Marketing of locally produced sustainable animal fiber products

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Project Information

Abstract:

A three year applied economics study in Texas, Virginia and Georgia determined that many consumers are willing to pay a 27-45% premium for locally produced, certified organic, environmentally friendly, or “all natural” animal fiber products. While organic labeling still captures the greatest premium for fiber products (45%), once consumers were provided with a definition for the alternative labels, the amount consumers were willing to pay increased premiums for products labeled as eco-friendly (39%), all natural (39%) and sustainable (27%) over products labeled as conventional. The results have been used to develop marketing plans for Southern animal fiber producers that will help them obtain maximum benefit from additional branding of products made from locally grown, sustainable animal fiber.

Project Objectives:

1. Estimate the value consumers place on apparel products made from locally grown fibers and fibers grown using sustainable production methods. 2. Investigate the effects of labeling on premiums for Southern fiber products. 3. Identify and characterize the attitudes and motivations of market segments of consumers willing to pay premiums for products produced from sustainable, locally grown animal fiber. 4. Develop and communicate pricing, labeling, and marketing strategies to Southern animal fiber producers using sustainable production methods.

Introduction:

Consumer interest in where their products are made and how they have been made has been increasing substantially in recent years. Large segments of consumers appear to be behind both these trends. Of primary interest, an estimated 52 million U.S. consumers (23% of general population) are part of a growing segment of the economy that is interested in “lifestyles of health and sustainability” (LOHAS) (French and Rogers, 2005). The market power of these consumers has been evident in the dramatic growth of the organic food industry, which has grown by around 20% annually for the past decade (Organic Trade Association, 2006). There is evidence that such changes may also be possible in the fiber sector, with sales of environmentally friendly or organic fiber products that have grown by at least 30% over the past few years (Marks, 2007). These changes have potentially significant impact on the fiber markets and create new opportunities for fiber producers. A national consumer survey found that consumers of wool apparel products ranked environmentally friendly fiber as more important than brand when considering wool products (Hustvedt, Chen, and Peterson, 2007). A problem is that while American apparel manufacturers and consumers are benefiting from the health and sustainability trend, American fiber producers are lagging far behind other countries in the production and marketing of fibers with the attributes of interest for the LOHAS market. Unfortunately, most American fiber producers are not currently in position to take advantage of this consumer trend. There are many reasons behind this, including a general satisfaction with the status quo, concerns about the potential loss of production capacity, apparent production challenges they might face, and a lack of awareness of these growing marketing opportunities. The exception has been U.S. organic cotton producers, which have successfully pursued these new opportunities and formed marketing cooperatives to address some of the production and marketing challenges. Animal fiber producers looking to capitalize on the growth of the LOHAS market face a different set of issues from cotton producers. While both have been seriously impacted by the shifting of textile processing capacity out of the United States, crucial infrastructure of the domestic wool processing system has been completely lost. Conversations with animal fiber industry contacts also suggest that animal fiber producers are reporting much greater difficulty than cotton producers in becoming certified organic, which is the presumed “Gold Standard” for the LOHAS consumer. Specifically, the prevalence of intestinal parasites in sheep and goats means that producers must choose between potentially losing infected animals or treating their animals with medications prohibited under current organic standards. Finally, unlike the cotton producer, for many producers who may have fiber bearing animals as part of their operation, the fiber production is likely not the focus of their operation. For example, dairy or ranch operators who use sheep or goats to control weeds in their organic pasture typically have a whole host of other concerns besides the marketing of their wool. It would be helpful then to identify economic opportunities specifically for sustainable animal fiber producers and operators who have incorporated or are considering incorporating fiber-bearing animals in their management system in the Southern region. As with the organic movement, the “buy local” trend can be seen as originating from the food sector and moving towards the fiber markets. The strength of the trend is evident in the increasing numbers of farmer’s markets (Agricultural Marketing Service, 2007) and in a rising number of state branding campaigns such as “Go Texan” or “Jersey Fresh” which have managed to achieve success in the marketplace (Texas Department of Agriculture, 2006). Many studies have shown that consumers are willing to pay a premium for local products. For example, a majority of Louisiana consumers were willing to pay equal or more for catfish labeled Louisiana farm-raised than those labeled as Mississippi farm-raised (Schupp

and Dellenbarger, 1993), and Arizona consumers preferred Arizona products over products from other states (Patterson et al., 1999). If the “buy local” consumer is also interested in locally produced fiber products, manufacturers and retailers targeting consumers in the identified segments will have an incentive to track and label their use of regionally produced fibers and increase their use of locally grown fibers over imported fibers. By adding a focus on origin to the environmental concerns, those benefits from the LOHAS movement enjoyed by US apparel manufacturers could be extended specifically to Southern fiber producers and to the entire Southern fiber and apparel industry. It may be worth the effort for producers and processors to take the steps required to market local, sustainably produced if the products can be successfully marketed to the rising number of consumers concerned with buying local. Once a reputation can be established for fiber products from the Southern region, locational brands can be used to market outside the local area, as in New Zealand lamb or Bordeaux wine. It would be useful then to identify market segments that are willing to pay a premium for apparel products labeled with locational attributes described by a particular region or state (e.g., “90% North Carolina Wool”) and with sustainable production attributes such as “All Natural”, “Environmentally Friendly”, or “Organic.” In terms of environmental problems, the livestock sector is considered one of the largest contributors (Steinfeld et al., 2006). Noticeably, the recent structural change in the livestock sector has been promoting growth of intensified, industrialized production of pigs and poultry, while discouraging growth of extensive production of cattle, sheep, and goats. Such shifts are marginalizing smallholders and pastoralists. Steinfeld et al. (2006) notes the possibility that consumers demanding environmental benefits may drive changes towards a sustainable livestock sector. Another important trend in the livestock sector is the increase of small-scale or “hobby” producers, which now make up 58% of farms in the U.S. (Cristie, 2005). Many hobby farmers select sheep, goats or alpaca as part of their farming system because their size makes them easy for women and children to manage (Bewley, 2003). Browsing animals such as sheep and goats could also be incorporated into sustainable farming operations as a viable weed control method. Sheep grazing has been promoted as a part of a silvopastoral system, important to the Southeast, where sheep contribute to weed management in marginal, woody areas that are not appropriate for traditional management practices (Longwell, Miller, and Schreiwies, 2007; CSTAF AIS, 2007). Moreover, a research project in North Dakota found sheep grazing on ranges can help control troublesome weeds, allowing cattle ranchers to improve their pasture (SARE, 2001). A researcher in California has successfully trained sheep to weed vineyards while leaving the grapes alone. Such incorporation reduces the use of herbicide and machinery for weeding (Associated Press, 2007). Enhancing economic opportunities for operators of sustainable farming operations who have adopted, or are considering adopting, a systems approach could encourage wider adoption of such sustainable practices by identifying a market for fiber products from their browsers. Enhancing economic opportunities to a farming sector with relatively high participation of minorities is also of concern. According to the 2002 Agricultural Census, there were 18,564 sheep and goat farming operations in the Southern region states. The percentage of operations that were managed by female primary operators was 17.1%. This percentage far exceeded the relative participation of female primary operators in other livestock operations, with 8.4% in hogs, 8.7% in beef cattle, and 14.9% in poultry. Similarly, the percentage of sheep and goat farming operations with primary operators of Spanish, Hispanic or Latino origin was 4.2%, exceeding 3.3% in hogs, 2.9% in beef cattle, and 1.7% in poultry. While consumption of sheep and goat meat has increased with an increasingly diversifying population, identifying additional markets for fiber products from browsers would have direct benefits for women and minority producers. The demonstration of a

market for locally or regionally produced fiber products can create incentives for the further development of producer networks. One of the major existing barriers to market for small-scale producers of animal fiber products is the economy of scale required for fiber processing and product development and manufacturing. While the scope of the animal fiber markets would be smaller than for that of the market for commodity fibers like cotton, only a few animal fiber producers in the Southern regions have successfully marketed fiber products. If on the other hand, producers from an identifiable region were to network, pool their fiber to address variations in quality and quantity, the marketing of regional fiber products could become more viable. At least one SARE project has already looked at the formation of producer networks for the dissemination of sustainable production methodology. The additional marketing benefit could help these valuable social networks develop more quickly. Further, small-scale producers and producers who focus on less common species, such as camelids, may find valuable social support from a marketing network that focuses on rewarding them for their sustainable practices. The goal of this project then was to determine consumer willingness to pay for products made from locally grown animal fiber produced with sustainable practices. Taking advantage of the identified market segment could significantly expand economic opportunities for Southern operators who have or are considering incorporating browsers into their sustainable farm or pasture or land management systems. Such economic benefits from additional branding of products made from locally grown, sustainable animal fiber would further strengthen the role of fiber bearing animals in sustainable agriculture and promote sustainable management practices. Literature Cited in Introduction: Agricultural Marketing Service, "Farmers Market Growth." 2007. Available online at http://www.ams.usda.gov/farmersmarkets/FarmersMarketGrowth.htm. Accessed November 13, 2007. Associated Press. “Lamb Mower: Sheep Trained to Weed Vineyards.” July 11, 2007. Available online at http://www.foxnews.com/story/0,2933,288961,00.html. Accessed October 2, 2007. Bewley, S. “Angora Goats are a Good Choice for Hobby Farmers.” Hobby Farms Magazine, August/September 2003. Available online at http://www.hobbyfarms.com/crafts-and-nature/angora-goats-14912.aspx Accessed on November 13, 2007. Cristie, L. “Farming for Fun”. CNN, January 6, 2005. Available online at http://money.cnn.com/2005/01/04/real_estate/buying_selling/hobbyfarms/Accessed on November 13, 2007. (CSTAF AIS) Center for Subtropical Agroforestry Agroforestry Information System. “Silvopastoral.” University of Florida. Available online at http://cstaf.ifas.ufl.edu/Silvopastoral.htm. Accessed October 2, 2007. French, S. and G. Rogers. “LOHAS market research review: Marketplace opportunities abound.” LOHAS Journal 2005. Available online at http://www.lohas.com/journal/trends.html. Accessed November 3, 2007. Hustvedt, G., Chen, Y.-J., Peterson, H.H. “Closing the loop. Consumer interest in non-inherent fiber attributes.” Presentation at the All Things Organic 2007 Trade Show and Conference. Chicago, IL. May 7th-9th, 2007. Longwell, T., N. Miller, and M. Schreiweis. “Weed Control and Fire Hazard Reduction in Forest Ecosystems with Sheep Grazing.” Purdue University, Sheep Extension. Available online at http://ag.ansc.purdue.edu/sheep/ansc442/Semprojs/forest/sheep.html. Accessed October 2, 2007. Marks, J. “Eco-friendly Merchandise on the Rise”. Home Textiles Today. Available online at http://www.hometextilestoday.com/article/CA6411888.html Accessed November 12, 2007. Organic Trade Association (OTA) 2006. “Organic food facts”Available online at http://www.ota.com/organic/mt/food.html (accessed May 2012). Patterson, P. M., H. Olofsson, T. J. Richards., and S. Sass. “An Empirical Analysis for State Agricultural product Promotions: A Case Study on Arizona Grown.” Agribusiness: An International

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Research

Materials and methods:

The first three objectives were addressed through a series of sessions with a random sample of consumers recruited at selected sites in the Southern region. All sessions consisted of an experimental auction and pre- and post-experiment questionnaires that included a choice experiment. The questionnaires were essential for objectives 1 and 3. The pre-questionnaire focused on obtaining consumers' attitude towards and knowledge of the different types of products and labels as well as an understanding of their shopping habits and motivations. The post-experiment questionnaire included the collection of demographic and socioeconomic information necessary for analysis, questions regarding changes in knowledge and attitudes, and an opportunity for additional comments and feedback. The auction experiment portion of the sessions functioned towards objectives 1 through 3, and indirectly to objective 4. They consisted of three rounds of bidding for socks. In each round, consumers were presented with a sock made with different fibers or with different attributes to bid on. The attributes included: sustainable, all natural, eco-friendly, organic, and, as a base, conventional. Before the last round, definitions of the attributes were given to consumers to see how these may influence willingness to pay (WTP) for the stated attributes. More detailed information concerning these sessions is provided below.

-Subjects & Regions Investigated

The subjects in the sessions were adult (over 18) consumers recruited from the general population. Three main issues with subjects for research projects such as this are: 1) sample size, 2) geographic extent of the sample, and 3) randomness of the sample. While early auction experiments typically relied on small samples (as few as 50 subjects or less), concerns over reporting such results have been raised at least since Lusk et al., 2001. Experience by the investigators has shown that 80 subjects for a treatment are sufficient for meaningful results (Bernard, Zhang, and Gifford, 2006). Experiments were run in three disparate sites across the South in the beginning of 2011: San Marcos, TX, Alexandria, VA, and Athens, GA. These sites were chosen as they were appropriate to capture any major regional differences, while still maintaining the feasibility of the project. Texas is the main wool and mohair producing state in the United States. This means that, producers in Texas are an important part of any regional fiber marketing network. The size of animal fiber production in Texas also means that any shifts toward sustainable production methods that would result from seeking access to the LOHAS market has much potential for environmental impact. Finally, because Texas has a well developed branding system for locally produced products "Go Texan", Texas consumers are likely to already be familiar with regional branding. This familiarity implies

participants are more likely to use the regional brand attribute for apparel in the same way they use it for food and help determine the value of a mature and trusted regional brand for fiber products. The second chosen site was Virginia. Virginia has both sheep and alpaca producers and also has a regional branding program for agricultural products, “Virginia Grown.” Wool produced in Virginia is marketed through the Virginia Wool Pool Program, making Virginia another region that is already in a good position to begin benefiting from marketing to the LOHAS market. Georgia was the third site chosen for this study. While Georgia does have sheep and camelid producers, the size of the sector in Georgia is much smaller than that in Texas or Virginia. However, this provides an opportunity to explore the development of education materials on marketing to the LOHAS consumer that is targeted at the small or “hobby” producers whose numbers are growing across the South. The absence of a regional branding program for agricultural products allows for exploration of introducing this type of brand. Additional information may be required for consumers in the Georgia market to confidently use the regional brand. Subjects participated in the experiments in groups of approximately 20. A total of 255 participants were recruited across all three sites, with 85 in Virginia, 95 in Georgia, and 75 in Texas. In order to achieve random samples within each site, a variety of recruiting methods were employed. Advertisements were placed in local newspapers and on Craigslist, as well as posted at public libraries and on community calendars. Each session lasted approximately one and a half hours. Subject payments must meet their opportunity cost for a session. Based again on the project directors’ experience, subject payments of $50 each were allocated. Subjects were instructed that the cash was there for the payments prior to the start of the experiments, but the money would not be given out until the end. $50 was the upper limit on the bids subjects could place in the auction. Some subjects were also necessary to pilot the experiment design. While extensive piloting of the experiments was not necessary given the experience of the researchers and similarities to previous project design, some were conducted to check the design’s ability to meet the stated objectives. To keep costs reasonable, student subjects from the University of Delaware, and Texas State-San Marcos were used. Feedback from the pilot sessions included useful information on the presentation and layout of the questionnaires, which was incorporated into the final design.

- Products & Attributes

The sessions included products made with wool and blends of wool with mohair and alpaca. Products were the same across all sessions. Several factors went into the selection of socks as the product used in these sessions. First, they were products for which consumers were familiar with and likely to desire purchasing, reducing possible zero bids in the sample. Secondly, they were products that typically fall within the price range of bids allowed by the experiment design. Products made with animal fibers, particularly alpaca and mohair, are often considered luxury items and if the products used in the experiment were too valuable, the bid limit placed to prevent bankruptcy would have prevented the participants from bidding anywhere near their actual values for the items. Even luxurious socks, however, can be purchased in the marketplace for less than $20, reducing the dissonance between the bids and the actual value. Finally, socks made from fibers that can be labeled with sustainable production attributes such as All Natural, Environmentally Friendly, and Organic, and as Locally Grown were custom made in small quantities for use during the study. These socks were similar enough to the conventional or non-regional versions currently found on the market that, aside from personal color or style preferences, the custom made socks were not distinguishable from those that are commercially available. Finally, unlike other apparel products, socks for adults typically come in only two sizes, men’s and women’s, which made it easier to plan

for the stock required for purchases of the socks by participants. Interviews were conducted with the ranchers to develop the definitions for the alternative labeling based on their current production methods. These were presented along with the definitions for organic and conventional which were taken from USDA materials: Organic: Items must be certified to the USDA's Organic standards, and must be inspected and certified before labeling. This means no synthetic pesticides, hormones or antibiotics, no irradiation, no artificial coloring or genetically modified (GM) ingredients, and no petroleum or sewage sludge fertilizers. Organic also means that animals were fed organic fed, and had access to pasture or the outdoors. Sustainable: The wool was produced using a ranching system that is capable of being continued with minimal long-term effects on the environment. This includes the management of natural resources, animal health, and the welfare and well-being of ranching families. Eco-Friendly: The wool was produced with minimal impact to the environment. All Natural: This wool is a renewable fiber that comes from a natural source, and was processed with non-hazardous, low-impact chemicals and dyes. Conventional: Most products fit in this category, meaning they are not produced locally and do not meet the requirements of organic. They may have been produced using antibiotics, hormones, GM, pesticides, and chemical fertilizers, but all with government approval and within government standards and limits.

- Description and Sequence of Sessions

The design followed successfully established formats of earlier experiments by the project directors, such as Bernard, Zhang, and Gifford (2006). A session began with the pre-experiment questionnaire as described above. The sessions then moved into the experiment phase with the auctions. A fifth-price version of Vickrey's (1961) second-price auction was used, which has long been demonstrated to be incentive compatible, meaning that the best strategy for participants was to enter a bid equal to their true WTP. With this mechanism, the top four bidders purchase the binding product at the price of the fifth highest bid. The project directors' experience has shown that having the four highest bidders in groups of around 20 leads subjects to put in realistic bids and avoid the concerns of disinterested bidders. Despite the favorable properties of the auction method to reveal true values subjects place on products, the best strategy is often not transparent to subjects. Prior to the auctions, there was a careful description of the workings of the auction and an explanation of the optimal strategy. This presentation, which has now been used successfully with over five hundred subjects by the project directors, shows how bidding more than your value leads to a chance to lose money while bidding below your value leads to the potential to miss a chance to earn money. These were followed by a practice auction to reinforce the optimal strategy of bidding your true value and familiarize the subjects with the mechanism. In this format, subjects nearly perfectly adopted the optimal strategy immediately. The different rounds of auctions began after being certain everyone was clear with the workings of the auction and why bidding your true value was the best option. Subjects were informed in advance that only one auction from one of the rounds was binding. This prevented subjects from lowering their bids in later auctions due to having already purchased a product and not wanting to spend more. To avoid buying large quantities of the products, the binding auction was selected in advance and sealed in an envelope at the front of the room shown to the subjects. A volunteer opened the envelope and announced the product and binding round after all auctions were complete. Further, announcing no bid results until the end avoided the possibility of bidder affiliation (see for example Bernard, 2005 or Corrigan and Rousu, 2006). The multiple rounds of bidding for the products each aided towards the objectives. Different information was given to consumers in each round to see how various

presentations of the product influence WTP for the attributes. Specifically, three rounds of bidding took place. In the first round one product representing each of the fiber contents (wool, wool/alpaca, wool/alpaca/mohair, polyester) was passed among the participants to allow them to assess the look and feel of the products, however, no information on beyond the fiber content attribute was presented. This yields a base measure of consumer WTP solely from their impression of the product without consideration of additional attributes that might appear on a label. For the second round the product was auctioned based on a label (displayed on screen), such as "Made from Texas Wool" or "All Natural," without a chance to examine them. This allowed capturing of the regard for the attribute without bias that may occur from any differences in look or feel among the versions of the product. Following this round, participants were given definitions for each of the labeling terms included in the study. The third and final round presented the same materials as in the second round in order to measure the change in bids created by receiving the For the third round, the elements of the first two rounds were combined. Here, subjects were presented with the products to touch and examine along with label information on their attributes. This gave the ability to directly see how bids in the first two rounds were altered by adding the respective piece of new information to the consumer. The fourth round was as the third, but with the addition of appropriate regional logos and marketing information. Results from this round were especially useful in assessing currently existing marketing strategies and aiding in formulating new recommendations. In total, the collected bids were direct estimates of the values consumers were willing to pay for these fiber products (objective 1). In addition, the experiment design allowed for discerning the effects of labeling on these premiums (objective 2). Analysis of the questionnaire data, along with bids, enabled the researchers to identify and characterize market segments of consumers who were willing to pay premium for these Southern fiber products (objective 3). While earnings for the subjects were calculated, subjects then filled out the post-experiment questionnaire that included a choice experiment, which allowed for analysis of attributes that were not available under current production methods. As discussed above, this questionnaire also served multiple purposes towards the objectives of the research. Subjects then left with their payments and purchased products, if any.

- Data Analysis & Communication of Strategies

This design allowed for the collection of a substantial quantity of data regarding consumer interest in various U.S. animal fibers. The set-up as discussed above allowed for both within-subject and inter-regional comparisons for analysis. The primary technique used in analysis was censored regression. This was needed since the chances of zero bids were both theoretically possible and practically likely. They could be due either to a true lack of WTP for the product, a difficult to control outside factor (e.g., the subject has a lot of the product at home already), or in rare events, non-cooperation by the subject. Censored regression models can also take into account the very likely existence of heteroskedasticity (Bernard, Pesek, and Pan, 2007) and possible endogeneity of some of the independent variables in selected models (Bernard and Bernard, 2007). Secondary models and analysis were performed using other appropriate techniques. These included the analysis of choice experiment data using a nested logit model. Literature Cited in Materials & Methods Bernard, J.C. "Evidence of Affiliation of Values in a Repeated Trial Auction Experiment." Applied Economics Letters, 12(2005): 687-691. Bernard, J.C. and D. J. Bernard. "What is it about Organic Milk? An Experimental Analysis." American Journal of Agricultural Economics, 91(2009): 826-836. Bernard, J.C., J.D. Pesek, Jr., and X. Pan. "Consumer Likelihood to Purchase Chickens with Novel Production Attributes." Journal of Agricultural and Applied Economics, (2007): 581-596.

Bernard, J.C., C. Zhang and K. Gifford. “An Experimental Investigation of Consumer Willingness to Pay for Non-GM Foods when an Organic Option is Present.” Agricultural and Resource Economics Review, 35(2006): 374-385. Corrigan, J. and M. Rousu. “Posted Prices and Bid Affiliation: Evidence from Experimental Auctions.” American Journal of Agricultural Economics, 88(2006): 1078-1090. Lusk, J.L., M.S. Daniel, D.R. Mark, and C.L. Lusk. “Alternative Calibration and Auction Institutions for Predicting Consumer Willingness to Pay for Nongenetically Modified Corn Chips.” Journal of Agricultural and Resource Economics 26(2001):40-57. Shogren, J. F., M. Margolis, C. Koo, and J.A. List. “A Random nth-Price Auction.” Journal of Economic Behavior and Organization 46 (2001):409-421. Vickrey, W. “Counterspeculation, Auctions, and Competitive Sealed Tenders.” Journal of Finance 16(1961):8-37. The results from above were used to develop strategies communicated to market strategists in accomplishing the last objective. The marketing strategies were presented at various regional industry meetings, which are listed further below. A comprehensive set of marketing strategies for all products in all Southern regions as well as those specific for producers in Texas, Virginia and Georgia are available as downloadable reports on the Southern SARE reporting website.

- Literature Cited in Materials & Methods

Research results and discussion:

- Benchmarks

1) Socks for use in the experiment will be procured through purchases or custom-ordering. The socks created from purchased wool were of similar style and quality to the socks procured from US sock manufacturers, which meant that difference in style or quality did not need to be considered during analysis. 2) Approval for research with human subjects will be obtained from all three participating universities. The Institutional Review Board of all three participating universities approved the study design 3) The survey instrument will be developed and pretested. Pretesting was conducted in 2010 with university students and the online survey software, Qualtrics, was programmed to capture participant responses. 4) The auction sites will be selected and the auction session will be coordinated. The auction sessions were conducted in early 2011 in all three states. 5) A recruiting firm will be selected and hired to recruit participants at each location. The quotes from recruiting firms were too high for the level of service they would provide. The student hired for the project developed a recruiting strategy that successfully recruited the 255 participants needed for all three locations. The diversity of participants was excellent and the main way that the sample varied from the typical population in each state was that the participants in VA were somewhat more educated, which is likely due to the large concentration of highly educated people in the Alexandria area. 6) The auctions will be conducted. The auction sessions were conducted on January 15-16, 2011 at Northern Virginia Community College in Alexandria (VA), on February 5-6, 2011 at University of Georgia in Athens (GA) and on March 5-6, 2011 at Texas State University in San Marcos (TX). There was a total of 85 participants in the seven sessions held in VA with between 4 and 22 participants in each session. There was a total of 95 participants in the four sessions held in GA with between18 and 39 participants in each session. There was a total of 75 participants in the four sessions held in TX with between 13 and 23 participants in each session. 7) The data will be analyzed. Several types of data were generated during the study. The various attitude and behavior variables included in the survey were analyzed for validity and reliability using exploratory factor analysis. The choice experiment data was analyzed using multinomial logit analysis and the bid data was analyzed using tobit regression analysis. The marketing image data was

analyzed to determine the participant preferences based on their ratings and frequency of selection. 8) The results will be used to create marketing materials. Based on the analysis of the participant response to the images used in mock labels, sample labels were created to demonstrate the preferred marketing. Additionally, the shopping data was analyzed to create marketing guidelines for each state that reflected consumer preferences for retails outlets and labeling language. 9) The marketing materials will be placed online. The workshop held for small-farm producers in Delaware formed the basis of an online presentation, found on the SARE website, which describes how to use sustainable production methods to market fiber products. Additionally, marketing guidelines and labeling summary and sample labels have also been placed on the SARE website. An article on marketing sustainable, local animal fiber has been written for the Alpacas Magazine and will also be placed on the Southern SARE website once the magazine issue is published in summer 2012. 10) The results and marketing strategies will be shared with animal fiber producers, apparel manufacturers and other stakeholders in sustainable fiber supply chain. Sample skeins of the yarn leftover from the sock production were banded with sample labeling designs and distributed along with marketing guidelines to animal fiber producers and consumers at the 2011 Southeastern Animal Fiber Fair in Asheville, NC in October 2011. Hundreds of producers and consumers who attended the event were given the yarn samples and marketing material. Additionally, an advertisement was placed in the event program encouraging producers to visit the Southern SARE website for information about the project and producer grants. A workshop titled Your Farm Has a Story: Marketing Sustainability to Consumers was also conducted at the Delaware State University Cooperative Extension Producers Conference: Profiting From A Few Acres; Dover, DE, December 2011. A poster titled Marketing Local: Logos, Labels and Location was presented at the 2012 Practical Tools & Solutions for Sustaining Family Farms Conference of the Southern Sustainable Agriculture Working Group, Little Rock, AK, in January, 2012. Finally, results have been shared with stakeholders in the wool, alpaca and mohair industries, including the American Sheep Industry Association, as well as officials from all three state agricultural branding programs. The results were especially well received by the Go Texan program, which had been seeking additional economic data to bolster the case for membership in the program. 11) The results will be used to create peer-reviewed presentations and articles for dissemination in academic forums. The results of the project were presented at the 5th International Consumer Research Conference in Bonn, Germany in July 2011 and at the Southern Sustainable Agriculture Working Group in Little Rock, AK in January, 2012. Two articles have been prepared, with one still under review and one accepted for revision and resubmission to the International Journal of Consumer Studies. A third article is under preparation and will be submitted to an agricultural economics journal in 2012. Additional presentations will be made in the coming year, including at the 2012 Sheep and Goat Field Day in San Angelo, TX.

- Results

The results from the study fall under two sections, those from the choice experiment included in a survey of participants and those from the auction bids themselves. These two sets of data were designed to complement each other, with the choice experiment being able to explore hypothetical products while the auction bids eliciting willingness to pay (WTP) values that are very reliable. Analysis of the results from the choice experiment focused on the role that consumer ethnocentricity plays in the willingness to pay a premium for locally produced fiber. The experiment included both fiber origin and the origin of manufacturing. Questions featured wool blend sweaters, which were chosen because sweaters are a unisex clothing item familiar to most consumers. Participants were asked to circle one of three

hypothetical wool sweaters they would be willing to purchase or to select “none” if they did not find any of the sweater options appealing. The sweaters were described using three attributes. The first attribute was Country of Manufacturing Origin (COMO) and had two levels: Knitted in USA and Knitted in China. The second attribute was Country of Fiber Origin (COFO) and had three levels: Made with AU wool, Made with US wool and Made with State wool. Participants were informed that AU stood for Australia and State was replaced with VA, GA or TX, corresponding to the state the session was conducted in. The third attribute was price and had two levels: $20 and $24, which pretesting showed were significantly different enough to generate data on the sensitivity of the participants to price. Consumer ethnocentricity was measured using the CETscale, which has been used in numerous previous studies on agricultural products, although never at the state level. In order to explore influence of consumer ethnocentrism on choice and WTP, the dataset was split into two groups using a median split: a High CET group and a Low CET group. Individuals with a mean CET score of 4.17 or higher were placed in the High CET group (n=127, M=5.3) and those with a mean score of 3.83 or lower were placed in the Low CET group (n=117, M=2.89). The 11 participants whose mean CET scores were at the median (4) were dropped from the analysis. Demographics of the sample show that each state produced a slightly different mix of participants. While the sample from Virginia had higher income than the samples from the other two states, this was consistent with census figures for the three states. The percentage of all minorities was overrepresented in the Virginia sample, but under-represented in Texas and Georgia, which along with the generally high levels of education for all states, would likely reflect the location of the sessions near regional universities. Analysis of Variance found that there was no significant difference in the levels of CET between the three states ($F(2, 252) = .283$, $p = .753$). The mean CET was 4.24 (SD=1.41). Consumers in the Low CET group had different levels of attitudes towards organic and buying local than the High CET group based on ANOVA. Those in the High CET group also had higher levels of positive attitudes towards buying local fiber (Attitude), had higher levels of interest in buying locally (Local) and had more positive feelings about organic agriculture (Organic). As hypothesized, higher mWTP estimates were exhibited for State wool compared to U.S. wool and AU wool, for both CET groups. Consumers in the High CET group on average were willing to pay $24.08 more for a switch from AU wool to State wool when knitted in the U.S. and $9.61 more when the sweater is knitted in China. A switch from AU wool to U.S. wool yielded an estimated mWTP of $19.73 more for sweaters knitted in the U.S., and $4.99 more for sweaters knitted in China. Lastly, for the High CET group, a switch from U.S. wool to State wool produced a mWTP of $19.37 more for sweaters knitted in the U.S., and only $4.62 more for a sweater knitted in China. For a switch from U.S. wool to State wool, and from AU wool to U.S. wool, changing the country of manufacture from China to the U.S. resulted in mWTP estimates that were over 4 times larger. In comparison, consumers in the Low CET group on average were willing to pay only $6.86 more for a switch from AU wool to State wool when knitted in the U.S., and $3.54 more for the sweater when knitted in China. These mWTP estimates are much lower than those exhibited by the High CET group. A switch from AU wool to U.S. wool yielded an estimated mWTP of $5.02 more for sweaters knitted in the U.S., and $1.85 more for sweaters knitted in China. Lastly, for the Low CET group, a switch from U.S. wool to State wool produced a mWTP of $4.85 more for sweaters knitted in the U.S., and only $1.69 for when knitted in China. Within each CET group, for either COMO, the largest mWTP values were exhibited for a switch to State wool. This information would be vital for state wool producers looking to market their products to the local consumer. As higher mWTP values were calculated for U.S. wool compared to AU wool, for both CET groups, these findings suggest that consumers with varying levels of consumer

ethnocentric tendencies are concerned with wool origin. Overall, higher mWTP values were shown for the High CET group compared to the Low CET group for all the versions (switching from AU COFO). This finding supports the hypothesis that a US consumer with ethnocentric tendencies would be willing to pay more for the state and U.S. origin attributes. The relationship between CET and attitudes towards buying local, local fiber and organic agriculture provide further support for the role of ethnocentrism in the support of sustainable or local agriculture seen in previous studies. Analysis of the results from the auction experiment focused on the role that labeling and information about the labeling plays in the willingness to pay a premium for locally produced fiber. In the first round, auction participants bid on wool socks, wool blended with mohair and also alpaca and a pair of polyester socks and were only told the fiber content for the socks. Based on this round of bidding, the base value of the socks could be determined and subtracted from subsequent bids once more information was added. The results demonstrated that participants valued the wool socks more than the polyester socks, but that addition of other fibers increased the value, with mohair adding the most value to the socks. Next, pairs of wool socks were auctioned off in 10 different versions. These were identified by production method that had 5 different levels (conventional, sustainable, all natural, eco-friendly, and organic) with 2 origin levels each (U.S. and imported). When that round of auctions was concluded, definitions of each of the production terms above were presented and participants were asked to bid on the socks again, thus allowing for the determination of the change in the bids with the provision of definitions for the labeling terms. Organic: Items must be certified to the USDA's Organic standards, and must be inspected and certified before labeling. This means no synthetic pesticides, hormones or antibiotics, no irradiation, no artificial coloring or genetically modified (GM) ingredients, and no petroleum or sewage sludge fertilizers. Organic also means that animals were fed organic fed, and had access to pasture or the outdoors. Sustainable: The wool was produced using a ranching system that is capable of being continued with minimal long-term effects on the environment. This includes the management of natural resources, animal health, and the welfare and well-being of ranching families. Eco-Friendly: The wool was produced with minimal impact to the environment. All Natural: This wool is a renewable fiber that comes from a natural source, and was processed with non-hazardous, low-impact chemicals and dyes. Conventional: Most products fit in this category, meaning they are not produced locally and do not meet the requirements of organic. They may have been produced using antibiotics, hormones, GM, pesticides, and chemical fertilizers, but all with government approval and within government standards and limits. The definitions for these were developed by examining how the terms were defined by the producers, retailers and manufacturers who used the terms and provided further discussion of the terms in their marketing material. Because an additional goal of the study was to explore the marketing of fiber by state-level origin, ranchers in each state where sessions were conducted were also interviewed about their production methods to determine the ability of the chosen definitions to be applied to their wool products. In order to reassure participants that each sock in the auction was accurately labeled, socks made in the U.S. from both domestic and imported fibers were sourced from a variety of manufacturers who were willing to make both fiber origin and specific production method claims in their marketing materials. Analysis of the differences in the bids before and after the terms were defined brings out several important points. First, as expected, the bids for the conventional versions were the lowest in all four cases, often by a substantial amount. The organic versions, also in line with expectations based on the current shape of the market, had the highest WTP. While bids for the all natural versions were the next highest, in most cases these values seemed indistinguishable from eco-friendly and not overly beyond mean WTP for

sustainable versions. Conventional was the only production method for which bids decreased significantly once participants read the definitions. There could be two possible reasons for this decline. First, being reminded of some of the aspects of conventional production that may be viewed negatively, such as pesticides and antibiotic use, many participants may have rethought their opinion. In contrast, the descriptions of some of the other versions may have made them more attractive enough that interest in conventional fell. The significant increase in bids for the organic versions after definition showed the importance of making certain that consumers understand the definition of organic. It appears therefore that producers could benefit substantially by increasing consumer knowledge regarding organic fiber. The increased WTP for sustainable wool socks also suggested benefits for explaining the meaning of this claim in the marketplace. While, as noted, there is little consensus on a definition these findings demonstrated a strong potential for the wording proposed as a starting point. For the most part, the level of significance for differences among the production methods was also consistent across the definition treatments. Most apparent here were the consistent premiums for all the other methods over conventional at better than the 1% level of significance. It was obvious from these results that consumers do have a clear WTP for products that go beyond conventional fiber production practices. Introducing the definitions did lead to a clearer differentiation when comparing organic to the alternatives. For example, prior to the provision of definitions, all natural was receiving a premium that, while significant at the 5% level, was only 14 cents less than the premium for organic. Afterwards, however, the substantially increased organic premium was significant at the 1% level compared with all of the alternatives. While this lack of knowledge may be benefiting producers marketing their fibers as all natural it shows the potential benefit organic producers should be trying to capture by ensuring their production attributes are more apparent and better differentiated. The two comparisons that changed after definitions involved the sustainable claim. In both cases, there had been a significantly lower WTP for sustainable prior to the definitions. One of these was with all natural, where the advantage of the latter vanished once consumers were better able to understand the two methods. The eco-friendly claim also lost its advantage over sustainable to the point where, for the socks of both domestic and imported origin, there was no difference in the mean bids between sustainable and the other alternative labels. The only two production methods for which no significant differences appeared in either set of auctions were eco-friendly and all natural. Finally, analysis of the bid data was conducted on the state level, to determine if there was any differences in WTP for consumers in the various locations included in the study. Only slight differences between the states were revealed. For example, while overall, the pattern of value for the various labels before definition were provided was (from lowest to highest) conventional, sustainable, eco-friendly, natural and organic, in Georgia, the value of eco-friendly and natural were switched, with eco-friendly being valued higher than all natural. However, once the participants were provided definitions for the labels, the value of natural dropped in Georgia and Texas to be the second lowest, only just higher than conventional, which was also significantly lower in Georgia and Texas than in Virginia. In fact, all of the bids from Virginia were significantly higher following the provision of information. While the variables of income and education were included in the model, these did not significantly impact the bids, however, age was responsible for increasing bids, along with positive attitudes towards purchasing local fiber products, which is to be expected.

- Discussion

Overall, the results of the choice experiment demonstrated that consumer ethnocentric tendencies, which have been shown to influence WTP for COO labeling

on food products, were also highly influential in increasing mWTP for COFO and COMO for wool sweaters. The information from these findings should aid producers in making apparel products targeted towards specific segments of consumers. From a policy perspective, the large mWTP for COMO, especially by consumers in the High CET group, validate the COMO labeling many countries require. The additional consumer support found for the COFO attribute, while not enough to suggest this information should be required on labels, should be viewed by many as a potential marketing opportunity. This is particularly true for producers of natural fibers, where finding a way to maintain the local origin of the fiber through the processing of the textiles could have significant economic benefits. In addition, individual state marketing programs or buy local campaigns in animal fiber producing areas of the U.S. could help targeting the local fiber consumer by regularly including local fiber products within their marketing efforts. Such benefits may include preserving or expanding farms and farm employment, increasing farm income and possibly promoting sustainable agricultural practices. Overall, the results from the auction experiment demonstrated that it makes economic sense for ranchers, processors and retailers to gather information about production methods that fall outside of the organic standards, since this information has value to consumers.

Participation Summary

Educational & Outreach Activities

PARTICIPATION SUMMARY:

Education/outreach description:

There are two categories of publications/outreach generated by this study a) marketing materials generated for producers and b) peer-reviewed publications and presentations generated for other researchers.

- Marketing Materials

The marketing materials generated by the project have been shared directly with producers at a large regional event as well as with key industry leaders in the American Sheep Industry Association and the mohair producers cooperative. The materials were also shared with the relevant marketing directors at the Virginia, Georgia and Texas agricultural branding programs within their state departments of agriculture. Finally, all of these materials have been placed at the SARE website where they will be available for anyone to download freely. These materials include: -Marketing guidelines for Virginia, Texas and Georgia animal fibers. -Samples of labeling based on study results -General marketing guidelines applicable to all US producers of sustainably produced animal fiber -Short article discussing the value of labeling animal fibers for sustainable production -Advertisement for the Southern SARE producer program aim specifically at animal fiber producers

- Peer Reviewed Presentations and Publications

Hustvedt, G., Onken, K. and Bernard, J.C. (under review) The influence of ethnocentricity on preferences for local fiber products. Bernard, J.C., Hustvedt, G. and Onken, K. (under review) What is a label worth? Defining the alternatives to organic for US wool producers. Hustvedt, G., Bernard, J.C., and Onken, K. (2012) Marketing Local: Logos, Labels and Location. Presented at the 2012 Practical Tools

& Solutions for Sustaining Family Farms Conference of the Southern Sustainable Agriculture Working Group, Little Rock, AK, January, 2012. Hustvedt, G. (2011) Your Farm Has a Story: Marketing Sustainability to Consumers. Delaware State University Cooperative Extension Producers Conference: Profiting From A Few Acres; Dover, DE, December 2011 Hustvedt, G., Onken, K. and Bernard, J.C. (2011) The influence of ethnocentricity on preferences for local fiber products. Presented at the 5th International Consumer Sciences Research Conference; Bonn, Germany, July 2011.

Project Outcomes

Project outcomes:

The results of this study provide evidence of an increased consumer WTP for organic labeled wool compared to all other labeling versions investigated. However, for wool producers who have not found transitioning to organic certification feasible, this study also supports the suggestion that policy makers in the U.S. should explore creating an official definition for the terms sustainable and eco-friendly, either by the USDA or by the FTC. Compared to conventional wool, there is evidence that providing consumers with a set definition for both eco-friendly and sustainable would increase WTP for products bearing each label. The definition of sustainable used for this study was consciously crafted to reflect the addition of social and economic sustainability concerns demonstrated by the producers and retailers using the term and the addition of these concerns, made apparent through the definition, resonated for the participants. Just as research into the market for locally produced food products has identified consumer interest in the economic and social value of their connection to agriculture, the success of the definition of sustainability used in this study should provide strong direction for fiber producers and apparel manufacturers who are looking into alternatives to organic labeling. The development and testing of a definition for sustainable in the apparel market is a major contribution of this study. Although formal definitions are available for organic and, to a lesser extent, all natural, results also suggest that improving consumer understand of the meaning behind these terms could influence WTP. In the case of organic, findings here indicate a significant price premium increase for organic wool products after consumers are presented with the official definition for the term. Future research should explore whether this increase is due to consumer uncertainty about the applicability of organic standards to non-food products. Policy makers aiming to foster domestic wool production should take into account the potential value of domestic consumer WTP for wool products bearing the production labels examined in this study. If a set of organic standards specific to wool production were to be introduced, coupled with evidence of consumer WTP for organic wool, producers would have a more solid foundation from which to justify the switch to organic. With such a large proportion of domestic wool currently being exported, the results found here suggest there is the same increase in WTP premium for a U.S. wool product designated as either organic, sustainable, eco-friendly, or all natural as being currently enjoyed by the greater number of overseas producers who are providing the vast majority of wool sold in the U.S. However, current production barriers such as the lack of suitable organic standards are likely preventing the domestic market for such labeled wool products to fully develop.

Economic Analysis

As part of this study on the marketing of locally produced fiber, a survey of the Southern consumers was conducted during the experimental auction sessions to determine consumer marketing preferences and purchasing habits for locally produced animal fiber products. Overall, while 38-48% of participants reported seeing products made from local fibers, the results suggest that locally owned grocery stores and natural foods supermarkets in the Southern US might be missing an opportunity to enhance their connection to the local economy by not offering local fiber products along with the local food. When the analysis is split by the various states, the following details emerge: -Georgia participants were asked where they were shopping and where they had seen both local food and local fiber apparel products and at least 38% of participants reported seeing products made from local fibers. While the locally owned grocery store was a location with local food available for sale that was listed by 62% of participants, only 10% of participants reported seeing local fiber products at the locally owned grocery store and only 10% reported seeing local fiber in their natural foods supermarket. Many stores carrying food also carry additional products for the convenience of consumers. Locally owned grocery stores and natural foods supermarkets in Georgia may be missing an opportunity to enhance their connection to the local economy by not offering local fiber products -Texas participants were asked where they were shopping and where they had seen both local food and local fiber apparel products and at least 48% reported seeing products made from local fibers. The results suggest that Natural Foods Supermarkets in Texas are doing a good job of offering local fiber products and should be kept high on the list of retail outlets for consideration by local fiber producers. While the locally owned grocery store was a location with local food available for sale that was listed by 47% of participants, only 5% of participants reported seeing local fiber products at the locally owned grocery store. Many stores carrying food also carry additional products for the convenience of consumers. As 11% of participants report that they have seen local fiber products in a supercenter such as Wal-Mart or Costco, locally owned grocery stores may be missing an opportunity to enhance their connection to the local economy by not offering local fiber products -Virginia participants were asked where they were shopping and where they had seen both local food and local fiber apparel products and, like the other states, at least 48% of participants reported seeing products made from local fibers. While the locally owned grocery store was a location with local food available for sale that was listed by 55% of participants, only 9% of participants reported seeing local fiber products at the locally owned grocery store. Many stores carrying food also carry additional products for the convenience of consumers. As 17% of participants report that they have seen local fiber products in a supercenter such as Wal-Mart or Costco, locally owned grocery stores may be missing an opportunity to enhance their connection to the local economy by not offering local fiber products. To test the strength of various marketing images, participants were shown three computer-generated images (a sheep, a farmhouse nestled in a pasture, and a green leaf on the palm) overlaid with the phrase “Made with STATE Wool” (where STATE was the name of the States where the surveys were conducted). Participants were asked to rank the images. A majority of participants most preferred the image of the sheep, with a smaller percentage most preferring the hand with the green leaf and fewest preferring the farmhome image. This suggests that in the retailing of locally produced fiber products, consumers would prefer an emphasis on the animal over the larger environment and prefer both more than an emphasis on the farm and farm family. Most states in the U.S. have programs designed to assist in the marketing of local agricultural products. A wide array of products are covered under these programs, often including animal fiber products such as wool, mohair and

alpaca. Producers and growers in these states are able to use state logos on their products either free of charge or in a few cases, after paying a fee. The results indicate that most but not all of the agricultural brand logos developed by the states are well liked by apparel consumers and would highly suitable for use on yarn or apparel labeling. In summary, when marketing products made from locally produced fibers, a balance of emphasis on the source of the fiber (in this case a sheep) must be made with the local connection (in this case the state). Finally, analysis of the bids made by participants in the experimental auctions revealed these key findings related to the value of the various labeling used in the study. Before the consumers were told definitions for all the terms, including organic and conventional, the bids for socks labeled “All Natural” were only $0.14 less and the “Eco-Friendly” were only $0.15 less than the “Organic” socks, for which participants were willing to pay $3.31. The socks labeled “Sustainable”, while still worth more than the $2.28 participants would pay for the “Conventional” socks, were worth the least of the alternatives at $2.90. This changed after participants were given information about the terms. Reminding participants what “Organic” means increased their bids to an average of $3.50. The bids for socks labeled as “Sustainable" also increased to $3.10 once this term was defined. “Eco-Friendly” and “All Natural” didn’t change in price after definition. The results of this study suggest that producers and retailers who are confident that their products meet these definitions, which are not regulated by any government body but still must meet the FTC “Truth in Advertising” requirements, should use these alternatives where possible. If the term “Sustainable” is the best fit for the product, the definition of the term should be included to help consumers know what it means in the context of an animal fiber product. All of the products in the study were manufactured in the U.S. and all of the socks that were made from U.S. wool received higher bids than the same socks made from imported wool. Retailers should make an effort to highlight the local origins of their animal fiber products wherever possible.

Farmer Adoption

The local production system for animal fibers the participation of processors, since, unlike local food, the locally produced fiber in its raw state is unusable by most consumers. Raw animal fiber requires cleaning and fiber alignment in order to be used even by artists and craftspeople who use loose fiber to create their products. For this reason, plans for assisting farmers/ranchers in adopting our marketing recommendations require a broader approach that includes processors and retailers of the processed fibers, whether loose wool for felting, roving for spinning, yarn for knitting or weaving or completely finished textiles. To this end, the marketing and labeling guidelines were taken to a large regional fiber fair, the Southeastern Animal Fiber Fair, where they were shared with the over 5000 attendees from across the region. A full page ad was taken out in the event program highlighting the role of the USDA in sponsoring marketing research applicable to small-scale producers and marketing guidelines, along with samples of the labeling developed based on the marketing guidelines, were given to as many attendees who passed through the vendor exhibition area as feasible. The goal of this study was not to change the production methods of small scale animal fiber producers here in the US, but rather to adjust the decision-making of these producers when it comes to their processing and marketing choices. It is too soon to determine the influence of the study on this portion of the system, but the results of this study have been made available to key industry leaders and will continue to be shared widely. A final constituency for this study was the state agricultural branding programs. While not all branding programs are developed enough to include textile products, the results should encourage these programs to consider the value of labeling textiles. The results were shared

with each of the states included in the programs and at least one state, Texas, is eager to use the results to encourage further participation in their program from fiber producers, based on the value the results show for state level branding.

Recommendations:

Areas needing additional study

A natural extension from this study would be to instead focus on consumer WTP for wool products designated as having been processed under the same labeling attributes included here. The recently ratified Global Organic Textile Standard is utilized by firms processing imported organic wool to sell to U.S. apparel manufacturers. Should domestic organic wool production increase in the future, it would be vital for producers and processors to understand the economic benefits of marketing products that are both produced with organic fiber and with a certified organic processing method. Exploring how the price premium for wool products that have been organically produced and processed interacts with premiums for domestic fiber origin would be of interest to industry members and policy makers aiming at increasing wool production in the U.S. Another area of study revealed by this project is the investigation of how consumers in the Southern region define as 'local' in terms of apparel products, and 'local' in terms of food products. Do consumers' definitions for local differ whether the product is apparel or food related? Knowing whether consumers definition of local is more forgiving or lax for apparel products compared to food products would be important information for Southern farmers and ranchers marketing their products to the local consumer. It would also be useful to investigate whether farm size has an effect on WTP for wool apparel products. If small farmers and ranchers can benefit from labeling their animal fiber products as being from a small farm, such increased premiums would be useful to uncover. Lastly, another area of investigation is how animal fiber producers marketing their products as local could additionally benefit from recognizing their membership in local community organizations. Is it smart business sense for farmers and ranchers in the Southern region to include on product labels that they are, for example, 'Lifetime FFA members', or a 'Member of the Texas Sheep and Goat Raisers Association'? Will consumers with a common membership be more likely to pay a price premium for the product? Will consumers who do not have a common membership pay a premium, or be indifferent? Exploring whether it is economically feasible for animal fiber producers to recognize their affiliation with community organizations on their products would be of interest to producers and marketers alike.

Information Products

- SAFF Program Page (Other)
- Marketing Local: Logos, Labels, and Location (Conference/Presentation Material)
- Your Farm Has a Story (Conference/Presentation Material)
- Sustainble Labeling Guide (Fact Sheet)
- Georgia Label (Other)

- Texas Label (Image)
- General Marketing Guide (Fact Sheet)
- Georgia Marketing Guide (Fact Sheet)
- Texas Marketing Guide (Fact Sheet)
- Virginia Marketing Guide (Fact Sheet)
- Virginia Label (Image)

SARE Sustainable Agriculture Research & Education US Department of Agriculture

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