Tronstad, Russell**, and Trent Teegerstrom. "Economic Trade-Offs Between Sale Weight, Herd Size, Supplementation, and Seasonal Factors." *Journal of Range Management*, Economics Section, Vol. 56(4), September 2003: 425–431.
- Aradhyula, Satheesh, and **Russell Tronstad**. "Does Tourism Promote Cross-Border Trade?" (senior authorship not assigned) *American Journal of Agricultural Economics*, Vol. 85(3), August 2003: 569–579.
- Tronstad, Russell**, Larry Lev, and Wendy Umberger. "Surviving and Thriving through Direct Farm Marketing." *Western Economics Forum*, Vol. 2(2), Fall 2003: 14–20.
- Tronstad, Russell**, Jeff Silvertooth, and Steve Husman. "Irrigation Termination of Upland: An Economic Analysis of Yield, Quality, and Market Factors." *Journal of Cotton Science*, Economics and Marketing Section, Vol. 7(3), 2003: 86–94.
- Tronstad, Russell**, and Dillon Feutz. "Impacts of the 2002 Drought on Western Ranches and Public Land Policies." *Western Economics Forum*, Vol. 1(2), Dec. 2002:19–24.
- Tronstad, Russell**, and Pablo Wong-González. "Cross Border Trade and Perceptions: Friend or Foe?" *Review of Agricultural Economics*, Vol. 21(1), Spring/Summer 1999: 68–85.
- Gum, Russell and **Russell Tronstad**. "The World Wide Web: Applications in Agricultural Economics." *Choices*, First Quarter 1996: 34–36.
- Tronstad, Russell**. "Importance of Melon Type, Size, Grade, Container, and Season in Determining Melon Prices." *Journal of Agricultural and Resource Economics*, Vol. 20(1), July 1995: 32–48.
- Tronstad, Russell** and Russell Gum. "Cow Culling Decisions Adapted for Management with CART." *American Journal of Agricultural Economics*, Vol. 76(2), May 1994: 237–249.

Tronstad, Russell. “The Effects of Firm Size and Production Cost Levels on Dynamically Optimal After-Tax Cotton Storage and Hedging Decisions,” *Southern Journal of Agricultural Economics*, Vol. 23(1), July 1991: 165–179.

Tronstad, Russell, and C. Robert Taylor. “Dynamically Optimal After-Tax Grain Storage, Cash Grain Sale, and Hedging Strategies.” *American Journal of Agricultural Economics*, Vol. 73(1), February 1991: 75–88.

Tronstad, Russell, and Thomas J. McNeill. “Asymmetric Price Risk: An Econometric Analysis of Aggregate Sow Farrowings, 1973–86.” *American Journal of Agricultural Economics*, Vol. 71(3), August 1989: 630–637.

Tronstad, Russell, and C. Robert Taylor. “Effects of the 1986 Tax Reform Act on Grain Marketing Decisions: A Case Study of Winter Wheat Producers.” *North Central Journal of Agricultural Economics*, Vol. 11(2), July 1989: 309–320.

Research and Extension Reports (since 2001, not formally peer reviewed)

Masoud, S., X. Meng, B. Chowdhury, Y.J. Son, C. Kubota, & **R. Tronstad.** 2019. “GRANDES: An online decision support tool for grafting nurseries.” Proceedings of II International Symposium on Vegetable Grafting, 1-8.

Tronstad, Russell, Rajat Gupta, and Chieri Kubota. 2019. "Excel cost budget template estimates for growing grafted, non-grafted, and direct seeded cantaloupes in Arizona; Basic information, land preparation, and production management." Grafting working group template, Proceedings of II International Symposium on Vegetable Grafting, 1-6.

Masoud, S., B. Chowdhury, Y.J. Son, and **R. Tronstad.** 2019. “*Markov-chain Monte-Carlo Sampling for Optimal Fidelity Determination in Dynamic Decision Making.*” In 2019 Institute of Industrial and Systems Engineers (IISE) Annual Conference and Expo, *IISE 2019*, New Orleans, <https://arxiv.org/pdf/1911.03719.pdf>

Tronstad, R, K.G. Cannon, A. Wright, and K.O. Cannon. 2018. “*Economics of Culling of Feeding Cows During Drought,*” *Arizona Cattlelog*, Sept., pp. 40–43.

Masoud, S., B. Chodhury, Y.J. Son, C. Kubota, and **R. Tronstad.** 2018. “*A Dynamic Modeling Framework for Human Hand Gesture Task Recognition.*” In 2018 Institute of Industrial and Systems Engineers (IISE) Annual Conference and Expo, *IISE 2018*, Orlando, U.S., pp. 563–568.

Tronstad, R. November 2017. “*Pasture Rangeland Forage – Rainfall Index,*” Arizona Range and Livestock Newsletter, Cooperative Extension, pp. 4–5.
<http://uacals.org/3xp>

- Teegerstrom, T. and **R. Tronstad**. “*Arizona Ranching Budgets: 2016*,” UA Cooperative Extension Report AZ1734-2017, March 2017, pp. 1–33.
- Kerna, A., G. Frisvold, **R. Tronstad**, and T. Teegerstrom. “*The Contribution of the Beef Industry to the Arizona Economy*,” Cooperative Extension Report, May 2014.
- Teegerstrom, T., S. Nakamoto, **R. Tronstad**, “Producer Business Checkup.” University of Hawaii Cooperative Extension Bulletin, June 2013.
- Teegerstrom, T., **R. Tronstad**, and S. Nakamoto, “An Overview of Risk Management Agency Insurance Products and Farm Service Agency Programs Available for Arizona Agricultural Producers as of December 2012, *Arizona Coop. Extension Publication*, AZ1587, January 2013.
- Tronstad, R.**, K. Nolte, E. Norton, R. Norton, and E. Taylor. “Review of the 2006 Arizona Cotton Season.” *2007 Arizona Cotton Report*, Pub. No. AZ1437, 2007: 1–4.
- Waters, Heather, and **Russell Tronstad**. “The Costs of Illegal Immigration to Arizona’s Border Ranches.” *Arizona Review*, 2007.
- Tronstad, Russell**, (with Eugene Sander) “An Interview with Provost Sander.” *Arizona Review*, 2007.
- Tronstad, Russell**, G. Frisvold, T. Teegerstrom, and T. Rahman “Farm Policy Preferences for Arizona.” *Arizona Review*, 2007.
- Aradhyula, Satheesh, and **Russell Tronstad**. “Arizona’s Agricultural Situation.” *Arizona Review*, 2007.
- Tronstad, Russell**, P. Clay, and E. Norton. “Review of the 2005 Arizona Cotton Season.” *2006 Arizona Cotton Report*, Pub. No. AZ1409, 2006: 1–4.
- Jeff Silvertooth, Abraham Galadima, and **Russell Tronstad**, “Irrigation Termination Effects on Cotton Yield and Fiber Quality.” *2006 Arizona Cotton Report*, Pub. No. AZ1409, 2006: 253–278.
- The 2007 Farm Bill: U.S. Producer Preferences for Agricultural, Food, and Public Policy, project collaborator for Arizona. Farm Foundation Publication 2006-01, Sept. 2006, pp. 1–64.
- Russell Tronstad**, and Trent Teegerstrom “Risk Management Activities.” *Arizona Review*, 2006: 6–8.
- Aradhyula, Satheesh, and **Russell Tronstad**. “Arizona’s Agricultural Situation.” *Arizona Review*, 2006: 18–19.

- Tronstad, Russell, S. Husman, R. Norton, E. Norton, P. Clay, and M. Zerkoune.** “Review of the 2004 Arizona Cotton Season.” *2005 Arizona Cotton Report*, Publ. No. AZ1366, 2005: 1–4.
- Jeff Silvertooth, Abraham Galadima, and **Russell Tronstad**, “Evaluation of Irrigation Termination Effects on Yield and Fiber Quality of Upland Cotton, 2004.” *2005 Arizona Cotton Report*, Publ. No. AZ1366, 2005:31–46.
- Tronstad, Russell**, (with Harry Ayer) “An Interview with the Review’s Founding Editor.” *Arizona Review*, Spring 2005: 1, 21–23.
- Tronstad, Russell**, Jeff Silvertooth, and Abraham Galadima, “Marginal Value of Water for End-of-Season Cotton Production.” *Arizona Review*, Spring 2005: 6–8.
- Aradhyula, Satheesh, and **Russell Tronstad**. “Arizona’s Agricultural Situation.” *Arizona Review*, Spring 2005: 20–21.
- Frisvold, George, Jimmye Hillman, and **Russell Tronstad**, et al. “Bartley P. Cardon, 1913–2005” *Arizona Review*, Fall 2005: 1, 3–11.
- Aradhyula, Satheesh, and **Russell Tronstad**. “Arizona’s Agricultural Situation.” *Arizona Review*, Fall 2005: 12–14.
- Tronstad, Russell**. (with Dean Lueck) “An Interview with the New Bartley P. Cardon Professor.” *Arizona Review*, Spring 2004: 1, 16–17.
- Tronstad, Russell**, and Satheesh Aradhyula. “Tourism and Cross-Border Trade: A Tale of Synergism.” *Arizona Review*, Spring 2004: 6–7.
- Aradhyula, Satheesh, and **Russell Tronstad**. “Arizona’s Agricultural Situation.” *Arizona Review*, Spring 2004: 18.
- Tronstad, Russell**, “Farming Your Net Price Received.” *Cotton Management Economic Note Series*, Feb. 13, 2004.
- Tronstad, Russell, S. Husman, R. Norton, E. Norton, P. Clay, and M. Zerkoune.** “Review of the 2003 Arizona Cotton Season.” In *2004 Arizona Cotton Report*, R. Tronstad, S. Husman, and R. Norton (managing eds.), A College of Agriculture Report Series P-138, Publ. No. AZ1335, University of Arizona, College of Agriculture and Life Sciences, Cooperative Extension, Tucson, Arizona, 2004: 1–4.
- Aradhyula, Satheesh, and **Russell Tronstad**. “Arizona’s Agricultural Situation.” *Arizona Review*, Fall 2004:14–15.

- Tronstad, Russell,** and Le Adams, “Learn More About Direct Marketing.” Southwest Marketing Network: Expanding Markets for Southwest, Small-Scale, Alternative, and, Minority Producers, September 2004: 5.
- Tronstad, Russell,** and Satheesh Aradhyula. “Influence of Quality and Season on Hay Market Decisions.” In 2004 National Alfalfa Symposium Proceedings, December 2004, 21–32.
- Silvertooth, J., A. Galadima, and **R. Tronstad.** “Evaluation of Crop Management Effects on Fiber Micronaire, 2000–2002.” *2003 Arizona Cotton Report*, pp. 85–96.
- Tronstad, Russell** and Satheesh Aradhyula. “Methodology for Modeling Economic Costs of Bioterrorism Attacks on U.S. Meat Supplies.” Confidential Report for SAIC and FSIS, September 2003, pp. 1–22.
- Tronstad, Russell** and Trent Teegerstrom. “Review of Fort McDowell Tribal Farm Crop Suitability Study Update and Additional Land Development.” Confidential Report for Tribe and Stantec Consulting, October 2003, pp. 1–24.
- Tronstad, Russell,** “Arizona Farm Policy Preferences.” *Cotton Management Economic Note Series*, Jan. 7, 2002.
- Tronstad, Russell,** “Use CRC as a Price Risk Tool for Grassley/Dorgan.” *Cotton Management Economic Note Series*, Feb. 19, 2002.
- Silvertooth, J., A. Galadima, and **R. Tronstad.** “Evaluation of Crop Management Effects on Fiber Micronaire, 2000–2001.” *2002 Arizona Cotton Report*, Pub. No. AZ1283, pp. 42–51.
- Jeffrey Silvertooth, Abraham Galadima, and **Russell Tronstad.** “Evaluation of Crop Management Factors, Variety, and Environmental Effects on Fiber Micronaire and Yield of Irrigated Cotton,” *Proceedings of the 2002 Beltwide Cotton Conference*, Atlanta, GA.
- Siedl, Andy, Larry Lev, Neil Meyer, and **Russell Tronstad.** “Western Producers’ Preferences for Federal Agricultural Policy and the 2002 Farm Bill.” Western Rural Development Center and Farm Foundation, Feb. 2002, pp. 1–44.
- Tronstad, Russell,** Dan Osgood, and Robert Young, “Transition of Agricultural Land Ownership and Use,” presentation/selected paper for the WAEA annual meetings, Long Beach, CA, July 29–31, 2002.
- Tronstad, Russell,** “New Legislation = Larger Crop Insurance Subsidies.” *Cotton Management Economic Note Series*, Feb. 9, 2001.

Silvertooth, J.C., A. Galadima, E.R. Norton, and **R. Tronstad**. "Evaluation of Crop Management Effects on Fiber Micronaire, 2000," *2001 Arizona Cotton Report*: 25–33.

Frisvold, George and **Russell Tronstad**. "Overseas Adoption of Bt Cotton. Implications for U.S. Producers." Proceedings of the 2001 Beltwide Cotton Conference, Anaheim, CA, pp. 184–186.

Editing of 2001 and prior years *Arizona Ranchers' Management Guide* articles to obtain Cooperative Extension Publication No. AZ1279. pp. 1–450. Articles added for 2001 to the Ranch Business Management Section of the *Arizona Ranchers' Management Guide* include:

Tronstad, Russell, Trent Teegerstrom, and Xing Gao. "Trade-Off Between Cow Numbers, Calf Size, and Sale Date Incorporating Seasonal Factors and Supplemental Feeding." pp. 181–187.

Tronstad, Russell, and Trent Teegerstrom. "Overview of Ranch Financial Analysis Spreadsheet." pp. 141–146.

Teegerstrom, Trent, **Russell Tronstad**, and Jim Sprinkle. "Modified Cash Projections." pp. 153–156.

Tronstad, Russell, Jim Sprinkle, and Trent Teegerstrom. "Evaluating Management Decisions." pp. 157–174.

Tronstad, Russell. "Drought Assistance Programs and Tax Implications of Drought Induced Livestock Sales." pp. 175–179.

Tronstad, Russell, "Agronomics vs. Markets: Irrigation Termination." *Cotton Management Economic Note Series*, August 14, 2001.

The 2002 Farm Bill: U.S. Producer Preferences for Agricultural, Food, and Public Policy, project collaborator for Arizona. Farm Foundation Publication 2001–02, Sept. 2001, pp. 1–56.

Electronic and Other Delivery

GRANDES -- GRAFTing Nursery Decision Support system. *GRANDES* is a simulation-based decision support system. The goal of *GRANDES* is to help vegetable seedling propagators with facility design decisions (e.g. capacity) and operational decision (e.g. workforce skill and schedule) via providing estimated facility capacity and costs (<https://www.grandes.arizona.edu>).

Small Farm Cost Estimator was developed (specialtycrops.arizona.edu) to determine break-even values when allocating both fixed and variable production costs for operations utilizing hoop houses, green houses, and small open fields for growing specialty crops.

www.localfresh.info This dynamic web portal is designed to connect consumers with direct farm marketers and farmers markets. The site allows producers to enter their

harvest calendars and markets into an online database that consumers can then search for their products and markets. Entering product availability using a Point of Sale export from Square is currently in development with programming expertise from the CALS Communications and Cyber Technology Team.

Ranch Restocking Decision Aide Spreadsheet. This template allows for differences in biological productivity of purchased versus raised replacements and allows a rancher to compare the long-term financial consequences associated with alternative restocking paths. Supplementation, including the use of controlled behavior grazing supplements like low moisture blocks, can be evaluated in this spreadsheet template.

Nursery Cost Analyzer Spreadsheet. This spreadsheet tool helps producers address space allocation decisions to different “crop mixes,” inventory management, set pricing points, quantify production cost differences for primary container sizes, and analyze nursery crop insurance. Financial risks associated with events like the “50-year” frost that occurred in January 2007 for much of the Southwest are made apparent through this spreadsheet template.

Crop Solver. This spreadsheet template optimizes a crop mix of up to 20 different crops subject to land, monthly labor, water, and capital, and alternative risk constraints. Costs and returns are entered in a format consistent with the U of AZ crop budgets. Risk is evaluated in both a diversification and dollar limit framework. A mixed integer routine is used to determine whether crop insurance should be purchased for a crop that it is available for.

Livestock Monitor. About monthly, a market situation newsletter for livestock, forages, feed grains, and international trade is emailed to over 1,000 producers and extension individuals throughout Arizona. A synopsis of each newsletter along with other relevant information for Arizona is sent with a two-page pdf file of the newsletter.

Livestock Record Keeping Workbooks. Over 2,400 of these workbooks have been distributed, largely in tribal areas, to help them better record and manage their livestock. The Navajo Nation Department of Agriculture has required grazing permit holders on the tribe to complete the forms included in the workbook and regularly update these records in order to utilize their permit. Updated livestock record keeping workbooks have also been distributed to beginning ranchers.

Crop Record Keeping Workbooks. Over 1,500 of these workbooks have been distributed to small-scale and beginning farmers helping them obtain loans, in many cases their first farm loan through FSA, and better record daily field activities, weather events, and harvested crop yields.

Scholarly Presentations (since 2001)

Seminars/Conferences

- Tronstad, R.**, R. Gupta, and C. Kubota, “*Cost estimates for grafted, non-grafted, and direct seeded cantaloupes.*” Poster presented at the II International Symposium on Vegetable Grafting, Charlotte, North Carolina, USA, July 14-18, 2019.
- Tronstad, R.** and E. Chin. “*Feasibility of a Local Food Center: A Discrete Choice Analysis.*” presentation at the 2019 WAEA Annual Meeting, Coeur d’Alene ID, July 2, 2019.
- Chin, E. and **R. Tronstad.** “*Revealed Preferences of Food Shopping Environments for Farmers Market Shoppers, Online Respondents, and General Consumers: A Survey Experiment.*” Paper presented at the 2019 WAEA Annual Meeting, Graduate Student Competition, Coeur d’Alene ID, July 1, 2019.
- Chin, E., **R. Tronstad**, and S. Aradhyula. “*A Discrete Choice Analysis of Food Shopping Attributes Desired in Yavapai County, AZ.*” Poster presented at the 2019 WAEA Annual Meeting, Coeur d’Alene, ID, June 30 to July 2, 2019.
- Chowdhury, B., S. Masoud, Y. Son, C. Kubota, and **R. Tronstad**, “*A Dynamic HMM-based Objects Tracking utilizing UHF Passive RFID,*” IISE Annual Conference and Expo 2019, Orlando, FL, May 20, 2019.
- Tronstad, R.**, L. Runfeng. “*Determinants and Spatial Relationships of U.S. Alfalfa Prices.*” Paper presented at the 2018 WAEA Annual Meeting, Anchorage, AK, June 25, 2018.
- Tronstad, R.**, E. Daly, M. Woods, and J. Trapp. “*CES Recent Funding Trends, Formula Allocations, and Directions for Building State Support.*” Paper presented at the 2017 WAEA Annual Meeting, Lake Tahoe, NV, July 10, 2017.
- Tronstad, R.** and P. Thiesse, “*Quantifying Weekly Beef Production Using Monthly Feeder Cattle Placements,*” Paper presented at the 2016 WAEA Annual Meeting, Victoria, Canada, June 26, 2016.
- Tronstad, R.**, M.R. Emerick, I. Sall, “*U.S. Cotton Acreage Response to Subsidized Crop Insurance, 1995 to 2011,*” Agricultural & Applied Economics Association’s Crop Insurance and the 2014 Farm Bill Symposium, Louisville, KY, October 8–9, 2014, available online at ageconsearch.umn.edu.
- Hiol, P., **R. Tronstad**, and J. Walworth, “*Optimal Pruning Frequency of Pecans.*” Paper Presented at the 2014 WAEA Annual Meeting, Colorado Springs, CO, June 24, 2014.

- Meng, C., Y.J. Son, C. Kubota, M. Lewis, **R. Tronstad**. “*Simulation-Based Decision Support System in Cost Estimation for Vegetable Grafting Propagation.*” Paper presented at the 2013 Vegetable Grafting Symposium, San Diego, CA, November 7, 2013.
- F. Saeed, **R. Tronstad**, and S. Aradhyula, “*Willingness to Pay from the Mouth vs. Wallet: A Restaurant Field Experiment with Beef*” Paper Presented at the 2013 WAEA Annual Meeting, Monterey, CA, June 27, 2013.
- F. Saeed, **R. Tronstad**, and S. Aradhyula, “In-Restaurant Field Experiment of Factors that Influence Consumer Choice of Beef Attributes.” Paper Presented at the 2012 WAEA Annual Meeting, Park City, UT, June 21, 2012.
- M. Lewis, C. Kubota, and **R. Tronstad**, “Scenario-Based Economic Analyses of Different Grafting Operation Sizes.” Presented at the Development of Grafting Technology to Improve Sustainability and Competitiveness of the US Fruiting Vegetable Industry, hosted by the 2012 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions, available online at mbao.org.
- Russell Tronstad**, Chieri Kubota, Michael A. McClure, and Mary Olsen, “Economic Considerations of Grafted Seedlings in Southwestern U.S. Muskmelon Production.” *2009 Annual International Research Conference Proceedings on Methyl Bromide Alternatives and Emissions Reductions*, available online at mbao.org.
- Chieri Kubota, Michael A. McClure, **Russell Tronstad**, and Mary Olsen, “Evaluation of Grafted Seedlings in Commercial Muskmelon Production in Southwestern United States.” *2009 Annual International Research Conference Proceedings on Methyl Bromide Alternatives and Emissions Reductions*, available online at mbao.org.
- Thompson, Gary, Satheesh Aradhyula, **Russell Tronstad**, “Impacts of Reference Prices on Imports of Fresh Tomatoes from Mexico.” 2008 Western Ag. Econ. Assoc. Annual Meeting, Big Sky, MT, June 2008.
- Thompson, Gary, Satheesh Aradhyula, **Russell Tronstad**, “North American Trade Suspension Agreement and Winter Tomato Supply Response.” 2007 Western Ag. Econ. Assoc. Annual Meeting, Portland, OR, July 2007.
- Tronstad, Russell**, “Effectively Communicating Research Results with a Poster: Opportunities and Challenges.” 2007 American Agricultural Economics Association Annual Meeting, Organized Symposium, Portland, OR, July 2007.
- Tronstad, Russell** and Heather Waters, “Modeling Federally Inspected Steer and Heifer Slaughter Marketings Using Lagged Feedlot Placement Data.” 2006 Western Ag. Econ. Assoc. Annual Meeting, Anchorage, AK, July 2006.

- Tronstad, Russell**, Jeffrey Silvertooth, and Abraham Galadima, “Early Irrigation Termination of Cotton as a Drought Mitigation Tool.” 2006 Western Ag. Econ. Assoc. Annual Meeting, Anchorage, AK, July 2006.
- Tronstad, Russell**, “From Farm to Fork: Profiles of Innovative Western Direct Marketers.” Organized symposium presented at the *American Agricultural Economics Association Annual Meetings*, Denver, CO, August 1–4, 2004.
- Tronstad, Russell**, John Marchello, “Price Efficiency of Grid versus Live Pricing,” Selected paper presented at the *Western Economics Association International / Western Agricultural Economics Association Annual Meetings*, Denver, CO, July 11–15, 2003.
- Frisvold, George, and **Russell Tronstad**. “Global Impacts of BT Cotton,” Paper presented at the *2003 National Cotton Beltwide Conference*, Memphis, TN, January 9–13, 2003.
- Tronstad, Russell**, Daniel Osgood, and Robert Young, “Transition of Agricultural Land Ownership and Use,” Selected paper presented at the *Western Agricultural Economics Association Annual Meetings*, Long Beach, CA, July 29–31, 2002.
- Aradhyula, Satheesh and **Russell Tronstad**. “Factors Influencing the Propensity for Cross-Border Trade.” Selected paper presented at the *Western Agricultural Economics Association Annual Meetings*, Logan, UT, July 8–11, 2001.
- Tronstad, Russell**. “Optimal Production Inputs with Varying Quality and Yield Components: Irrigation Termination of Upland.” Selected paper presented at the *Western Agricultural Economics Association Annual Meetings*, Logan, UT, July 8–11, 2001.
- Teegerstrom, Trent and **Russell Tronstad**. “Managing Herd Composition of Range Cattle: Sale Weight and Seasonal Factors.” Selected paper presented at the *Western Agricultural Economics Association Annual Meetings*, Logan, UT, July 8–11, 2001.
- Tronstad, Russell**. “Harmonizing Infrastructure Between United States and Mexico.” Invited presentation for *Transportation Bottlenecks in the US-Mexico Food System* sponsored by SAGAR, USDA’s Emerging Markets Program, ERS, and FAS, Laredo, TX, January 24–25, 2001.
- Frisvold, George, **Russell Tronstad**, “Overseas Adoption of Bt Cotton: Implications for U.S. Producers.” Paper presented at the *2001 National Cotton Beltwide Conference*, Anaheim, CA, January 9–13, 2001.

Community / Outreach Presentations (since 2014)

2019

- RMA presentation, “*Economic Risks and Costs of Trich in AZ Beef Herds.*” Marana, AZ, January 10, 2019.
- RMA presentation, “*Ag Outlook and Farm Bill Considerations for Central AZ.*” Buckeye, AZ, January 16, 2019.
- Beginning Farmer & Rancher statewide conference and presentations at the beginning of the Southwest Indian Agricultural Association Conference, “*Beginning Farmer and Rancher Grant and Objectives, Soil Health Considerations for Ranching, and Navajo Cultural Values and Issues for Horses,*” Laughlin, NV, January 21, 2019.
- Poster presentation at SWIAA, “*Beginning Farmer & Rancher Activities and RMA Livestock Insurance Tools.*” Laughlin, NV, January 22-24, 2019.
- Presentation to Beginning Farmers, “*Business Planning Tools and Resources for Beginning Farmers.*” Florence, AZ, February 2, 2019.
- Presentation at Southwest Ag Summit, Latino Farm Symposium, “*Finance and Assistance Programs for Beginning, Limited-Resource, and Socially Disadvantaged Producers.*” Yuma, AZ, February 20, 2019.
- ALVSCE Poster Forum with Elena Chin and Dr. Aradhyula, “*A Discrete Choice and Revealed Preference Analysis of Food Shopping Attributes for Yavapai County Consumers.*” Tucson, AZ, March 22, 2019.
- RMA presentation, “*Overview of USDA Programs for Producers and Record Keeping Tools.*” Florence, AZ, April 4, 2019.
- RMA presentation, “*Alfalfa’s Trade and Market Situation.*” Maricopa, AZ, April 10, 2019.
- Beginning Rancher presentations, “*Overview of Developing Opportunities and Growing Businesses of Limited-Resource and Native American Beginning Ranchers.*”
 - + San Carlos, AZ, April 30, 2019.
 - + Stockton Pass, AZ, May 5, 2019.
 - + Polacca, AZ, May 14, 2019.
- Presentation to LMIC Technical Advisory Committee, “*Trade Impacts on Alfalfa in the West.*” Denver, CO, May 22, 2019.
- RMA poster presentation at Department of Navajo Nation Summit with Elena Chin, “*2019 Whole Farm Revenue Protection for Tribal Ranches.*” Twin Arrows, AZ, June 19-21, 2019.
- Poster presentation at International Symposium on Vegetable Grafting with R. Gupta and C. Kubota, “*Cost estimates for grafted, non-grafted, and direct seeded cantaloupes.*” Charlotte, NC, July 14-18, 2019
- RMA presentations to SE tree nut producers, “*Ag Census Trends for Tree Nuts, RMA Programs for SE AZ Tree Nuts, and Whole Farm Revenue Protection.*” Willcox, AZ, July 12, 2019.
- RMA presentations to central AZ dairy producers, “*Alfalfa Market Trends and Recent Changes to USDA Dairy Programs.*”
 - + Buckeye, AZ, July 29, 2019.
 - + Stanfield, AZ, August 1, 2019.

- Poster presentations at Annual Extension Conference, “*LocalFresh.Info – connecting consumers to local producers and market managers*” and “*A Discrete Choice and Revealed Preference Analysis of Food Shopping Attributes for Yavapai County Consumers,*” Tucson, AZ, August 6-7, 2019.
- Beginning Farmer presentations, “*Prescott Local Food Center Study, LocalFresh.Info, and Beginning Farmer grant activities for Prescott.*” Prescott, AZ, August 8, 2019.
- Beginning Rancher presentation, “*Vision, Mission, and Cash Flow Considerations for Beginning Ranchers.*” Continental, AZ, August 9, 2019.
- Beginning Rancher presentation, “*Developing Opportunities and Growing Businesses of Limited-Resource and Native American Beginning Ranchers.*” Payson, AZ, August 27, 2019.
- Beginning Farmer presentation, “*Selected Beginning Farmer Graduate Stories.*” Florence, AZ, September 3, 2019.
- Beginning Rancher statewide conference organized and presentation, “*Value-Added Protocols for Marketing Calves.*” Rimrock, AZ, October 19, 2019.
- Beginning Rancher presentations, “*Herd Health/Nutrition and Range Management: Fertility vs. Numbers.*”
 - + Tsaile, AZ, October 22, 2019
 - + Kykotsmovi, AZ, October 23, 2019
 - + Tuba City, AZ, October 24, 2019
- Beginning Farmer presentation, “*Planning Your Farm Operation: Costs and Checklists for Beginning Farmers.*” Florence, AZ, November 5, 2019.
- Lunch panelist, “*Justice for Humans, Animals, and the Environment.*” College of Law, Tucson, AZ, November 8, 2019.
- RMA presentation, “*Economics of Niche Beef Direct Marketing.*” San Xavier, AZ, November 9, 2019.
- Beginning Rancher presentation, “*Business Planning Tools and Issues for Beginning Ranchers.*” Douglas, AZ, November 20, 2019.
- Beginning Farmer presentation, “*Planning Your Farm Operation: Costs and Checklists for Beginning Farmers.*” Benson, AZ, December 13, 2019.

2018

- RMA presentations, “*Outlook and Risk Management Considerations for AZ’s Forage and Cotton.*”
 - + Buckeye, AZ, January 10, 2018
 - + Casa Grande, AZ, January 11, 2018
 - + Marana, AZ, January 16, 2018
- RMA presentation to SE crop producers, “*Risk Management of Pistachios and Forage.*” Southeast Ag Days, Willcox, AZ, February 7, 2018.
- Presentation to SE AZ crop producers, “*Producer Decisions for Seed Cotton becoming a Title I Commodity as part of the 2018 Bipartisan Budget Act.*” Safford, AZ, February 16, 2018.
- Presentation to Southern AZ livestock producers, “*U.S. Livestock Marketing and Global Issues with Highlights on Brazil and China.*” Tucson, AZ, February 27, 2018.

- Producer webinar presentation on “*Economic Viability of Grafting Cucurbits in the West*,” workshop held online as part of Specialty Crops grafting grant, March 16, 2018.
- RMA presentation to Southern AZ specialty crop producers, “*Risk Management Issues for Grapes and RMA Crop Insurance Options*,” Benson, AZ, March 23, 2018.
- RMA presentation to Central AZ forage producers, “*Determinants of Alfalfa Prices and Risk Management Considerations*,” Maricopa Agr. Center, AZ, March 28, 2018.
- Presentation to Northern AZ livestock producers, “*Economics of Culling Decisions*,” Camp Verde, AZ, May 8, 2018.
- Presentation to Central AZ livestock producers and AZ/NM FS personnel, “*Economics of Forced Cow Culling during Drought*,” Fountain Hills, AZ, May 11, 2018.
- Presentation to White Mountain Apache tribal members, “*Evaluating Alternative Restocking Paths after Drought*,” Whiteriver, AZ, May 11, 2018.
- Presentation to Northern AZ specialty crop producers, “*Hoop House Experiences from the Beginning Farmer Project*,” with U. Schuch, Star School, Leupp/Flagstaff AZ, June 1–2, 2018.
- RMA presentation to LMIC/TAC members, “*How AZ Utilizes the Livestock Monitor, LMIC Weekly, In the Cattle Markets, and LMIC Data*,” Des Moines, IA, June 4, 2018.
- Presentation at Western Extension Committee meeting, “*2018 Farm Bill Considerations*,” Anchorage, AK, June 24, 2018.
- RMA presentation to Southern AZ tree nut producers, “*RMA Insurance Tools: Pistachios, Pecan Revenue, and Pecan Tree Products*,” Elfrida, AZ, July 17, 2018.
- RMA presentation to San Carlos Apache crop producers, “*Hoop House Technology and Product Attributes Demanded by Farmers Market Consumers*,” San Carlos, AZ, August 4, 2018.
- Poster presentation at Annual Extension Conference, “*Food Shopping Environment and Attributes Desired: Case for Yavapai County Consumers*,” with E. Chin and S. Aradhyula, Tucson, AZ, August 7–8, 2018.
- RMA presentation to Central AZ specialty crop producers, “*USDA/RMA Resources to Protect Your Farm Business*,” Florence, AZ, August 24, 2018.
- RMA presentations to specialty crop producers, “*LocalFresh.Info*.”
 - + Florence, AZ, August 24, 2018.
 - + Prescott, AZ, August 27, 2018.
- RMA presentations to specialty crop producers, “*Local Food Center vs. Farmers Market Shopping Environments: Marginal Propensity to Consume Results*.” with E. Chin.
 - + Florence, AZ, August 24, 2018.
 - + Prescott, AZ, August 27, 2018.
- RMA presentation to Northern AZ specialty crop producers, “*USDA/RMA Resources for Grapes and Non-Insured Yavapai County Crops*,” Prescott, AZ, August 27, 2018.
- RMA presentations to livestock producers, “*Livestock Market Update*” and “*Livestock Recordkeeping Tools*.” – same presentation at each location.
 - + Benson, AZ, September 7, 2018.
 - + Santa Rosa, AZ, September 11, 2018.

- + San Carlos, AZ, September 14, 2018.
- RMA presentations to livestock producers, “*USDA/RMA’s Pasture Rangeland Forage, Rainfall Index, and Whole Farm Revenue Programs for Your Grid,*” and “*Spreadsheet Tools to Evaluate Drought Management and Restocking Alternatives.*”
 - unique numbers and slides for each location.
 - + Benson, AZ, September 7, 2018.
 - + Santa Rosa, AZ, September 11, 2018.
 - + San Carlos, AZ, September 14, 2018.
- Mandatory national beginning farmer and rancher conference for PIs, “*Developing Opportunities and Growing Businesses of Limited-Resource and Native American Beginning Farmers and Ranchers in Arizona.*” Albuquerque, NM, September 24–26, 2018.
- Beginning Farmer workshop in Central AZ, arranged for keynote speaker on “*Building Soils in an Arid Climate,*” and gave presentation on “*Proposed Curriculum for Specialty Crop Producers.*” Florence, AZ, December 11, 2018.

2017

- RMA presentation at Southwest Indian Agricultural Association Conference, “*Recordkeeping, Whole Farm Revenue and Rainfall Index Insurance.*” Laughlin, NV, January 18, 2017.
- Poster presentation at SWIAA, “*RMA Livestock Insurance Tools.*” Laughlin, NV, January 18–19, 2017.
- Beginning Farmer presentations, “*Growing in High Tunnels and Transplanting to the Field: Economic Considerations.*”
 - + Florence, AZ, February 7, 2017
 - + Flagstaff, AZ, February 8, 2016
- Beginning Farmer presentation, “*Recordkeeping Tools and Financing Alternatives for Beginning Farmers.*” Flagstaff, AZ, February 22, 2017.
- Southwest Ag Summit presentation, “*RMA/USDA Insurance Tools and Trends for AZ’s Cotton.*” Yuma, AZ, February 23, 2017.
- RMA presentation, “*Livestock Market Outlook and USDA/RMA Risk Management Tools for San Carlos Tribe.*” San Carlos, AZ, February 27, 2016.
- Beginning Farmer presentation, “*Certification and Labeling Considerations and Organic Certification Issues.*” Flagstaff, AZ, March 8, 2017.
- Range Livestock Nutrition Workshops, “*International Livestock Markets and Paying for Supplement.*”
 - + Safford, AZ, March 14, 2017
 - + Holbrook, AZ, March 15, 2017
 - + Kingman, AZ, March 16, 2017
- Beginning Farmer presentation, “*Market Analyses and Assessing Demographics of Direct Markets for Flagstaff.*” Flagstaff, AZ, March 22, 2017.
- Beginning Farmer workshop organized, “*Arizona Domestic Wells Water Workshop.*” Benson, AZ, April 12, 2017.
- Beginning Farmer workshop organized, “*Small Animal Livestock Production Considerations.*” Benson, AZ, April 26, 2017.

- Beginning Farmer presentation, “*Developing Market Goals and Assessing Benson Demographics for Direct Marketing.*” Benson, AZ, May 10, 2017.
- Beginning Farmer workshop organized, “*Food Safety and FSMA issues for Direct Marketers.*” Flagstaff, AZ, June 20, 2017.
- Risk Management Presentations and half-day workshops, “*International Trade Situation and Market for Beef,*” “*Strategies to Manage for Drought and Market Risks,*” and “*Hands-on Spreadsheet Tools for Evaluation the Profitability of Supplement, Other Inputs and Herd Mix with your laptop.*”
 - + Clifton, AZ, July 5, 2017
 - + Douglas, AZ, August 16, 2017
 - + Flagstaff, AZ, August 22, 2017
 - + Kingman, AZ, August 23, 2017
 - + Globe, AZ, September 22, 2017
 - + Sonoita, AZ, October 4, 2017
- Beginning Farmer presentation, “*Assessing Production and Marketing Issues in Pinal County.*” Winkleman, Florence, and Raldolph, AZ, October 18, 2017.
- Prescott Farmers Market presentation, “*Concept of a Local Food Center.*” Prescott, AZ, October 21, 2017.
- Beginning Farmer presentation, “*Small Plot Farming Issues at MAC.*” Maricopa, AZ, October 25, 2017.
- The Future of AZ Agriculture 10 Years and Beyond: A Panel Discussion, co-organized with Joel Cuello and presented on, “*Trends in AZ’s Agriculture.*” Tucson, AZ, November 3, 2017.
- RMA presentation, “*Livestock Risk Management Programs: PRF-Rainfall Index, WFRP, and LRP.*” Twin Arrows, AZ, November 15, 2017.
- RMA poster, “*Market Trends and RMA Programs for Ranches and Small Farms.*” Twin Arrows, AZ, November 15–17, 2017.
- RMA presentation, “*Whole Farm Revenue Protection.*” Paulden, AZ, November 27, 2017.
- Beginning Farmer presentation, “*Assessing Behavioral Changes from the Beginning Farmer Project.*” Florence, AZ, November 29, 2017.
- Beginning Farmer presentation, “*Trends with Organic Certification and Direct Marketers in AZ.*” Benson, AZ, December 13, 2017.

2016

- RMA presentation at Southwest Indian Agricultural Association Conference, “*Beef Price Outlook and Managing Livestock Market and Financial Risks.*” Parker, AZ, January 20, 2016.
- Poster presentation at SWIAA, “*RMA Livestock Insurance Tools.*” Parker, AZ, January 19–21, 2016.
- RMA presentation, “*Outlook and Crop Insurance Considerations with Limited Water.*”
 - + Marana, AZ, January 26, 2016
 - + Buckeye, AZ, January 27, 2016
 - + Casa Grande, AZ, January 28, 2016

- Beginning Farmer presentations, *“Overview of BF Program, Establishing Goals, and Intro to Developing a Business Plan.”*
 - + Benson, AZ, January 27, 2016
 - + Benson, AZ, October 5, 2016
- Beginning Farmer presentations, *“Market Considerations for Hoop House Production and Knowledge Assessment Evaluation.”* Florence, AZ, February 3, 2016.
- Beginning Farmer presentations, *“Recordkeeping and Financials for Small-Scale Farming.”*
 - + Benson, AZ, February 10, 2016
 - + Benson, AZ, October 19, 2016
- Beginning Farmer presentations, *“Certification and Labeling Issues and Organic Marketing Considerations from the 2012 Ag Census.”*
 - + Benson, AZ, February 24, 2016
 - + Benson, AZ, November 2, 2016
- Beginning Farmer presentations, *“Small Animal Considerations for Beginning Farmers.”* Florence, AZ, March, 1, 2016.
- RMA presentation, *“Marketing Options for Cattle: Livestock Risk Protection vs. Futures and Options.”* Safford, AZ, March 2, 2016.
- Beginning Farmer presentations, *“Market Analyses and Enterprise Planning/Budgeting.”*
 - + Benson, AZ, March 9, 2016
 - + Benson, AZ, November 30, 2016
- Beginning Farmer tour, *“Cost and Labor Issues Associated with HH Production and LocalFresh.info.”* Campus Ag. Center, Tucson, AZ, March 16, 2016.
- Beginning Farmer presentation, *“Financing, Microloans, and Grant Opportunities.”* Benson, AZ, March 23, 2016.
- RMA presentations, *“Rainfall Index Insurance for Arizona Rangelands.”*
 - + Twin Arrows, AZ, March 12, 2016
 - + Willcox, AZ, March 13, 2016
- Beginning Farmer presentation arranged, *“Mushroom Production in Arizona.”* Dr. Barry Pryor, Florence, AZ, April 6, 2016.
- Beginning Farmer presentation of *“Hoop House Construction and Production/Market Considerations for the Western Navajo Nation.”* Tonalea Day School, April 11, 2016.
- Beginning Farmer presentation arranged, *“Arizona’s Water Right Laws for Wells.”* Janick Artiola, Florence, AZ, May 4, 2016.
- Beginning Farmer presentation arranged, *“Solar Electricity Generation for Small Farms.”* Dr. Edward Franklin, Florence, AZ, June 7, 2016.
- RMA presentations, *“RMA Programs for Colorado River Agriculture.”*
 - + Mesquite, NV, July 25, 2016
 - + Parker, AZ, August 31, 2016
- Beginning Farmer presentation arranged, *“Integrated Pest Management for Small Farms.”* Dr. Ayman Mostafa, Florence, AZ, September 6, 2016.
- Beginning Farmer presentation of *“Hoop House Construction and Production/Market Considerations for Central Arizona.”* Florence, AZ, September, 29, 2016.
- Beginning Farmer presentation of *“Local Foods and using LocalFresh.info to Connect with Local Consumers.”* Florence, AZ, October, 4, 2016.

- RMA presentation, “*RMA Program Update for Forage and Cotton Production.*” Parker, AZ, October 19, 2016.
- Beginning Farmer presentation of “*Using LocalFresh.info to Connect with Consumers.*” Florence, AZ, October, 4, 2016.
- Beginning Farmer presentation arranged, “*Introduction to Aquaponic Production and Marketing Issues in Central Arizona.*” Dr. Jason Licamele, Florence, AZ, November 1, 2016.

2015

- Tour for WEC group, “*Commercial Organic Vegetable Production and Composting.*” Buckeye, AZ, January 5, 2015.
- Presentation for AMS grant, “*LocalFresh.info and Assessing Product Attributes for Direct Farm Markets.*” Sierra Vista, AZ, January 13, 2015.
- RMA presentation at Southwest Indian Agricultural Association Conference, “*Rangeland Vegetative Index, Livestock Risk Protection, and Farm Service Agency Insurance Products.*” San Xavier, AZ, January 20, 2015.
- FSA presentations, “*2014 Farm Bill Update and Utilizing the Online Farm Bill Decision Tools.*”
 - + Casa Grande, AZ, January 28, 2015
 - + Maricopa, AZ, February 18, 2015
- RMA presentation, “*Outlook for AZ Crop Commodities and 2014 Farm Bill Update.*”
 - + Buckeye, AZ, February 4, 2015
 - + Marana, AZ, February 16, 2015
 - + Casa Grande, AZ, February 17, 2015
 - + Safford, AZ, March 4, 2015
- Beginning Farmer presentations of “*Hoop House construction and assessing market size and opportunities for the Western Navajo Nation.*”
 - + Coal Mine (S. of Tuba City), AZ, March 12, 2015
 - + Tonalea (E. of Tuba City), AZ, March 12, 2015
- RMA presentation, “*RMA Insurance Products for Yuma and Alfalfa Exports.*” Yuma, AZ, April 1, 2015.
- Beginning Farmer presentations, “*Overview of BF Program and Economics of HH Production.*”
 - + Tucson, AZ, April 8, 2015
 - + Safford, AZ, April 9, 2015
 - + Florence, AZ, April 14, 2015
- Beginning Farmer presentations, “*Securing Grants, Financing, and Record Keeping Tools.*”
 - + Tucson, AZ, April 22, 2015
 - + Safford, AZ, April 23, 2015
 - + Florence, AZ, May 5, 2015
- Beginning Farmer presentations, “*Assessing Market Size and Food Safety Considerations.*”
 - + Tucson, AZ, May 6, 2015
 - + Safford, AZ, May 7, 2015

- RMA computer workshop and presentation to Annie’s Project participants, “*Vegetative Index Rangeland Insurance, Livestock Risk Protection, and Spreadsheet Tools for Ranch Profitability.*” Flagstaff, AZ, May 15, 2015.
- Beginning Farmer presentations, “*Certification and Labeling Considerations for Small Farm Producers.*”
 - + Tucson, AZ, May 20, 2015
 - + Safford, AZ, May 21, 2015
- Beginning Farmer presentation, “*Developing a Business Plan and Understanding Financial Statements.*” Florence, AZ, June 2, 2015.
- RMA presentation at Southwest Indian Livestock Days, “*Vegetative Index Rangeland Insurance, FSA Livestock Programs, and Beef Situation and Outlook.*” Twin Arrows, AZ, June 16, 2015.
- Presentation for AMS grant, “*Certification and Labeling and LocalFresh.info.*” Show Low, AZ, July 15, 2015.
- Poster presentation at the Arizona Cattle Growers Annual Conference, “*RMA Livestock Insurance Tools and AZ Cost Estimates for Cow-Calf Operations.*” Tucson, AZ, July 22–23, 2015.
- Computer workshop and presentation, “*Dissecting FSA and RMA Livestock Programs, Cost of Production Benchmarking, and Spreadsheet Tools for Ranch Profitability.*” Willcox, AZ, August 19, 2015.
- Beginning Farmer presentation, “*Evaluating Production Constraints and Market Opportunities with Organics.*” Florence, AZ, September 8, 2015.
- Mandatory national beginning farmer conference for PIs, “*Growing the Management Skills of Native Americans and Limited-Resource Beginning Farmers in the Southwest.*” Reno, NV, September 21–23, 2015.
- Presentation to AZ and NM ranchers, “*Evaluating Production Risks and Economic Costs within Wolf Country.*” Willcox, AZ, October 1, 2015.
- Testimony provided to U.S. Small Business Administration, Regions VI and IX Small Business Owners and Business Leaders, “*Economic Wolf Linkages: Visual, Indirect, and Ripple Effects.*” Provided via conference link among participants in Washington D.C., AZ, and NM, October 14, 2015.
- Beginning Farmer presentation, “*Certification and Labeling Issues for Small Farm Producers.*” Florence, AZ, October 6, 2015.
- Beginning Farmer presentations, “*Developing a Business Plan, Goals, and SWOT Analyses.*”
 - + Prescott, AZ, October 26, 2015
 - + Tonalea, AZ, October 27, 2015
- Beginning Farmer presentation, “*Financial Analyses and Developing a Viable Market Size for Small Farms.*” Florence, AZ, November 3, 2015.
- Beginning Farmer presentations, “*Basics of Record Keeping, Goal Setting for Youth, and High Elevation HH Production Possibilities.*”
 - + Prescott, AZ, November 9, 2015
 - + Tonalea Middle School, November 10, 2015
- Beginning Farmer presentation, “*Enterprise and Financial Analyses for Small Scale Agriculture.*” Phoenix, AZ, November 16, 2015.

- Beginning Farmer presentation, *“Using AgPlan as a Business Planning Tool and Certification and Labeling Issues for Small Farms.”* Prescott, AZ, November 23, 2015.
- Beginning Farmer presentation, *“Careers in Agriculture and Basics of Food Labeling.”* Tonalea Middle School, November 24, 2015.
- Beginning Farmer tour, *“Growing for Direct Markets at a High Elevation.”* Whipstone Farms, December 15, 2015.

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- Beginning Farmer presentations to Annies Project participants, *“Ranch cost analyses and supplementation decisions; and Utilizing Crop Solver for selecting a crop mix with monthly financial, water, and labor constraints.”* Benson, AZ, January 27, 2014.
- Beginning Farmer presentation to IRC individuals, *“Evaluating market size for specialty crops using CSA and Farmers’ Markets.”* Phoenix, AZ, February 3, 2014.
- Beginning Farmer presentations of *“Hoop House construction costs and assessing market size and opportunities for local direct markets.”*
 - + Tucson, AZ, February 12, 2014
 - + Cottonwood, AZ, February 18, 2014
 - + Phoenix/IRC, AZ, February 18, 2014
- Beginning Farmer presentations of *“Certification and Labeling Considerations for Agricultural Producers and Direct Farm Marketing Alternatives.”*
 - + Tucson, AZ, February 26, 2014
 - + Safford, AZ, February 27, 2014
 - + Phoenix/IRC, AZ, March 17, 2014
 - + Cottonwood, AZ, March 18, 2014
- Integrated Crop Management presentations to producers, *“Outlook and Crop Insurance Considerations Amidst Drought.”*
 - + Buckeye, AZ, March 3, 2014
 - + Marana, AZ, March 4, 2014
 - + Casa Grande, AZ, March 5, 2014
- Beginning Farmer presentations of *“Record Keeping, Crop Plans, and Financing your Business Plan.”*
 - + Tucson, AZ, March 12, 2014
 - + Safford, AZ, March 13, 2014
- Beginning Farmer presentations of *“Financial Metrics and Grants/Loans available to Beginning Farmers.”*
 - + Tucson, AZ, March 26, 2014
 - + Safford, AZ, March 27, 2014
- Critique and recommendations for business plans presented from Cottonwood area Beginning Farmers, Cottonwood, AZ, April 1, 2014.
- Presentation to Eastern Navajo Nation producers of *“Adding Value to High Elevation Native Specialty Crops,”* Tuba City, AZ, April 3, 2014.
- Field Day review of IRC crop plantings, *“Monitoring Water and Labor Costs on Small Scale Plots,”* Chandler, AZ, April 15, 2014.
- Presentation to Tucson Community Food Alliance members on *“Aligning Producer Harvest Calendars with Locavores,”* Tucson, AZ, April 28, 2014.

- Presentations to Gila River Farm Board:
 - + “*Developing a Farm Plan*,” Sacaton, AZ, May 13, 2014.
 - + “*Risk Assessment of Labor and Market Issues*,” Sacaton, AZ, May 27, 2014.
- Presentation to Southern AZ ranchers on “*Economics of Developing or Purchasing Replacement Heifers*.” Tucson, AZ, June 12, 2014.
- RMA presentation to SWIAA members on “*Potential Payouts of Vegetative Index Insurance for Small Livestock Producers*.” Flagstaff, AZ, August 9, 2014.
- RMA presentation to Southern AZ ranchers on “*Research and Findings on Consumer Beef Preferences and Drought Management Tools*,” Oracle, AZ, December 5, 2014.
- AMS presentation to Eastern Navajo Nation producers on “*Certification and Labeling Issues and Assessing Market Size for Specialty Native American Crops*,” Tuba City, AZ, December 29, 2014.

Grants and Contracts (Dr. Tronstad is **PI of grant/contract unless noted otherwise**).

Since 2001, Dr. Tronstad has been the PI of 40 grants that total \$4.61 million and co-PI of 21 grants that total \$2.99 million. Combined, he has been the PI or co-PI in securing about \$400K annually in external funding that has gone to the University of Arizona.

- Risk Management Education for Dairy and Beef Producers in AZ, NV, and NM, Western Center for Risk Management Education, \$99,990 (with D. Diaz, J. Grace, N. Notah, N. Brawley, A. Carlisle, J. Arias, E. Alden, S. Sekaquaptewa and G. Farrell) 2020/21 (*submitted, March 26, 2020*)
- Household Decision Making under Uncertainty, Climate Information Service, and Rural Livelihoods (NSF), \$493,084, (with T. Rahman (PI) and T. Galarneau), 2019/23 (*resubmission*)
- Farm Plan for Gila River Indian Community Farms, \$21,976, 2019/20.
- Marketing and Management Toolset for Localfresh.Info App. (Extension Strategic Program Initiative), \$26,175 (AREC’s portion), (with M. Rahr and J. Schalau), 2019/20
- San Xavier Cooperative Association Value-Added Meat Processing (subaward, SXCA/USDA), \$10,634, 2018/20
- Nalwoodi Denzhone Rural Business Development Program on San Carlos Apache Reservation (subaward, SanCarlos / USDA/RD), \$2,500, (with (PI) Trent Teegerstrom), funded to Tribal Extension Programs, 2018/20
- West Navajo Nation Local Food Business Development Program (subaward, Star School / USDA / RD), \$2,250, (with Trent Teegerstrom (PI)), funded to Tribal Extension Programs, 2018/20
- Developing Opportunities and Growing Businesses of Limited-Resource and Native American Beginning Farmers and Ranchers in Arizona, \$600,000, awarded from USDA/NIFA, (with L. Austin, A. Brischke, A. Hall, E. Greene, J. Grace, J. Sherman, and A. Wright), 2018/22
- Risk Management Education for Arizona’s Livestock, Dairy, Forage, and Tree Nut Producers, \$99,990, awarded from USDA/RMA, (with D. Diaz, A. Hall, E. Greene, J. Sherman, and A. Wright), 2018/20.
- Feasibility of a Local Food Center near Prescott, \$24,243 awarded from USDA/RD, 2017/19.

- Risk Management Education for Arizona's Livestock, Tree Nut, Forage and Small Specialty Crop Producers, \$92,918, awarded from USDA/RMA, (with A. Wright and J. Sherman), 2017/18.
- Development of Grafting Technology to Improve Sustainability and Competitiveness of the U.S. Fruiting Vegetable Industry. UA is a sub-award on this five institution USDA/NIFA Multi-Disciplinary Specialty Crop Grant. Total grant is \$2.5 million and initial funding was for 4 years, subject to satisfactory progress after 2 years. (UA PIs Chieri Kubota for 2016/17 and Young-Jun Son for 2017/18. (Dr. Frank Louws, PI for all 6 institutions) (USDA/NIFA Specialty Crops) (AREC's portion was \$75,775), 2016/20.
- Risk Management Education for Arizona Livestock Producers on Record Keeping, Rainfall Index and Whole Farm Insurance, \$80,225 awarded from USDA/RMA, (with T. Teegerstrom), 2016/17.
- Growing the Management Skills of Native American and Limited-Resource Beginning Farmers in the Southwest, \$750,000 awarded from USDA/NIFA, (with U. Schuch, T. Teegerstrom, M. Crain, S. Clixby, R. LeMaster, L. Austin, R. Freeman), 2014/17.
- Risk Management Education for Southwest Livestock, Forage, and Specialty Crop Producers on Record Keeping and Available Insurance Programs, \$89,133 awarded from USDA/RMA, (with T. Teegerstrom), 2015/16.
- 2014 Farm Bill Education for Arizona, \$20,811 awarded from USDA/FSA, with T. Teegerstrom (PI), 2014/15.
- Risk Management Education for Livestock Producers in the Southwest on Vegetative Index, AGR-Lite and Recordkeeping, \$81,487 awarded from USDA/RMA, (with T. Teegerstrom), 2014/15.
- Development of Grafting Technology to Improve Sustainability and Competitiveness of the U.S. Fruiting Vegetable Industry, UA is a sub-award on this six institution USDA/NIFA Multi-Disciplinary Specialty Crop Grant. Total grant of this renewal grant is around \$2 million and UA's portion is \$300,895. (with Dr. Chieri Kubota (PI for UA), and Dr. Son), 2014/16. (AREC's portion was \$31,581)
- Hedging Pecans: Yield, Quality, and Economic Implications, Arizona Specialty Crop Block Grant, (with J. Walworth (PI)), \$89,301, 2012/14.
- Expanding Markets and Market Coordination for Native American and Other Specialty Crop Producers Using LocalFresh.info, \$55,000 awarded from USDA/NIFA (with T. Teegerstrom), 2013/14.
- Enhancing Beginning Farmer Specialty Crop Management Skills and Opportunities in the Southwest, \$675,750 awarded from USDA/NIFA, (with U. Schuch, T. Teegerstrom, and J. Vosper), 2011/14.
- Risk Management Education on AGR-Lite, Vegetative Index, and Worker Safety Solutions for Arizona and California Specialty Crop and Limited Resource Producers, \$100,000 awarded from RMA's Community Outreach Partnership with T. Teegerstrom (PI) and U. Schuch, 2011/12.
- Development of Grafting Technologies to Improve Sustainability and Competitiveness of the U.S. Fruiting Vegetable Industry, UA is a sub-award on this five institution USDA/NIFA Multi-Disciplinary Specialty Crop Grant. Total grant is \$2.49 million and UA's portion is \$323,964. Dr. Chieri Kubota (PI for UA), Dr. Son and Dr. Tronstad, 2011/13.

- Specialty Crop Risk Management Tools and Strategies for Pests and Limited Irrigation Water, \$10,000 awarded from RMA Commodity Partnership Small Session, 2010/11.
- Arizona Pistachio Association Risk Management Education, \$10,000 awarded from RMA Commodity Partnership Small Session (with T. Teegerstrom), 2010/11.
- SURE, AGR-Lite, and LRP Risk Management Education for Arizona Livestock and Forage Producers, \$10,000 awarded from RMA Commodity Partnership Small Session (with S. Aradhyula), 2010/11.
- Integrating Organic Production with Subsurface Drip Irrigation: Meeting the Challenge, (with J. Walworth (PI)), \$56,536 awarded from Arizona Specialty Crop Block Grant, 2009/2011.
- LRP and AGR-Lite Education for Arizona Livestock and Forage Producers, \$20,000 awarded from RMA Commodity Partnership Small Session (with T. Teegerstrom), 2009/10.
- Arizona Pistachio Risk Management Education, \$20,000 awarded from RMA Commodity Partnership Small Session (with T. Teegerstrom), 2009/10.
- Risk Management Education in Southwest Indian Country on Recordkeeping, AGR-Lite, Alternative Energy, and Agri-tourism, \$130,000 awarded from USDA/RMA, (with T. Teegerstrom (PI), and T. Rahman), 2009/11.
- Record Keeping Tools and Hands-on Training to Enhance Profitability and Federal Program Participation of Southwest Native American Producers, \$300,000 awarded from USDA/NIFA, (with T. Teegerstrom), 2009/2012.
- LRP and AGR-Lite Education for Arizona Livestock and Forage Producers, \$20,000 awarded from USDA/RMA, (with T. Teegerstrom), 2009/2010.
- Arizona Pistachio Association Risk Management Education, \$20,000 awarded from USDA/RMA, (with T. Teegerstrom), 2009/2010.
- Risk Management Education in Southwest Indian Country on Recordkeeping, AGR-Lite, Alternative Energy, and Agri-tourism, \$130,000 awarded from USDA/RMA (with T. Teegerstrom, T. Rahman, and J. Dale), 2009/2010.
- Educating Southwest Indian Country Agriculture on Recordkeeping, AGR-Lite, Alternative Energy, and Agri-Tourism, \$75,000, awarded from USDA/RMA, (with T. Teegerstrom (PI), and T. Rahman), 2008/2009.
- Market-Based Instruments for the Optimal Control of Invasive Insect Species: *B. Tabaci* in Arizona, (with T. Richards (PI), P. Ellsworth, and S. Naranjo), \$47,000 to UA and \$23,000 to AREC, awarded from USDA/CSREES, 2008/2009.
- Livestock, Nursery, and Specialty Crop RME for the Southwest and Hawaii, \$100,000, awarded from USDA/RMA, (with T. Teegerstrom and U. Schuch), 2007/2008.
- Southwest Indian Country Rural Enhancement through Improved Recordkeeping, Agri-Tourism, AGR-Lite and other Programs, \$125,000, awarded from USDA/RMA, (with T. Teegerstrom (PI), and T. Rahman), 2007/2008.
- Use of grafted seedlings for methyl bromide transition in U.S. open-field fresh vegetable production, \$884,330 awarded from USDA Integrated Research, Education, and Extension Competitive Grants Program (~\$35,000 AREC) (with Chieri Kubota (PI), M. McClure, N. Burrelle, M. Bausher, E. Rosskopf, and D. Chellemi), 2007/2010.

- Developing and implementing field and landscape level reduced-risk management strategies for lygus in western cropping systems, \$407,000, USDA/NRI (~\$20,000 AREC), (with Peter Ellsworth (PI), P. Goodell, M. Parajulle, and S. Bundy), 2007/2010.
- Livestock, Nursery, and Specialty Crop RME for the Southwest and Hawaii, \$150,000, awarded from USDA/RMA, (with T. Teegerstrom and U. Schuch), 2006/2007.
- Enhancing Quality of Life in the Rural Southwest: Roles of AGR-Lite, Agri-Tourism, and Specialty Agri-Products, \$100,000, awarded from USDA/RMA Outreach, (with T. Teegerstrom (PI), and T. Rahman), 2006/2007.
- Record Keeping Training for Native American Livestock Producers, \$32,844, awarded from Western Center for Risk Management Education and CSREES/USDA, (with J. Hiller (PI) and T. Teegerstrom), 2005/2007.
- Southwest RME for Livestock, Forage and Specialty Crop Producers, \$149,999, awarded from USDA/RMA, (with T. Teegerstrom and U. Schuch), 2005/2006.
- Southwest Indian Country Risk Management Education on Agri-Tourism and Specialty Agri-Product Market Opportunities, \$120,000, awarded from USDA/RMA Outreach, (with T. Teegerstrom (PI), and T. Rahman), 2005/2006.
- Subsurface Drip Irrigation for Sustainable Production of Specialty Vegetable Crops in Arizona, \$64,000, initial award received in 2002 from ADA Specialty Crop Funds (with Tom Thompson (PI), Ed Martin, Kai Umeda, and Mary Olsen). A TRIF award for \$60,000 was received for 2005/07.
- North American Trade Suspension Agreements and Winter Tomato Supply Response, \$154,000 (with Satheesh Aradhyula (PI) and Gary Thompson), NRI Markets and Trade Grant, 2005/07.
- Managing Production Costs and Market Risks for Southwest Vegetable and Nursery Producers, \$36,995, awarded from Western Center for Risk Management Education and CSREES/USDA, (with T. Teegerstrom and U. Schuch), 2005/2006.
- Trade Adjustment Assistance Education for Alaska Salmon Fisherman, \$14,400, awarded from Western Center for Risk Management Education and CSREES/USDA, (with T. Teegerstrom (PI)), 2004/2005.
- Early Irrigation Termination of Cotton as a Drought Mitigation Strategy, \$66,535 received from a TRIF Water Sustainability Proposal, (with Jeff Silvertooth), 2004/06.
- Trade Adjustment Assistance Education for Arizona Shrimp Producers, \$9,660, awarded from Western Center for Risk Management Education and CSREES/USDA, (with T. Teegerstrom (PI) and K. Fitzsimmons), 2004/2005.
- Southwestern Computer Risk Management Training for RMA Priority Commodities, \$146,540 awarded from USDA/RMA, (with T. Teegerstrom and U. Schuch), 2004/2005.
- Survival Strategies for Small and Limited Resource Farmers and Ranchers: An Outreach Regional Conference, \$15,000, awarded from Davis RMA Office, (with T. Teegerstrom), 2004/2005.
- Southwest Indian Country Risk Management Education on Agri-Tourism and Specialty Agri-Product Market Opportunities, \$100,000 awarded from USDA/RMA, (with J. Hiller, and T. Teegerstrom), 2004/2005.

- Record Keeping Training for Hualapai & Havasupai Livestock Producers, \$15,000 awarded from the Western Center for Risk Management Education, (with L. Didier (PI) and T. Teegerstrom), 2004/2005.
- Reducing Human Resources and Marketing Risks of Labor Intensive Agriculture Operations, \$35,000 awarded from the Western Center for Risk Management Education, (with U. Schuch (PI) and T. Teegerstrom), 2004/2005.
- Should I Certify? Helping Producers Assess the Opportunities and Risks, \$33,000 awarded from Western Center for Risk Management Education, (with other members of the Western Extension Marketing Committee), 2003/2005.
- Risk Management Education for “Certification and Labeling Considerations for Western Agricultural Producers,” (with other members of the Western Extension Marketing Committee), \$23,940, awarded from the Western Center for Risk Management Education, Washington Sate University, 2002/2005.
- Arizona Risk Management Education for RMA Priority Commodities, \$79,800 awarded from USDA/RMA, (with T. Teegerstrom), 2003/2004.
- Direct Farm Marketing and Tourism Working Group Funds, \$4,000 (\$2,500 – 2005, \$1,000 – 2004, \$1000 – 2003), awarded from Coop. Extension Program funds.
- Review of Crop Suitability Study Update for Fort McDowell Yavapai Nation, \$3,000 gifted from Stantec Consulting, (with T. Teegerstrom), 2003.
- Localized Risk Management Decision Analysis using Computers, \$94,000 awarded from USDA/Risk Management Agency, (with T. Teegerstrom), 2002/2003.
- Risk Management Education for Crop and Livestock Producers, (with D. Osgood (PI) and T. Teegerstrom), \$1,000, awarded from Coop. Extension program funds, 2002/2003.
- Risk Management Education for Unusual Agricultural Enterprises, (with other members of the Western Extension Marketing Committee), \$45,675, awarded in proposal to USDA for the Western Center for Risk Management Education, Washington State University, 2001/2002.
- Risk Management Education for Arizona, \$12,500 total (\$8,000 2001, \$4,500 2000), cooperative agreement with USDA/ Risk Management Agency, (with T. Teegerstrom and D. Osgood).

Teaching (since 2006)

While my appointment does not include a formal teaching assignment, I have provided instruction through advising/mentoring students (including independent study/internship support for undergrads), guest-lecturing (Economics of Policy Analysis, AREC 464; Range Management, RAM 487/587; Vet Sciences 405; Beef Resource Management, ACBS 477), and co-teaching/driving with Dr. Thompson, Structure Management and Performance of American Agriculture (AREC 496a), 15 to 20 students/yr. for 2010 and 2012. Sponsored two Engineering Senior Class Projects (ENG 498) in 2010/11 and 2011/12 on “*Remote Livestock Tracking System: Phase I and II*,” working with 5–6 students each year on this project.

Advising / Theses Activities

- Bijoy Chodhury, (member) Systems & Industrial Engineering, PhD Dissertation projected in summer 2020.
- Sara Masoud, (member) Systems & Industrial Engineering, PhD Dissertation in 2019.
- Rajat Gupta, (advisor) AREC, moved to non-thesis option in 2019.
- Elena Chin, (advisor) AREC MS Thesis, 2019.
- Ibrahima Sall (co-advisor), Arid Lands, PhD Thesis Committee, 3 Essays with Alliance Preferences for Beef, Acreage Response from Crop Insurance in Cotton, and Cotton Abandonment and Insurance, 2019.
- Siddharth Kishore, AREC MS Thesis, 2018.
- Weide Wang, AREC MS Thesis, 2017.
- Niloy Krittika Chowdhury, AREC MS Thesis, 2016
- Runfeng (Daniel) Li (advisor), AREC MS Thesis, Regional Price Variations of U.S. Alfalfa Hay, 2016.
- Wenjun Wu, AREC MS Thesis, 2016.
- Will Kacheris, CEA MS Thesis Committee, 2016.
- Christopher S. Avery, AREC MS Thesis, 2016.
- Ashutosh Kumar, AREC MS Thesis, 2016.
- Chao Meng, Systems & Industrial Engineering, PhD Thesis Committee, 2015.
- Gouro Camara, Investments in Energy Efficiency and Solar Photovoltaic Systems for the T.O. Nation: An Economics Feasibility Study, 2015.
- Jingyu Liu, (advisor) MS Thesis Committee, 2014.
- Phillip Thiesse (advisor), MS Thesis, Effects of Seasonality in ADGs and Feedlot Placements on Beef Production, 2015.
- Placide Archimede Hiol (advisor), MS Thesis, Optimal Pruning Frequency of Pecans, 2013.
- Faiza Saeed (exchange student advisor), PhD, International Exchange Student, The impact of price and beef attributes on beef selection: A field experiment, Aarhus School of Business, Aarhus University, Denmark, 2013.
- Ibrahima Sall (co-advisor with Satheesh Aradhyula), MS Thesis, Attribute Preferences for Beef Alliances: A Bivariate Nested Panel Probit Approach, 2012.
- Byron Haught, undergraduate independent study on Economics of Revitalizing the GRIC Fox Butte Feedlot, 2012.
- Sam Garcia, MS Animal Sciences (member/economic advisor), Comparison of Feedlot Performance and Carcass Merit of Various Crossbred Cattle, 2011.
- Luis Palafox (advisor), MS Thesis, Seasonality of Mexico and U.S. Jalapeno Pepper Prices, 2010.
- Quatie Nanye-hi Jorgenson (advisor), MS Thesis, Beef Producers Preferences For Joining Beef Alliances: An Arizona And Western Canada Study, 2009.
- Yanfei Liu (advisor), MS Thesis, Using Monthly Feedlot Placements to Predict Weekly Slaughter Numbers, 2008.
- Jose Soto (co-advisor with Satheesh Aradhyula), MS Thesis, Acreage Allocation Analysis of Florida's Winter Tomato Production, 2008.
- Derong Liu (co-advisor with Tauhid Rahman), MS Thesis, Influences on Happiness for Rural Individuals, 2008.

Romilee Bool (advisor), MS Thesis, Has Subsidized Crop Insurance Shifted Regional Cotton Production? 2008.

Heather Waters (advisor), MS Thesis, The Costs of Illegal Immigration to Arizona's Border Ranches, 2007.

Larry Gibbons, Independent Study, Economics of using Low Moisture Block as a Grazing Incentive, 2005–06.