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Specialty Crop Black Grant Program
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Project 1: Wholesale Fruit and Vegetable Promotion through Effective National Show

Project was terminated and funds were directed to a new project.

Project 2: Expanding Markets for Grainger County Tomatoes

Need for Grant

The grant's purpose was to expand the market for the confined demographic Grainger County Tomatoes. Included were several families within the county that expanded their farming operation intensively because of Grow Farms marketing Grainger County tomatoes. The small county of Grainger County has been one of the few places it is a fantastic product that ignited interest outside its county.

Providing marketing and advertisement needs for the Grainger County farmers was our goal and was accomplished by displaying at national produce conventions. The growers in this small rural town have a great product that is well known within their 50 mile radius. Our initial goal was to simply expand their radius by advertisement and having meetings.

Approach Taken for the Project

The first approach we made was discussing with the growers on our objective and how we were going to be aggressive in marketing their crop that they work hard to harvest. We immediately enrolled in all of the major regional and national produce expos and invested in material that displayed the Grow Farms Grainger County Logo.

One of the first produce conventions of the year is the Southeast Produce Council Tradeshow located in Florida. It is in the month of March every year. During this show, we set up a booth that has the Grow Farms Grainger County Brand displayed. Many buyers walk the floor during this show and either randomly stop by or stop by because of a planned meeting. The Grow Farms Grainger County Brand is the importance of every conversation. Another Show we attended is the Mid-West Produce show in August at Chicago. It is similar to the SEPC as far as people attended, just during the harvest of produce which is nice. The 3rd show we attended is the PMA Fresh Summit tradeshow. This is a much larger show that changes locations every year but is always in October. The importance of the shows relies heavily on the times of year. It is great to have one before harvest, during harvest, and at the end of harvest.

Results of the Program

Exposure of details about the product resulted in about 20% more Grainger County Tomatoes sold the following year. In addition, we worked closely with retailers to get material displayed in the stores so the Grow Farms Grainger County Brand could be visible for all to see.

The increase of Grainger County tomatoes roughly went from \$800,000 in value to \$1,000,000 in value or approximately 100,000 cases. The stores were located in Kentucky, Ohio, and Tennessee. This is the area where we were selling currently. We basically increased the volume in those areas since we spent a lot of time getting the word out. Roughly 60 hothouses and 50 acres is devoted to the Grainger County Program.

Beneficiaries

The farmers in Grainger County as well as the consumers that purchase their produce at retail supermarkets were the people that benefited. Since there was a big jump in exposure we now have our growers in Grainger County growing more tomatoes now than ever.

The number of farmers that benefited from this project is roughly 6 family farming operations.

Lessons Learned

We knew this is a great product. Now we know we can help many growers in that area since there is a huge demand for their tomatoes.

Many things went well with this project starting with the shows we exhibited in. It is always great when you can have face to face contact with the potential buyers of your product. We were able to articulate to the customers about our Grainger County Growers as well as display pictures of the families in the field growing tomatoes. The weather is always going to be a factor when farming is concerned. Even the hothouses will be affected by weather since the colder the winter means the more the grower will spend on gas to heat the houses. The field tomatoes are subject to hail, wind, too much rain, and excessive heat.

Contact Information

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Project 3: The Tennessee Master Nursery Program

Need For a Grant

The Tennessee Master Nursery Program (TMNP) was developed to better position Tennessee nursery producers to successfully adapt to a changing marketplace so they can compete as a leading nursery crop producing state. The TMNP was designed to include progressive information with a sustainability emphasis to increase understanding of the science behind recommended production practices, increase industry-specific business and marketing skills, and create awareness of advancements such as irrigation technology.

When the project was proposed, there were substantive challenges facing the industry including an initially sluggish post-recession market, non-target pesticide loss, inadequate irrigation, labor shortages, and technology gaps in multi-generation businesses. However, growth opportunities also existed and continue to exist. These include a favorable production climate, existing infrastructure (allied products, liners, landscape-sized plants, and brokers), ground transportation to half of the US population within 24 hours, and strong markets for edible crops (e.g. blueberries) and recession-proof plants (hydrangeas and Knock Out® roses). Collectively these position the Tennessee nursery industry to continue its tradition as a significant part of the state agricultural economy.

Approach Taken for the Project

A two-pronged approach was used to develop the TMNP. The committee first organized a live class and then transitioned to an online program. The live class was offered in the fall of 2012 and was supplemented by a live webinar for those who could not commute to McMinnville. Six 4-hour classes utilizing 18 different nationally recognized speakers from across the U.S. were held weekly between November 6 and December 18, 2012. A test was held at the conclusion of the program with a minimum score of 70% required to graduate. Participants were also required to attend a minimum of 5 of 6 class dates or 4 of 6 plus a technology workshop held earlier in 2012. A graduation celebration was held February 28, 2013.

The online class was offered beginning February 2014. The online program was designed with 21 modules each consisting of one hour of content. Each module is followed by a quiz and participants must receive a 70% or better to advance to the next module. The online program begins with a pre-test and concludes with a post-test and evaluation. A 70% or better must be achieved on the post-test to graduate.

The following topics compose the online TMNP program:

- Marketing and Economics I, Marketing and Economics II, Marketing and Economics III
- Irrigation I, Irrigation II
- Container Production I, Container Production II, Container Production III, Container Production IV
- Plant Nutrition and Fertilization
- Field Production I, Field Production II, Field Production III
- Pruning, Staking, and Branch Architecture
- Propagation I, Propagation II
- Pest Mgt. I, Pest Mgt. II, Pest Mgt. III, Pest Mgt. IV, Pest Mgt. V

Working with the UTIA Marketing and Communications, the TMNP committee created branding artwork for the TMNP. We printed postcards to promote the program at industry events and during site visits to growers. Recently with support from the UT Assistant Dean for Extension we created rack cards to help County Extension Agents and TDA staff promote the TMNP program. Fence signs, license tags, and hats (license tags and hats paid for by other funds) are provided to those who successfully completed the course. The signs are made from high quality weather resistant plastic that has been used successfully for years in the Tennessee Master Beef Producer program.

We developed a website in May 2012 and it is kept up-to-date (last updated October 2015) so that producers and county extension agents and specialists have access to current information about the course. <http://tnmasternursery.com>

We also developed a UT SharePoint site that allows agents to easily see a listing of all growers who have completed the course and in what year they'll need to renew the TMNP certification for TAEP. Recently a process was developed so that the staff at TDA is also able to access the UT-based SharePoint site.

Results of the Program

Live Program:

Graduates of the 2012 Tennessee Master Nursery Producer Program stated that they estimate saving an average of \$4,272 per graduate. **One time program impact is \$162,336** (45 graduates*85% agreed or strongly agreed they'd save money from the course*\$4,272=\$162,336). An estimated 50% of that savings is realized annually (e.g. fertilization reduction) for an **ongoing annual savings of \$81,168 per year**.

Online Program:

Graduates of the live program estimated saving \$7,406.31*20 participants=**\$148,126 due to improved production practices**. Participants specifically mentioned more precisely applying pesticides and rotating pesticides for better control, avoiding late fertilization to reduce winter damage, and updating or starting websites to increase sales and develop a wider customer base.

Graduates also estimated a value of \$6,612.50*20 participants = **\$132,250 due to an increase in plant quality**. They largely attributed this to refined pruning practices. **The combined estimated economic impact of the online program is \$148,126 + \$132,250 = \$280,376**. An estimated 50% of that savings is realized annually for an **ongoing annual savings of \$140,188 per year**.

The total economic impact for the first 3 years of the TMNP program is \$442,712 (\$162,336+280,376) not including reoccurring costs or the additional cost share for which participants were eligible.

Graduates of the online program have an average pre-test score of 58% and an average post-test score of 89%. We believe that participants are estimating a greater savings from the online program because they are learning more, which is happening for several reasons. Our team has control of the online curriculum, unlike when speakers were invited to

teach parts of the program. We created a very intentional, step-wise curriculum that builds in a logical sequence from basic to more difficult material. A quiz score of 70% or better must be achieved in order to advance to the next module, which integrates the quiz into the learning process more than with the live class. Growers do not have to worry about their competition hearing their questions or feel self-conscious about asking something they think they should already know in front of a crowd. They can press replay and listen to/watch a slide as many times as needed until they understand the concept and/or email me for a detailed explanation. Finally, there are no excused absences from the online program. If all modules are not completed successfully, the participant hasn't graduated. With live classes excused and unexcused absences occur and inevitably participants miss critical information and opportunities to enhance their business.

Below are some of the comments that participants have submitted when they finish the program:

Live Program

Thankful for the webinar opportunity; Great job; Will recommend to others; Thanks to each of you; Gained a lot of new knowledge and refreshed my memory on other things; Excellent use of my time.

Online Program

The UT staff was very helpful and cooperative; Knowledge is always powerful; Thanks it was fun!

Thank you for offering this; enjoyed this program and learned a lot more than I thought I would; I feel I have gained very useful information from this program. Very beneficial and pretty doggone difficult.

Quotes (both programs)

I would like to see the program continue as an online program as it allows one to do the programs during time when we can. I did most of mine 8 - 10 pm. That worked great for me.

Dale Bennett, Swan Mill Nursery

The online course proved to be interesting and insightful. I was basically born into the nursery business, but there is information in the course that will benefit the novice, as well as the veteran grower. *Scott Rubley, Rubley's Nursery*

"I've learned a lot. There's a lot of value about what it's teaching me about irrigation and information that will help us with cost savings and labor savings."

Beth Blankenship, Blankenship Farms

I enrolled in the Master Nursery Program with the sole purpose of increasing the pay percentage of the Ag Enhancement Program. When I finished, I was eligible for the higher reimbursement but the education that I acquired will be of much more value over time.

Kim Holden, Holden Nursery

Progress made to achieve the Long-Term Outcome of the Program

Our target was 50 enrollees. We have 65 graduates, 30% more than planned.

Our long-term outcome was to increase profit, which is demonstrated in the economic data reported in #3.

Beneficiaries

Nursery owners are direct beneficiaries as their businesses benefit from the increased knowledge, research updates, current recommendations, and the competitive advantage that this new information and practices bring. Nursery owners also directly benefit from the potential to be accepted in the TAEP program at a greater cost share. As of June 2014, TMNP graduates have been approved for \$184,612 in TAEP cost share funding (50% cost share) to improve their

production with projects valued at \$369,224. Graduating from the TMNP program reduced the cost share necessary to complete the same level of farm improvements by \$55,384.

Other beneficiaries include nursery employees and their families, nursery communities, and allied businesses. There are nearly 1,700 nurseries in Tennessee and they are responsible for approximately \$285 million in cash receipts each year (<http://www.tn.gov/agriculture/topic/horticulture>), which underscores the significant role the nursery industry plays in the state agricultural economy. The community and state benefit from nursery owners and nursery workers being employed, paying sales tax, buying homes and vehicles, making capital improvements and generally spending money in the local economy, which supports other local businesses and contributes to others workers staying employed.

Nursery communities, the state and the region benefit from the sustainability emphasis in the program. The TMNP program is infused with information designed to reduce the impact of the nursery industry on our environment. Responsible pesticide use is taught, as are cultural practices such as solarizing containers and applying the correct amount of water to prevent root rot so that fungicide use can be reduced. Collectively, the practices that are taught in the TMNP will improve or preserve air, water and soil quality.

Lessons Learned

Developing an online class is a time-intensive process, but it offers much more control over the course content than is achieved with live speakers. I would allow twice as much time to develop the online program if I was doing this again. Just hiring the right person for the job can be a lengthy process because the person must possess very specialized knowledge. The online program offers the economies of scale of being able to meet the needs of many growers without yearly program organization, etc. and the Moodle system does an excellent job of housing the online program and organizing participant metadata. Growers also greatly appreciate the flexibility that the online class affords. Uncertainty surrounding the post-test requirements for the online program seems to have deterred some from participating (based on personal communication with potential participants).

Additional Information

A range of resources have been provided to growers who participate in the TMNP program. These include:

Planning Today for Tomorrow's Farms. 212pp.

<https://extension.tennessee.edu/publications/Documents/PB1791.pdf>

IPM for Select Deciduous Trees in Southeastern US Nursery Production. 324pp.

<https://itunes.apple.com/us/book/ipm-for-select-deciduous-trees/id541182125?mt=11>

and

http://wiki.bugwood.org/IPM_book

IPM for Shrubs in Southeastern U.S. Nursery Production: Volume I. 175pp.

<https://itunes.apple.com/us/book/ipm-for-shrubs-in-southeastern/id903114207?mt=11>

and

http://wiki.bugwood.org/IPM_Shrub_Book

Systems-based Pest Management Manual – [English version](#) 47pp.

Systems-based Pest Management Manual – [Spanish version](#) 47pp.

UT-UK IPM for Shrub Production Manual. 80pp.

<http://plantsciences.utk.edu/tnsustainablenurserycrops.htm>

UT-UK IPM Calendar for Shrub Production

http://plantsciences.utk.edu/pdf/fulcher_IPM_shrub_calendar_FINAL.pdf

IPMPro Mobile Device Application

Apple Platform: <https://itunes.apple.com/us/app/ipmpro/id526045862?mt=8>

Google Platform: <https://play.google.com/store/search?q=IPMPro>

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Project 4: Farm-to-School Food Safety Guidelines & Educational Resources For Tennessee Farmers, Extension Professionals and School Systems

Need for a Grant:

The USDA Farm-to-School Initiative is gaining momentum across Tennessee. This initiative aims to improve school nutrition programs and support local farmers. As farmers continue to diversify marketing outlets for their products, selling fruits and vegetables to schools appears to be a viable option. Developing guidelines to address food safety is a critical part of making the Tennessee farm-to-school program a success. Each year foodborne illnesses result in millions of illnesses and thousands of deaths. Young children are at greater risk for foodborne illnesses, due to their continuing development and behavior patterns. Contamination of fresh produce with pathogens can occur anywhere in the supply chain, and once it occurs, is difficult, if not impossible, to remove. The FDA states that the most likely points of contamination occur during preharvest production. Therefore, educating growers in proper food safety practices to prevent contamination and reduce the risk of a school outbreak is crucial to the success of the farm-to-school initiative. The purpose of this project is to develop food safety guidelines for farm-to-school in Tennessee through collaboration among UT Extension, the Center for Profitable Agriculture, the TN Department of Education, and growers, and disseminate these materials through in-service trainings, workshops, and electronic resources.

Approach Taken for the Project:

The purpose of this project is to draft statewide guidelines for food safety for the farm-to-school program in Tennessee and provide training for Extension professionals, school nutrition professionals and growers for the implementation of these guidelines.

The objectives are to:

1. Develop and distribute statewide Farm-to-School Food Safety Guidelines to be used to educate Extension professionals, schools nutrition professionals and growers
2. Conduct Extension professional in-service trainings and tours in all three regions of the state on farm-to-school food safety
3. Develop and host Farm-to-School Food Safety Workshops to be presented statewide

Results from the Program:

Objective 1: Develop and distribute statewide Farm-to-School Food Safety Guidelines to be used to educate Extension professionals, schools nutrition professionals and growers

The curriculum 'Enhancing the Safety of Locally Grown Produce' was created at the University of Georgia, Clemson, and Virginia Tech to train growers and farmers' market managers in food safety practices. PI-Critzer participated in the conceptualization and development of these materials, and has facilitated our collaboration with Dr. Judy Harrison from the University of Georgia. We used these materials to train growers in Tennessee, and created companion materials for School Nutrition Directors that are now a part of the 'Enhancing the Safety of Locally Grown Produce' curriculum to be used both in Tennessee and neighboring states. The grower curriculum is composed of DVD with Factsheets & Self-Help Forms, Farmer Training Tools (Instructor Guide, Instructor Dialogue, PowerPoint slides, and Post-session Evaluation) and a Certificate of Completion, as well as video interviews on the farm. The school nutrition directors' curriculum contains six factsheets (link included in 'Additional Information'):

1. Farm to School Self-Help Form
This checklist allows school nutrition directors to assess their farm to school food safety practices and start a conversation with their growers about good agricultural practices.
2. Introduction (overview of food safety)
This factsheet provides a background on food safety and the important steps from farm to tray. The information covers on-farm food safety, including critical areas such as land and water use, farm worker health and hygiene, facilities and equipment, harvest and storage, and transport. On the institutional side, institutional worker health and hygiene, facilities and equipment, storage and handling, and students are discussed.
3. What's in season?
Many school nutrition directors want to buy from growers, but are unsure of what is in season during the school year. This table provides a month-by-month snapshot of which fruits and vegetables are available in Tennessee throughout the year.
4. Does your produce make the grade?
This factsheet provides a guide on evaluating incoming produce to the school, and covers the school nutrition personnel responsibilities from vehicle inspection, sorting, checking and recording incoming temperatures and conducting a mock recall.
5. Proper storage of produce
These tables provide the ideal storage temperature for each commodity, as well as delineating which crops are ethylene producers and ethylene sensitive that should be physically separated in storage.
6. Washing produce
This factsheet discusses choosing a disinfectant and steps to follow for washing produce.

Objective 2: Conduct Extension professional in-service trainings and tours in all three regions of the state on farm-to-school food safety

Extension agent in-service trainings were conducted on February 25 and 27, 2014 in Pikeville and Clarksville, TN, respectively. In the trainings, 28 agents were provided with Instructor Materials for 'Enhancing the Safety of Locally Grown Produce'.

Objective 3: Develop and host Farm-to-School Food Safety Workshops to be presented statewide

A half-day workshop was conducted on January 30, 2014 at the Tennessee Horticultural Expo in Nashville, TN. Drs. Faith Critzer and Annette Wszelaki presented the 'Enhancing the Safety of Locally Grown Produce' curriculum to 62 growers and Extension professionals.

Moreover, PI's Wszelaki and Critzer conducted trainings with 72, 52 and 98 Tennessee School Nutrition Directors, respectively, on April 24, 2014 in Jackson (West TN), April 28, 2014 in Nashville (Middle TN) and May 2, 2014 in Knoxville (East TN).

Lastly, PI's Wszelaki and Critzer have conducted three Farm to School Food Safety Workshops on November 7, 2014 in Ripley (West TN), November 18, 2014 in Murfreesboro (Middle TN) and December 10, 2014 in Chattanooga (East TN) for a total of 60 growers, school nutrition personnel, Extension professionals and agricultural teachers. These workshops provided participants with a platform to tour the school kitchen facilities, exchange questions regarding procurement, pricing, and crop quantity and availability, and learn basic food safety guidelines in the field and institution.

Overall, we have used the materials developed through this project to train over 350 Extension professionals, growers and school nutrition personnel in-person and distributed over 1,000 packets of materials.

Progress Made to Achieve the Long-term Outcome of the Program:

In Tennessee, the fruit and vegetable industry accounts for nearly \$75,000,000 in annual sales and is comprised of over 1,800 farms. Across the country and in Tennessee, the interest in providing fresh fruit and vegetables to local schools systems is increasing. In 2010-11, school nutrition programs in Tennessee spent over \$25,000,000 on fresh fruits and vegetables; the estimated amount spent on local produce was approximately \$600,000 (Hodges, personal communication). There is great potential for Tennessee producers to capture more of these purchasing dollars through the farm-to-school program; however, prior to this project, there are no harmonized food safety guidelines available in the state for farmers and schools systems to follow to minimize the risk of contamination. As a result, school nutrition directors had identified food safety concerns as the largest obstacle to implementing a farm-to-school program (Hodges, 2012). The development and dissemination of these guidelines will hopefully facilitate in providing an additional marketing outlet for Tennessee farmers and allow Tennessee school systems and farmers to provide fresh fruit and vegetables with reduced risk in the long-term.

Beneficiaries:

- 1) Extension professionals comprised of both agricultural agents and family and consumer science agents in all 95 counties of Tennessee and in neighboring states;
- 2) Growers interested in the farm to school program specifically, but more broadly those interested in direct marketing their produce;
- 3) School nutrition directors from across the state and in surrounding states;
- 4) The nearly one million school students in Tennessee who will ultimately benefit from the farm to school program.

Lessons Learned:

- A lack of guidelines for farm to school food safety was a barrier to many school nutrition directors adopting this program.
- Many schools have purchased kitchen equipment to better process fresh fruits and vegetables, versus utilizing canned products.
- By hosting the regional workshops, school nutrition directors, Extension professionals and growers had the opportunity to network, ask questions and learn how to move forward with farm to school in their respective communities.

Additional Information:

The six school nutrition directors' curriculum factsheets can be found here:

[Enhancing the Safety of Locally Grown Produce: Farm to School Self-Help Form SP 768-A](#)

[Enhancing the Safety of Locally Grown Produce: Introduction to Food Safety in Farm to School Programs SP 768-B](#)

[Enhancing the Safety of Locally Grown Produce: Does Your Produce Make the Grade? SP 768-C](#)

[Enhancing the Safety of Locally Grown Produce: Washing Produce SP 768-D](#)

The original “Enhancing the Safety of Locally Grown Produce” materials for growers can be found here:

<http://pubs.ext.vt.edu/category/on-farm-food-safety.html>

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Project 5: SproUTing Growers: A Train-the-Trainer Program for Extension Professionals Working with Beginning Growers of Specialty Crops

Need for a Grant:

Market stands and farmers markets are becoming increasingly important avenues for growers to market their produce directly to the consumer. In fact, in these markets, demand often outstrips supply. Direct markets offer better prices to the farmer, lower travel costs and less time to get products to market. In turn, these markets offer the consumer an opportunity to connect with the grower and the land where their food was produced, and learn about the agricultural practices used to grow the food, as well as providing fresher, more nutrient rich foods, as the time and distance from farm to fork can be greatly reduced by buying locally. While the demand is on the rise, the age of our farmers is also increasing, with an average age of 55-years old for a U.S. farmer. As these farmers age and retire, farm land is lost to development and other enterprises. In order to preserve the farmland and meet the supply for local production, we need to replace the older generation of farmers with a new generation and help existing operations meet the direct market demand. The purpose of this project is to expand the development of a beginning grower program called ‘SproUTing Growers’.

Approach Taken for the Project:

In order to stimulate interest in farming and provide those interested with the tools they need to succeed, we developed modules for a comprehensive, 10-part beginning grower program titled ‘SproUTing Growers’. The program enhances skills to become market growers from business planning and management to production to marketing. The SproUTing Growers Workshop Series was funded in 2010 through ARRA Funds. The program was highly successful in the Knoxville area, and the PI received requests to conduct the workshops all across the state. To make the program more accessible and comprehensive, we created a train-the-trainer format, where the Extension agents were given the modules to deliver to clientele in their area. This innovative program was a collaboration of a multi-disciplinary team at the University of Tennessee composed of personnel from the Departments of Plant Sciences, Agricultural and Resource Economics, and Food Science & Technology and the Center for Profitable Agriculture.

The **objective** of this project was to develop modules for a 10-part ‘SproUTing Growers’ workshop series to provide potential growers with the business planning and management, agricultural production, food safety and marketing tools that they need to properly plan and carryout a farming venture. The modules were provided to Extension agents through in-service training, with the idea that they would be delivered by Extension agents to potential growers in their county and surrounding counties.

Results from the Program:

In the first year of the project, ten half-day, interactive modules were designed on all aspects of growing for market. These modules include:

- 1) Business Planning, led by A. Rhea, Area Farm Management Specialist
This workshop helps participants think about the description of their business (products they will offer, location, legal structure, operation procedures, personnel, accounting and legal, and insurance), as well as helps them decipher financial data.
- 2) Production Planning, led by A. Wszelaki and D. Lockwood, Plant Sciences
This workshop covers site selection, crop scheduling, seed selection, and farm design.
- 3) Marketing Strategies, led by M. Leffew, Center for Profitable Agriculture
This workshop introduces participants to direct marketing options (farm market, farmers market, coops, and CSA), helps them develop a marketing plan (strategy, market analysis, and customer service) and provides tips for marketing their farm image.
- 4) Transplant Production, led by A. Wszelaki and M. Rogers, Plant Sciences
This workshop covers choosing your supplies, fertility, light requirements, and potential challenges.
- 5) Small Fruit Production, led by D. Lockwood, Plant Sciences
This workshop introduces participants to considerations for small fruit production, including site preparation, variety selection, pruning, maintenance, and weed, disease and insect control.
- 6) Cool Season Vegetable Production, led by M. Rogers and A. Wszelaki, Plant Sciences
This workshop covers cool season crop selection, planting dates, variety selection, plant spacing, production tips, and weed, disease and insect control.
- 7) Warm Season Vegetable Production, led by A. Wszelaki and M. Rogers, Plant Sciences
This workshop covers warm season crop selection, planting dates, variety selection, plant spacing, production tips, and weed, disease and insect control.
- 8) Season Extension Techniques, led by A. Wszelaki and M. Rogers, Plant Sciences
This workshop introduces participants to high and low tunnels, their design features, crop selection, planting dates, variety selection, production tips, and pest control.
- 9) Food Safety, led by F. Critzer, Food Science and Technology, D. Lockwood and A. Wszelaki, Plant Sciences
This workshop helps participants assess the food safety risks on their farm, or helps them mitigate risks, and create a farm food safety plan.
- 10) Harvest and Handling, led by A. Wszelaki and M. Rogers, Plant Sciences
This workshop covers harvesting tips and postharvest handling (cooling, washing, storing and packaging) to maintain the highest quality product fresh from the farm.

In the second year of the project, two train-the-trainer in-services for Extension agents were conducted for 28 agents on February 25 and 27, 2014 in Pikeville and Clarksville, respectively. Each agent was given a notebook with the 10-modules, presentation notes, pre- and post-tests and a certificate of completion for workshop attendees in both paper and USB formats. The pilot workshop series was also conducted for a nine county cluster (Cheatham, Decatur, Dickson, Henry, Hickman, Houston, Humphreys, Montgomery, and Robertson Cos.), which began on September 2 and ran through

November 4, 2014. The class consisted of 11 attendees. The knowledge gain from before to after the workshops ranged from 5-25%, with an average overall increase in knowledge of 15% per participant. Finally, the curriculum of the SproUTing Growers Series was presented at the national American Society for Horticultural Science meeting in July 2014 to an audience of 75 educators from all across the United States. There was much interest in the program, with the potential to expand beyond the borders of TN.

Progress Made to Achieve the Long-term Outcome of the Program:

This multi-disciplinary project, involving the Departments of Plant Sciences, Agricultural and Resource Economics, and Food Science & Technology and the Center for Profitable Agriculture, provides the foundation for all aspects of growing for market- agricultural production, food safety, business planning and management, and marketing for Extension agents training their potential growers. The project has potentially increased the number of market growers in Tennessee, stimulated interest in farming, and preserved family farms.

Beneficiaries:

The beneficiaries of this project include:

- 1) Agricultural Extension professionals in all 95 counties of Tennessee, who have access to the material to present to potential growers in their counties;
- 2) Potential growers interested in the learning aspects of successful fruit and vegetable production- from business planning to marketing.

Lessons Learned:

- While teaching potential growers the foundations for growing for market can increase the number of growers, it is also valuable if through the workshops series, potential growers learn that farming is not for them. We consider this a success as well, in preventing an operation from failing, as farming is hard work and inherently risky.

Additional Information:

Materials that were distributed to participants are on file at the TN Department of Agriculture.

Contact Information for the Subrecipient:

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Project 6: Creative Nursery Marketing, Practical Solutions

Project was terminated and funds were directed to a new project.

Project 7: Understanding Product Liability

Need for a Grant

Tennessee specialty crop growers may be unaware of product liability risks that are associated with the sale of their products. The risk of foodborne illness may be reduced by adopting a written set of food safety procedures but the risk of a grower's customer claiming foodborne illness may not be completely eliminated. General farm owners' insurance coverage may be limited and may not extend to direct marketed products, to specialty crops purchased for resale or to processed products made from specialty crops. Product liability insurance is a tool specialty crop growers may use to transfer this risk.

The purpose of this grant is to educate Tennessee growers of specialty crops about product liability risk and how to manage that risk with tools such as insurance. Clarification and education about product liability issues will enable specialty crop growers to manage product liability risks.

Approach Taken for the Project

An advisory team was assembled with individuals from Tennessee Department of Agriculture Market Development Division (Tammy Algood, Amy Tavalin and Debbie Ball), Tennessee Department of Agriculture Consumer and Industry Services Division (Mike Brown and Shannon Lively), University of Tennessee Department of Plant Sciences (David Lockwood and Annette Wszelaki), University of Tennessee Department of Food Science and Technology (Eric Goan and Faith Critzer), Tennessee Association of Farmers Markets (Steve Guttery), University of Tennessee and Tennessee State University Extension (Lee Sammons, Janie Becker and Tom Stebbins) and University of Tennessee Center for Profitable Agriculture (Megan Leffew and Hal Pepper). A teaching team consisting of Tennessee Department of Agriculture specialists (Tammy Algood, Amy Tavalin and Mike Brown), University of Tennessee and Tennessee State Extension agents and specialists (Janie Becker, Margarita Velandia, Eric Goan, Faith Critzer and Hal Pepper) and USDA-Risk Management Agency (Terri Lemire) was selected. Plans were made to develop and conduct educational workshops on topics that would appeal to specialty crop growers and agents—liability risk from food-borne illness, insurance applications and limitations, food manufacturing, regulations on processed fruits and vegetables, signage, booth displays, communication, connecting with the customer, expanding sales through electronic payments, sales tax, business tax, sampling, selling fruits and vegetables to restaurants and whole farm revenue insurance.

Three focus group meetings of fruit and vegetable growers were planned and conducted in 2012 and the information obtained was used to develop an 8-page survey about product liability insurance. The survey titled "*2013 Tennessee Fruit and Vegetable Producer Survey—Product Liability Risk*" was mailed to 495 fruit and vegetable growers listed on the Pick Tennessee Products website. A copy of the survey is provided as Appendix A.

Plans were made for two specialists (Faith Critzer and Hal Pepper) to write a fact sheet about food safety best practices at farmers markets. Plans were also made for four specialists (Hal Pepper, Faith Critzer, Margarita Velandia and Annette Wszelaki) to write a publication about managing risks of foodborne illness for growers of specialty crops. The publication would discuss the risk associated with growing fresh produce and some of the tools available to growers for managing this risk. This publication is drafted and pending publication.

Using the information gathered from the survey and in researching materials for the publication about managing risks of foodborne illness for growers of specialty crops, a presentation was developed about insurance applications and limitations related to liability risk from foodborne illness. Presentations on regulations for making cottage foods, acidified and formulated acid foods, food labeling, and food safety best practices for product sampling were also developed. These and other presentations were designed to help specialty crop growers make good decisions about handling specialty crops safely and obtaining insurance that addresses the risk of foodborne illness. The presentations were incorporated into all-day workshops called "Farmers Market Boot Camps."

An evaluation form would be developed to assess 2013 Farmers Market Boot Camp participants' overall improvement in knowledge of the topics presented and increase in understanding on the topic of product liability insurance. The evaluation form from the 2013 Farmers Market Boot Camp is provided as Appendix B. The evaluation form was expanded for the 2014 and 2015 Farmers Market Boot Camp to assess whether participants learned about: 1) product liability insurance for sales of fruits and vegetables, 2) how to determine whether your existing insurance covers you when you sell fruits and vegetables at the farmers market, 3) how to determine the amount of insurance coverage you have and 4) how to determine differences in coverage for fresh versus processed fruits and vegetables. The 2014 and 2015 Farmers Market Boot Camp participants were asked how likely they were to market their products more competitively and how likely they were to increase profits. They were also asked if they planned to get insurance that provides coverage for sales of fruits and vegetables, to rate the overall usefulness of the boot camp and tell what they liked best and least about the workshop. They were asked to list other topics that should be offered in future workshops. Results from the evaluation forms would be used to improve these and future workshops. The evaluation forms for the 2014 and 2015 Farmers Market Boot Camps are provided as Appendix C and Appendix D.

Planning was conducted with Extension agents and specialists, Tennessee Department of Agriculture specialists and USDA-Risk Management Agency to conduct six Farmers Market Boot Camps each year from 2013 to 2015 (for a total of 19—one was repeated in 2015 due to weather) in various locations across the state. Planning was also conducted with agents and specialists to offer 8 additional presentations about product liability as it relates to specialty crops at various grower workshops. The workshops and contacts are summarized by year in Table 1.

Results of the Program

The survey of fruit and vegetable growers about product liability risk was mailed to 495 fruit and vegetable growers and 163 surveys were returned for a return rate of 33 percent. The data from this survey were summarized by the University of Tennessee's Human Dimensions Research Lab. According to the results, the most common risk faced by these fruit and vegetable producers was "quality problems with produce due to weather, pests, etc." The next two most common risks faced by these fruit and vegetable producers were "customer liability associated with injuries caused by harmful products such as contaminated fresh products" and "customer liability associated with bodily injury that occurred on the farm premises." The survey results were reported in the article "Product Liability Risk Perceptions in Tennessee Fruit and Vegetable Marketing" which was published in the Spring 2014 edition of the Journal of Agribusiness. This article can be accessed at

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmxtYXJnYXJpdGF2ZWxhbmRpfGd4OjdjMTcwMTdhNGQwYzdkOTY>.

A large percentage (64 percent) of respondents use a homeowner's insurance policy as a tool to handle the risks of customer liability associated with injuries caused by harmful products and bodily injury on the farm premises. However, the exclusions contained in homeowner's policies may prevent producers from having protection from these risks. The survey also showed that producers on average have limited familiarity with product liability insurance as an insurance coverage option. The information gained from this survey was used to educate growers about product liability risks and the importance of understanding their insurance policies and any exclusions contained in them.

A draft of the fact sheet titled *Food Safety Best Practices for Farmers' Markets* was developed in December 2012. The fact sheet was reviewed and edited in February and March, 2013 and published in April. The fact sheet was printed and distributed to county Extension offices and was used as a teaching aid in the 2014 Farmers Market Boot Camp Workshops. The fact sheet contains educational information for farmers market managers and vendors about sampling of produce and foods, personal hygiene, pets at farmers markets, vendor displays, produce containers, implementation of good agricultural practices and regulatory compliance. This fact sheet is available online at

<https://ag.tennessee.edu/cpa/CPA%20Publications/SP749%20Food%20Safety%20Best%20Practices%20for%20Farmers%>

[20Markets.pdf](#). A 10 page publication on managing the risks of foodborne illness for growers of specialty crops was written and is expected to be published in January 2016.

A goal was set for 70 percent of participants to increase knowledge and skills through participating in the Farmers Market Boot Camps. At the 2013 Farmers Market Boot Camps 274 attended and on a scale of 1 to 5 where 5 equals “huge improvement in knowledge,” the mean rating of all participants was 4.27 which corresponds to good or “huge” change in knowledge. For the presentation on product liability insurance the mean score for improvement in knowledge was 4.33. At the 2014 and 2015 Farmers Market Boot Camps 450 attended and 86% of participants learned about product liability insurance for sales of fruits and vegetables; 11% already knew about this topic. Eighty-three percent learned how to determine whether existing insurance covers them when they sell fruits and vegetables at the farmers market and 10% already knew this. Seventy-three percent learned how to determine the amount of insurance coverage they have and 15% already knew this. Seventy-eight percent learned how to determine differences in coverage for fresh versus processed fruits and vegetables and 7% already knew this. In rating the overall usefulness of the workshops 10% rated them Somewhat Useful, 18% rated them Moderately Useful and 71% rated them Very Useful. When asked whether they would get insurance that provides coverage for their sales of fruits and vegetables, 50% said they plan to do this within the next 12 months, 15% did this before the workshop and 17% said this did not apply to them.

Progress made to achieve the Long-Term Outcome of the Program

Participants at Farmers Market Boot Camps increased their knowledge about product liability insurance for sales of fruits and vegetables, how to determine whether their existing insurance covers them when they sell fruits and vegetables at the farmers market, how to determine the amount of insurance coverage they have and how to determine differences in coverage for fresh versus processed fruits and vegetables. Half of the participants plan to get insurance that covers their sales of fruits and vegetables and 90% said they are somewhat likely, likely, very likely or extremely likely to market their products more competitively as a result of the workshops. Eighty-seven percent said they were somewhat likely, likely, very likely or extremely likely to increase profits based on knowledge gained at the workshops. Long term outcomes anticipated are participants’ improved ability to manage product liability risk, increased number of sales, increased volume of sales and increased income.

Beneficiaries

Beneficiaries include specialty crop growers, Extension agents and farmers market managers who participated in the workshops and received training on using insurance to manage product liability risks from foodborne illness. Their customers also benefit when specialty crop growers harvest, handle and process their fruits and vegetables safely.

Lessons Learned

Many farmers are surprised to learn that their general liability farm insurance may not provide product liability coverage for their direct marketed sales of specialty crops. Farmers must read their policy carefully to know the amount of coverage, what is covered and what is excluded.

Additional Information

The fact sheet *Food Safety Best Practices for Farmers’ Markets* may be found at <https://ag.tennessee.edu/cpa/CPA%20Publications/SP749%20Food%20Safety%20Best%20Practices%20for%20Farmers%20Markets.pdf>.

Center for Profitable Agriculture website: <https://ag.tennessee.edu/cpa/Pages/default.aspx>

The 10 page publication on managing the risks of foodborne illness for growers of specialty crops that is slated for publication in January of 2016, will be sent to The Tennessee Department of Agriculture and will be available upon request.

Contact Information for the Sub-Recipient

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A deliverables matrix with additional information is included as Table 1 below.

Table 1

Summary of Deliverables, Events and Contacts for the Understanding Product Liability Project

	Grant Yr 1 (Oct 2012- Sep 2013)	Grant Yr 2 (Oct 2013- Sep 2014)	Grant Yr 3 (Oct 2014- Sep 2015)	Cumulative Totals (Meetings)	Cumulative Totals (Contacts)
# of focus group meetings conducted	3			3	
# of contacts at focus group meetings	18				18
# of Farmers Market Boot Camp Workshops conducted	6	6	7	19	
# of contacts at Farmers Market Boot Camp Workshops	274	268	182		724
# of additional presentations on product liability	3	3	2	8	
# of contacts at additional presentations on product liability	77	97	82		256
# of fact sheets and journal articles published	1	1			
# of educational publications and journal articles drafted and pending			2		

publication					
# of surveys conducted	1				
Total Meetings/Contacts				30	998

Photos from Farmers Market Boot Camp workshops in Dyersburg, Dickson, Chattanooga, Clarksville, Covington & Alcoa.



Figure 1. Specialty crop growers in Dyersburg learned about product liability on February 25, 2014.



Figure 2. Specialty crop growers in Dickson learned about insurance and risk from food-borne illness on February 26, 2014.



Figure 3. Specialty crop growers in Chattanooga learned about regulations for processing in domestic kitchens on March 5, 2014.



Figure 4. Hal Pepper taught specialty crop growers in Clarksville about product liability risk on February 25, 2015.



Figure 5. Amy Tavalin taught specialty crop growers in Covington about having a fabulous display on February 24, 2015.



Figure 6. Amy Tavalin taught specialty crop growers in Alcoa about selling fruits and vegetables to restaurants on February 17, 2015.

Appendix A



THE UNIVERSITY of TENNESSEE **UT**
INSTITUTE of AGRICULTURE

2013 TENNESSEE FRUIT & VEGETABLE PRODUCER SURVEY

***** Product Liability Risk *****

Fruit and vegetable growers face important risks associated with foodborne illness outbreaks. Two examples are:

- 1) Liability risks in that consumers can take legal actions against producers demanding monetary compensation claiming the food they purchased made them sick.
- 2) Regulators can issue a product recall or warning because of a foodborne illness outbreak that can cause an enormous drop in product sales and an economic loss for all producers including those whose product was not contaminated.

Product liability insurance may help protect producers by limiting their possible exposure to risks associated with consumers' claims of injury caused by harmful or contaminated products. Other insurance products may help producers cover direct and indirect costs associated with product recalls. Researchers at the University of Tennessee request your help in completing the attached survey to design educational tools that help growers understand product liability risks and how to protect against these risks.

The enclosed 7-page survey should take about 20 to 25 minutes to complete. This survey is being sent to a random sample of 700 Tennessee fruit and vegetable producers. The survey is funded by the USDA Specialty Crop Block Grant and is conducted as part of a research and outreach project in cooperation with the Tennessee Department of Agriculture. Your participation is strictly voluntary, and your response to this survey will be confidential. Responses to the survey will be aggregated and published in summary form only.

Please complete the survey and mail it back to us in the enclosed self-addressed postage-paid envelope. Your response is extremely valuable, and we look forward to receiving your completed survey. The survey results will be made available at <http://vegetables.tennessee.edu>. Thank you for taking the time to assist the University of Tennessee's Institute of Agriculture with this survey.

IMPORTANT

Are you the best person to answer questions about fruit and vegetable marketing and product liability on your farm? If so, please answer the following questions. If not, please direct this questionnaire to the person who makes the fruit and vegetable marketing decisions. Please note that questions about your farming operation apply to the 2012 and 2011 crop years.

A. PLEASE TELL US ABOUT YOURSELF AND YOUR OPERATION

1. In what county is your primary farming operation located?
_____ County
2. In what year were you born? _____
3. How many years have you farmed? _____ years
4. How many years have you been selling fruits or vegetables? _____ years
5. Please indicate your sex (check one)
 Male
 Female
6. Which of the following describes the highest level of education you have obtained?
 Less than High School/GED
 High School/GED
 Some college
 Associate degree or Vocational school or equivalent
 Bachelors' degree
 Graduate degree
7. How many persons are in your household, including yourself?
 1
 2
 3
 4
 5 or more
8. What is your primary occupation?
 Full time farmer
 Employed full-time off the farm
 Employed part-time off the farm
 Retired and farming part-time
 Usually employed (full time or part time) off the farm, but currently unemployed

9. On the land you owned or rented from others, how many acres did you use to produce fruits, vegetables, and other crops in the last two years?

Fruits, Vegetables, and Other Crops	2011		2012	
	Owned	Rented	Owned	Rented
Fruits and Vegetables				
Other Crops				

10. Which of the following farm products and services were produced on your farm in 2012? (Check all that apply).

PLEASE NOTE THAT "FRESH MARKET SALES" INCLUDES U-PICK FOR THIS SURVEY.

- | | |
|---|---|
| <input type="checkbox"/> Fruits and/or vegetables for <i>fresh market sales</i> | <input type="checkbox"/> Poultry or Eggs |
| <input type="checkbox"/> Fruits and/or vegetables for <i>processing</i> | <input type="checkbox"/> Milk |
| <input type="checkbox"/> Grains | <input type="checkbox"/> Beef |
| <input type="checkbox"/> Hay | <input type="checkbox"/> Pork |
| <input type="checkbox"/> Nursery crops, Greenhouse crops, or Christmas trees | <input type="checkbox"/> Lamb or goat meat |
| <input type="checkbox"/> Nuts | <input type="checkbox"/> Value-added farm products (e.g. ham, wine, cheese) |
| <input type="checkbox"/> Other <i>please list</i> : _____ | <input type="checkbox"/> Agri-tourism |

B. MARKETING INFORMATION

IF YOU **DID NOT** SELL FRUITS AND VEGETABLES YOU RAISED IN THE LAST TWO YEARS, PLEASE ANSWER "NO" TO **QUESTION 11** AND THEN SKIP TO **QUESTION 27**.

11. Did you sell fruits and/or vegetables that you raised in 2011 or 2012?

___ Yes, proceed to Question 12

___ No, skip to Question 27

12. Did you sell fruits and/or vegetables purchased from someone else in the last two years?

2011: ___ Yes 2012: ___ Yes
 ___ No ___ No

13. Approximately what percentage of your farm's gross annual sales came from *fresh market* sales of fruits and vegetables in the last two years? 2011 _____% 2012 _____%

14. Approximately what percentage of your farm's gross annual sales came from sales of fruits and vegetables for *processing* in the last two years? 2011 _____% 2012 _____%

15. Which of the following fruits and vegetables did you produce for sale (for fresh market sales or for processing) in the last two years? (Check all that apply).

- | | | |
|---|---|---|
| <input type="checkbox"/> Apples | <input type="checkbox"/> Grapes | <input type="checkbox"/> Snap Beans |
| <input type="checkbox"/> Bell peppers | <input type="checkbox"/> Lettuce | <input type="checkbox"/> Squash |
| <input type="checkbox"/> Blueberries | <input type="checkbox"/> Greens | <input type="checkbox"/> Strawberries |
| <input type="checkbox"/> Blackberries | <input type="checkbox"/> Okra | <input type="checkbox"/> Sweet Corn |
| <input type="checkbox"/> Broccoli | <input type="checkbox"/> Onions | <input type="checkbox"/> Tomatoes |
| <input type="checkbox"/> Cabbage | <input type="checkbox"/> Peaches | <input type="checkbox"/> Turnips |
| <input type="checkbox"/> Cantaloupes | <input type="checkbox"/> Pears | <input type="checkbox"/> Watermelons |
| <input type="checkbox"/> Cherries | <input type="checkbox"/> Plums and prunes | <input type="checkbox"/> Other fruits _____ |
| <input type="checkbox"/> Cucumbers and/or Pickles | <input type="checkbox"/> Pumpkins | <input type="checkbox"/> Other vegetables _____ |

16. Mark with an "X" the marketing methods you used in the last two years in selling fruits and/or vegetables and estimate the percentage of your sales made through each method. Mark with an "X" those methods you used that require product-liability insurance.

	Marketing methods used (mark with an "X")		Estimate the percentage of sales made through this method (each column should total 100%)		These marketing methods require product liability insurance (mark with an "X")
	2011	2012	2011	2012	
Direct Sales to Consumers:					
On farm sales					
Farmers' markets					
Community Supported Agriculture (CSA)					
Roadside stands					
Pick-your-own					
Other direct sales (describe) _____					
Sales to Intermediaries:					
Grower cooperatives					
Wholesale buyers/brokers/packers					
Other farmers					
Other intermediaries (describe) _____					
Sales to Retail Outlets:					
Grocery stores					
Food cooperatives					
Restaurants					
Institutions (such as schools and hospitals)					
Other retail outlets (describe) _____					
			100%	100%	

C. RISK MANAGEMENT AND LIABILITY INSURANCE

17. What are the risks you face when selling fruits and/or vegetables? (Mark all the risks that apply with an "X").

Risks	Mark with an "X"
Customer liability associated with injuries caused by harmful products such as contaminated fresh products	
Customer liability associated with bodily injury that occurred on the farm premises	
Product recall or warning because of foodborne illness outbreak	
Low sales volume, unsold produce	
Quality problems with produce due to weather, pests, etc.	
Buyer back out, failure to fulfill commitments	
Market fluctuations (e.g., low price, low profits)	
Other risk (describe) _____	

18. Mark an "X" to the left of each risk management option that you use or have used to manage risk in your operation. On a scale from 1 to 7 where "1" is not important and "7" is very important, circle how important you believe each option you marked is in terms of risk management on a typical farm.

Mark an "X" if used	Risk Management Options	Not Important							Very Important						
		1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Financial savings/reserves	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Adjusted Gross Revenue (AGR) or Adjusted Gross Revenue-Lite (AGR-lite) crop insurance	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Actual Production History or APH insurance (Yield Base Insurance)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Product liability insurance policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Product recall policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Comprehensive farm liability policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Good Agricultural Practices (GAP) training/certification	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Commercial business policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Homeowner's policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Umbrella policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Become a corporation or limited liability company (LLC)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Other (describe) _____	1	2	3	4	5	6	7	1	2	3	4	5	6	7

19. On a scale from 1 to 7, where “1” is not familiar and “7” is very familiar, please circle your familiarity with each insurance coverage option for fresh produce growers.

Risk Management Options	Not Familiar							Very Familiar						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Product liability insurance policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Comprehensive farm liability policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Homeowner's policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Umbrella policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Commercial business policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Product recall policy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Adjusted Gross Revenue (AGR) or Adjusted Gross Revenue-Lite (AGR-lite) crop insurance	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Actual Production History or APH insurance (Yield Base Insurance)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Other (describe) _____	1	2	3	4	5	6	7	1	2	3	4	5	6	7

The following definition may be helpful:
Product liability insurance protects producers against consumer claims of injury caused by harmful products such as contaminated fresh or value added products.

20. Do you have insurance that provides product liability coverage?

___ Yes

___ No → In the space below, please indicate the main reasons why you don't have product liability coverage and then *Skip to Question 27*:

___ I Don't Know → *Skip to Question 27*.

21. What type of insurance policy do you use to provide product liability coverage?

- Product liability insurance policy
- Comprehensive farm liability policy
- Homeowner's policy
- Umbrella policy
- Commercial business policy
- Other (please describe) _____

D. INFORMATION ABOUT YOUR HOUSEHOLD

27. Check what percentage of your taxable household income was from farming in the last two years?

2011

- None
- Less than 25%
- 25% to 49%
- 50% to 74%
- More than 75%

2012

- None
- Less than 25%
- 25% to 49%
- 50% to 74%
- More than 75%

28. Check the category that best reflects your taxable household income from both farm and non-farm sources in 2012:

- | | |
|--|--|
| <input type="checkbox"/> Under \$10,000 | <input type="checkbox"/> \$50,000 - \$74,999 |
| <input type="checkbox"/> \$10,000 - \$14,999 | <input type="checkbox"/> \$75,000 - \$99,999 |
| <input type="checkbox"/> \$15,000 - \$24,999 | <input type="checkbox"/> \$100,000 - \$150,000 |
| <input type="checkbox"/> \$25,000 - \$34,999 | <input type="checkbox"/> more than \$150,000 |
| <input type="checkbox"/> \$35,000 - \$49,999 | |

Thank you for your time!

Please place the survey in the enclosed self-addressed postage-paid envelope and return by mail. A summary of the results will be made available at

<http://vegetables.tennessee.edu/>.

Appendix B

Evaluation Form Farmers Market Boot Camp 2013 – Spring Hill

- 1) What was the one most important thing you learned in today's program?
- 2) On a scale of 1 to 5 (where 1 is Terrible and 5 is Excellent), how would you rate today's overall "Boot Camp" program?
- | | | | | | |
|----------|---|---|---|---|-----------|
| Terrible | | | | | Excellent |
| 1 | 2 | 3 | 4 | 5 | |
- 3) On a scale of 1 to 5, overall, how much did this program improve your knowledge?
- | | | | | |
|----------------------------------|---|---|---|----------------------------------|
| No change
<u>in</u> knowledge | | | | Huge improvement
in knowledge |
| 1 | 2 | 3 | 4 | 5 |
- 4) On a scale of 1 to 5, please rate the quality of each presentation and the effectiveness of the presenter.
- | | | | | | |
|---|----------|---|---|---|-----------|
| | Terrible | | | | Excellent |
| a. "Don't Drive with your Brakes On... Taking Your Marketing to the HOV Lane" – Tammy Algood | 1 | 2 | 3 | 4 | 5 |
| b. "How to Raise Profits by Focusing on Consumer Desires: Who Buys and Why They Buy at Farmers Markets" – Margarita <u>Valencia</u> | 1 | 2 | 3 | 4 | 5 |
| c. "Keep the Wolves at Bay-Be Informed About Liability Insurance <u>and</u> Sales Taxes" – Hal Pepper | 1 | 2 | 3 | 4 | 5 |
| d. "From a Produce Market to a Farmers Market: Transitioning <u>and</u> How To Stand Out"- Janie Becker | 1 | 2 | 3 | 4 | 5 |
- 5) Please rate each of the following presentation topics on a scale of 1 to 5 to indicate how much each presentation improved your knowledge.
- | | | | | | |
|--|----------------------------------|---|---|----------------------------------|---|
| | No change
<u>in</u> knowledge | | | Huge improvement
in knowledge | |
| a. Effective signage | 1 | 2 | 3 | 4 | 5 |
| b. Communicating with words and wardrobe | 1 | 2 | 3 | 4 | 5 |
| c. Who shops at Farmers Markets | 1 | 2 | 3 | 4 | 5 |
| d. Product liability insurance | 1 | 2 | 3 | 4 | 5 |
| e. Sales tax rules and exemptions | 1 | 2 | 3 | 4 | 5 |
| f. Expanding sales through EBT and credit cards | 1 | 2 | 3 | 4 | 5 |
| g. Producer panels - promoting a healthy market <u>environment</u> | 1 | 2 | 3 | 4 | 5 |
- 6) What topics would you suggest be addressed in future "Farmers Market Boot Camp" workshops? (Include any of today's topics that you would like to learn more about.)
- 7) Please provide any additional comments on the back of this form.

Appendix C

2014 Farmers Market Boot Camp Workshops

1. Which workshop did you attend?

	DID BEFORE THIS PROGRAM	PLAN TO DO IN 12 MONTHS	NO PLANS	DOES NOT APPLY
2. Accept credit and debit cards from customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Add value to fruits and vegetables by processing them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Get insurance that provides coverage for my sales of fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Get a business license	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Memphis
 Dyersburg
 Dickson
 Fayetteville
 Chattanooga
 Harriman

Farmers Market Practices – Please tell us about how you may or may not use the following practices.

Knowledge - Tell us what you learned in this program and what you already knew.

	LEARNED IN THIS PROGRAM	ALREADY KNEW	NOT SURE

6. Creating an effective booth display for fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Adding value by processing fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Understanding product liability insurance for sales of fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Food safety for sampling produce	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Regulations for sales of processed fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Merchandising fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. How to determine whether your existing insurance covers you when you sell fruits and vegetables at the farmers market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LEARNED IN THIS PROGRAM	ALREADY KNEW	NOT SURE
13. How to determine the amount of insurance coverage you have	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. How to determine differences in coverage for fresh versus processed fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Expected Impact - Tell us whether you expect to see improvement in your fruit and vegetable operations as a result of this workshop.

	NOT AT ALL LIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY	EXTREMELY LIKELY
15. How likely are you to market your products more competitively?	<input type="checkbox"/>				

16. How likely are you to increase profits based on knowledge gained here?

Overall

17. Overall, how useful was this workshop to you?

NOT VERY USEFUL

SOMEWHAT USEFUL

MODERATELY USEFUL

VERY USEFUL

18. What did you like BEST about the workshop?

)

19. What did you like LEAST about the workshop?

20. What OTHER topics should be offered for farmers market boot camp workshops?

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.

University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments co-operating.

UT Extension provides equal opportunities in programs and employment.

Appendix D

2015 Farmers Market Boot Camp Workshops

1. Which workshop did you attend?

Cookeville Alcoa Greeneville Covington Clarksville Franklin

Farmers Market Practices – Please tell us about how you may or may not use the following practices.

	DID BEFORE THIS PROGRAM	PLAN TO DO IN 12 MONTHS	NO PLANS	DOES NOT APPLY
2. Add value to fruits and vegetables by processing them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Get insurance that provides coverage for my sales of fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Knowledge - Tell us what you learned in this program and what you already knew.

	LEARNED IN THIS PROGRAM	ALREADY KNEW	NOT SURE
4. Creating an effective booth display for fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Adding value by processing fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Understanding product liability insurance for sales of fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Regulations for sales of processed meats and poultry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Regulations for sales of processed fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Selling poultry processed under an exemption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. How to determine whether your existing insurance covers you when you sell fruits and vegetables at the farmers market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. How to determine the amount of insurance coverage you have	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. How to determine differences in coverage for fresh versus processed fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Expected Impact - Tell us whether you expect to see improvement in your fruit and vegetable operations as a result of this workshop.

	NOT AT ALL LIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY	EXTREMELY LIKELY
13. How likely are you to market your products more competitively?	<input type="checkbox"/>				
14. How likely are you to increase profits based on knowledge gained here?	<input type="checkbox"/>				

Overall

15. Overall, how useful was this workshop to you?

- NOT VERY USEFUL
- SOMEWHAT USEFUL
- MODERATELY USEFUL
- VERY USEFUL

16. What did you like BEST about the workshop?

17. What did you like LEAST about the workshop?

18. What OTHER topics should be offered for farmers market boot camp workshops?

Project 8: Awareness and Growth of Grape Growing Industry in Tennessee (Turned in and Approved on 2nd Annual Report in January 2015)

Need for a Grant

With the economic downturn in full swing, MVV decided there was a dire need to help support the farmers growing grapes in the state of Tennessee, specifically those growing grapes for winemaking at Tennessee wineries. The selling of bunch grapes and Muscadine grapes to wineries in the state is the absolute best possible solution for Tennessee farmers looking to sell their grapes due to the very high premiums paid for wine-grapes in the state. A farmer can expect to get anywhere from .30 cents to .45 cents per pound for “you pick” operations or by selling their grapes to jelly makers, but by selling the grapes to local wineries they can ensure premium payment for their fruit – anywhere from .60 cents to \$1.31 per pound (see attached pricing structure that MVV pays for wine-grapes Exhibit B). At the time, no statewide funding or support was in effect promoting the growing and selling of wine-grapes in the state of Tennessee. Utilizing grant funds, MVV planned to promote and raise awareness of Tennessee Wine and the Rocky Top Wine Trail to encourage an increase in demand for Tennessee grown wine-grapes.

Approach Taken for Project

MVV immediately began to promote the Rocky Top Wine Trail through a variety of media including brochures, newspaper ads, TN Vacation Guide Ads, television advertising, travel advertisements, and social media. Focus was placed on promoting the Rocky Top Wine Trail through printed passports that would encourage participation on the trail – guests would use these passports to visit multiple wineries within a short time span, thus increasing overall market demand and accessibility. Marketing efforts also focused on bringing awareness to the grape industry in East TN by promoting a “buy local” feel in all advertisements. Almost every ad included the slogan “Local Wines from Local Vines” and “made in Tennessee” which directly encourage consumers to search out and purchase winery products made from Tennessee grown fruit. The buy local approach was taken due to the large support for this exact type of marketing/advertising in the neighboring state of North Carolina and the rest of the country. With the overall economic slow down, there has been a large windfall of people who genuinely want to support local economy vs. large corporate entities. MVV worked to use this current cultural phenomenon to our advantage. This included the use of the Pick TN Products logo at all times, when able. The following is a discussion of the timeline of activities as they occurred during the project. In October of 2012, MVV started the process of carrying out the grant by focusing first on the creation of the Rocky Top Wine Trail Facebook page, the inclusion of a “Buy Wine” page on the three existing Facebook pages for the wineries on the trail, and an approach to increase search engine optimization (SEO) through a business out of California – Winery Advisor. MVV also placed their first order for 50,400 passport brochures to allow for an increase in the number handed out to guests at the current wineries. Following this in November of 2012, MVV placed a full-page ad in the TN Dept. of Tourism run Tennessee Vacation Guide to help promote the trail to potential consumer interested in visiting Tennessee and in particular Tennessee Products. Coupling with two wineries not currently on the wine trail, the cost was shared and helped reduce the amount due to be reimbursed through grant funds. In that same month, MVV also began work with a TV spot on a local tourist channel to capture more consumers already in the area – this program would run for 6 months. The NC/TN based company Breath Magazine also began running ads in the regional area focusing on the wine trail and the local grapes used to make the wine – tag line “Local Wines from Local Vines!”. In addition, a 1/6th page ad was placed in a Southern Loving Co-Op in North Carolina. By February of 2013 MVV had already order an additional printing of 50,400 passport brochures. Also, ads had been placed state wide in the Ag Insider magazine that promotes Tennessee Agriculture and regionally in the Southeast through the magazine Southern Living. Then in April of 2013, MVV began

ordering over 100,000 passport brochures at a time and had also created a means of including two additional area wineries to the wine trail, thus boosting the effectiveness of the trail tremendously. Due to the large order of passports, the next order for 100,800 did not have to be placed until September of 2013 – this being the final action taken concerning grant funds.

Achievement of Goals

Two key areas of measurable statistics were used to track the effectiveness of the program. Using the accounting of glasses redeemed at the winery locations on the Rocky Top Wine Trail in 2011, MVV expected to see a growth in the number of participants traveling along the complete trail. The total participation for 2011 was 48,247 people for the year. Our goal was to increase participation 25% by 2013. We are pleased to report that for 2012, we saw an initial increase to 53,464 participants on the trail (and increase of 10% participation in the first year alone). Then in 2013 participant numbers increased to a total of 61,751, a total increase of 27.9% based on 2011 – thus exceeding our initial goal by nearly 3%.

The second area considered would be grapes purchased for winemaking by MVV, showing an increase in overall demand for TN grapes. MVV expected the total number of grapes purchased from our contracted grape farmers to increase steadily as well due to the efforts of the grant and general operations. In 2011, MVV purchased over 800,000 pounds of grapes from local farmers. Our goal in this area was to see this number increase to over 1,000,000 pounds of grapes purchased in 2013, thus directly increasing Tennessee farm income for our grape farmers. Once again we are pleased to report the results. Total baseline increase from 2011 for the harvest of 2013 was an additional purchase of 550,000 pounds of Tennessee grown grapes for winemaking, with a total harvest of 1.35 million pounds. This 68.7% increase in grape purchases also included the addition of 12 new farmers/vineyards, bringing MVV total number of contracted farmers to 39. Outside of the grapes purchased in the state, MVV also found more demand for other Tennessee fruits to be made into wine; therefore we purchased an additional 20 tons of peaches from another farmer in the state. These peaches were processed and made into Tennessee Peach Wine. Overall, MVV was able to exceed the grapes purchased in 2013 goal by 350,000 pounds due to an increase demand brought on by the Rocky Top Wine Trail and a bumper growing year. MVV had just enough tank space to accommodate this large purchase of Tennessee fruit by working closely with the four other wineries partnering with the Rocky Top Wine Trail.

Progress Made to Achieve the Long-term Outcome of the Program

The long term outcomes of the program were as follows: maintain and grow the Rocky Top Wine Trail to promote awareness and demand for Tennessee grapes grown for winemaking in the state and increase the overall purchases of Tennessee grown grapes by member wineries. Progress has been made on both fronts for continued growth in these areas for the long term. MVV has increased its list of farmers as demand has increased for Tennessee wine, bringing the total number of grape farmers to near 40. MVV is also persistently searching for more farmers every year, especially for white grape varieties grown in the state. Since the time this grant was initially instituted, the Rocky Top Wine Trail has grown from three wineries to a total of five with the addition of Sugarland Cellars Winery in Gatlinburg, TN and Eagle Springs Winery in Kodak, TN. Both of these locations represent a huge asset to the long-term goal of raising awareness and demand for Tennessee Wine by encouraging participation along the Rocky Top Wine Trail from new markets. Visitation to Gatlinburg alone stands near ten million people a year, and Sugarland Cellars is located on the main Parkway in town. One additional area of progress is the addition of tanks at two of the member wineries, allowing for more grapes

to be purchased during a bumper year – helping to ensure that Tennessee grapes are not left un-purchased in the future due to lack of adequate space for storage.

Beneficiaries

MVV utilized this grant to grow demand for Tennessee grown grapes to be made into winemaking. Beneficiaries of this grant include: all the member wineries of the Rocky Top Wine Trail - Mountain Valley Vineyards, Apple Barn Winery, Hillside Winery, Sugarland Cellars, and Eagle Springs Winery. Each of these Tennessee Farm Wineries benefited through the extended marketing of their value-added product this grant allowed. Additional beneficiaries include the 30 plus grape farmers who sell their fruit directly to the member wineries of the Rocky Top Wine Trail – 100% of the grapes acceptable for wine making and that were delivered to these wineries during the time of the grant were purchased and used for making the value-added product of Tennessee wine.

Lessons Learned

At the onset of this grant, we had no idea how to combine the 2 additional wineries in the area on the trail – mainly due to the geography of the area and traffic congestion that would limit customer visitation and completion of the trail. We learned to alleviate this issue by making the trail cards never expire and also providing a 5th stop gift along with the 3rd stop glass to encourage the completion of all five wineries along the trail. This has resulted in an increase to 70% of all wine trail participants visiting all five wineries along the trail.

Another valuable lesson learned deals with where some of the marketing funds were best used. We originally had a grant funds devoted to regional ads in paper magazines that we later removed due to lack of direct influence to increasing demand for TN grown grapes. These magazines were “fly by night” and offered a lot of return, but in the end fell far short of expectations. Opposite to this, we found large, well known magazines such as Southern Living provided a greater return than was expected. MVV has continued with (2) regional ads in Southern Living not associated with grant funds due to their effectiveness. We received well over 1,000 leads from our ads and also had dozens of customers mention them in the winery.

Ordering in large quantities was key to keeping the costs down for the Rocky Top Wine Trail Passports. We originally began with orders of 50,000 but increased to 100,000 per order, reduce the cost enough to allow for a full additional order for the same amount budgeted.

Additional Information

Simply stated, utilizing the joint efforts of multiple wineries on a wine trail is an exceptional means of growing demand for their value-added product, thus increasing the demand for Tennessee grown fruit – especially grapes. Increasing participation of consumers on the Rocky Top Wine Trail by over 27% in just two years and increasing the purchases of Tennessee grapes by 68.7% in the same amount of time is an incredible feat. This grant has helped solidify in our minds, the need for a statewide Tennessee Wine Trail. Demand for grapes grown in the state would surely follow.

Contact Info for Sub Recipient

Mountain Valley Vineyards-2174 Parkway Pigeon Forge, TN – 865-428-4416

Project 9: Helping Farmers Add Value to Fruits and Vegetables Through Direct Marketing and Food Processing Education

Need for a Grant

According to the 2007 Census of Agriculture, 3,581 farms in Tennessee were directly marketing products to consumers for human consumption, generating \$15.38 million in sales. From 1997 to 2007, the state experienced a 33 percent increase in the number of farms involved in direct marketing and an 83.5 percent increase in the total value of agricultural products sold to consumers. In 2007, there were 251 farms marketing through CSAs, and the number of farmers markets has risen from approximately 55 in 2006 to more than 100 in 2011. The number of Tennessee farmers reporting value-added processing activities in 2007 was 2,719. This ranked Tennessee 10th in the nation. As more farmers offer fresh fruits and vegetables for sale, value-added processing is a way for some farmers to add value and create niches in the marketplace for their produce. All indications are that increases in direct marketing activities continue.

Direct-marketing may be on the rise, but success does not come easy. The purpose of the *Helping Farmers Add Value to Fruits and Vegetables through Direct Marketing and Food Processing Education* project was to enhance the knowledge and skills of specialty crop producers in Tennessee to increase their potential for success and improve farm income.

Approach Taken for the Project

The approach for the project had two major emphases:

1. To supply educational programs to producers who are interested in growing and marketing specialty crops.

These tools and programs were developed to help them enhance their marketing knowledge and skills to help them overcome the many obstacles faced in manufacturing value-added products and/or directly marketing specialty crops to consumers. The program was designed to support the growing number of farmers interested in direct marketing to improve their potential for success and ultimately improve income from these operations.

2. To provide professional development opportunities for Extension agents and specialists who are tasked with providing assistance to the increasing number of farmers seeking information on manufacturing value-added food products and/or direct marketing of specialty crops.

The benefit of the knowledge and skills gained by participating Extension workers will be multiplied as they develop educational programs and tools and assist clients from across the state and beyond.

Results of the Program

A total of 13 producer workshops were held for 257 participants, an hour-long in-service provided to 25 Extension agents and 31 Extension attended four major professional development activities. Additional details about each activity conducted in the project are provided in this section including:

- Regional Direct Marketing Workshops for Specialty Crop Growers Marketing through Specific Marketing Channels
- Regional Direct Marketing Workshops for Adding Value to Fruit and Vegetable Products through Food Processing
- Direct Marketing Sense Workshop
- Professional Development Activities for Extension Agents and TDA Specialist

Regional Direct Marketing Workshops for Specialty Crop Growers Marketing through Specific Marketing Channels

Four *Fruit Production and Direct Marketing* workshops were held in January 2015. The workshops included sessions on fruit production for pick-your-own and on-farm retail, Good Agricultural Practices, food manufacturing opportunities, financial management, risk management and marketing. Instructors included UT Extension's Dave Lockwood, Faith Critzer, Alan Galloway and Megan Bruch Leffew. Each workshop included a tour of a Tennessee direct marketing operation. Tours were provided by Falcon Ridge Farm, Forgie's Fruit Farm, Buffalo Trail Orchard and Tsali Notch Vineyard. Local Extension agents providing assistance included Lee Sammons in Hardeman County, Ricky Skillington in Marshall County, Melody Rose in Greene County and Jonathan Rhea in Monroe County. Funding for the workshop was provided, in part, by the United States Department of Agriculture's Specialty Crop Block Grant, administered by the Tennessee Department of Agriculture. A total of 67 people attended the workshops with 44 submitting evaluation forms for a 66.7 percent overall response rate.

Many of the materials developed for these workshops were used for a workshop hosted by UT/TSU Extension in Giles County called *Spring Maintenance for Fruit Trees and Grapes*. The workshop was held February 9, 2015 and included Megan Leffew and Dave Lockwood on the teaching team. A total of 36 people participated in the workshop.

The number of participants by location is presented below:

Date	Location	Number of Participants
January 21, 2015	Hardeman County	16
January 22, 2015	Marshall County	19
January 27, 2015	Greene County	17
January 28, 2015	Monroe County	15
February 9, 2015	Giles County	36
Total		103

Regional Direct Marketing Workshops for Adding Value to Fruit and Vegetable Products through Food Processing

A partnership was formed with Penn State Extension to offer their branded educational program called *Food for Profit* in Tennessee. The *Food for Profit* workshop takes you step by step through the information necessary to start and run a small food product business, especially directed to individuals who will be making and packing their products for resale through grocery stores, farm markets, or restaurants. Although Extension programs cannot exclude anyone wishing to attend, the workshops were developed for and promoted to specialty crop growers.

Megan Bruch (now Leffew) attended a *Food for Profit* workshop in Pennsylvania in November 2012 to determine if this program was what was needed in Tennessee and to begin to become familiar with the program. (The funding for this trip was not provided by the specialty crop grant.) Bruch and Food Safety Extension Specialist, Faith Critzer, participated in a *Food for Profit* apprenticeship program including webinars and interviews/field trips to food manufacturing facilities.

Seven *Food for Profit* workshops were held in Tennessee. A total of 141 people completed the program. Three workshops were held in both April and September 2014, and one workshop was held in May 2015. In addition, Leffew and Critzer conducted an in-service for 25 Extension agents about the program at the Tennessee Extension Conference. A summary of workshop dates, locations and number of participants is presented below:

Dates	Locations	Number of Participants
April 8, 2014	Alcoa, TN	25
April 9, 2014	Chattanooga, TN	13
April 10, 2014	Murfreesboro, TN	20
September 17, 2014	Jackson, TN	16
September 18, 2014	Clarksville, TN	30
September 24, 2014	White Pine, TN	18
May 4, 2015	Lebanon, TN (Wilson County)	19
November 12, 2014	Nashville, TN	25
Total Participants		166

Direct Marketing Sense Workshop

Plans were developed to offer three *Direct Marketing Sense* workshops for specialty crop producers in different locations across Tennessee in March 2013. Two workshops were cancelled due to low registration numbers.

A two-day *Direct Marketing Sense* workshop was held in Spring Hill, Tennessee on March 11-12, 2013. A total of 13 farmers participated in the workshop. Four instructors presented sessions on the following topics to help specialty crop growers analyze and develop direct marketing enterprises:

- An Introduction to Direct Marketing
- Key Concepts for Developing a Business Plan
- Key Concepts for Successful Marketing
- Sales Tax Considerations
- Merchandising Considerations
- Developing Effective Marketing Materials
- Food Processing & Regulatory Considerations for Direct Farm Marketers
- An Introduction to Marketing on the Web
- Customer Service
- Risk Management
- Additional Resources

Participants were asked to indicate the overall effectiveness of the workshop in providing information needed to enhance the success of their current or potential direct farm marketing enterprise or in preparing them to serve clients on direct farm marketing issues. Responses were given on a scale of 1=Not Effective to 5=Very Effective. The average rating on the overall effectiveness of the workshops was 4.68.

A complete summary of evaluation form responses is available online at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20Info%202010%20Direct%20Market%20Sense%20Evaluation%20Summary%202013.pdf>.

Professional Development Activities for Extension Agents and TDA Specialist

A total of 31 Extension and Tennessee Department of Agriculture representatives participated in four major professional develop conferences as part of this project. The dates, events, location and number of attendees are summarized in the table below:

Date	Event	Location	Number of Attendees
February 1-6, 2013	North American Farmers Direct Marketing Association Conference	Oregon and Washington	1
January 30 to February 1, 2014	Tennessee Horticultural Expo	Nashville, TN	21
January 31 to February 5, 2014	North American Farmers Direct Marketing Association Conference	Kansas and Missouri	3
February 1-6, 2015	North American Farmers Direct Marketing Association Conference	Tennessee	6
Total			31

The North American Farmers Direct Marketing Association Conference and Bus Tour is the premier educational and networking conference for direct farm marketers in North America. The conference features educational sessions, workshops, tours and a trade show. UT Extension and TDA delegates to NAFDMA were charged to seek out and gain knowledge, resources and/or skills that can be taught in workshops and conferences and used in providing one-on-one technical assistance and marketing programs to help specialty crop growers add value to their products through direct farm marketing and agritourism. Delegates will carefully choose tours and sessions to attend that will meet this charge.

Specialty crop growers have the potential to add value to their crops by direct marketing them to consumers at the farm through pick-your-own, on-farm retail markets, Community Supported Agriculture (CSAs) and developing long-lasting and even lifetime relationships with consumers by providing them with on-farm experiences. Agritourism is one way to entice consumers to visit the farm to purchase specialty crops and create memories for customers that will have them coming back year after year to continue purchasing those specialty crops and spreading the words to their friends. This added “word-of-mouth” marketing can be the most effective and hardest to gain.

The Tennessee Horticultural Expo brought together specialty crop growers and direct marketers for a three day educational event each year. Participants could attend sessions about production and market for fruit and vegetables, flowers, grapes and wines, farmers markets and agritourism. The conference included educational sessions, a trade show, networking opportunities and farm tours.

Progress Made to Achieve the Long-Term Outcome of the Program

Outcomes and impacts for each of the project activities is presented in this section.

Regional Direct Marketing Workshops for Specialty Crop Growers Marketing through Specific Marketing Channels

Participants at the four *Fruit Production and Direct Marketing Workshops* were asked to complete an evaluation form. Respondents were asked to rate the degree to which they agreed or disagreed with several statements. A rating scale was provided with a numeric score assigned to each text rating. The scale and assigned numeric score were: Strongly Disagree (1), Disagree (2), Somewhat Disagree (3), Somewhat Agree (4), Agree (5) and Strongly Agree (6). The statements, the number of people responding, number of people responding with Somewhat to Strongly Agree and average response ratings are listed in the table below.

All statements received an average rating of 4.63 (Somewhat Agree) or higher with 35 or more participants ranking each statement Somewhat Agree, Agree or Strongly Agree. The highest average ranking was received for the statement “I would recommend this workshop to others.”

Rating of Agreement for Impact Statements on a Scale of Strongly Disagree (1), Disagree (2), Somewhat Disagree (3), Somewhat Agree (4), Agree (5) and Strongly Agree (6), Number of Responses and Average Rating

Statement	Total Responses	# Responses Somewhat – Strongly Agree	Mean
I have gained knowledge and/or skills to produce fruit for direct marketing.	44	37	4.77
I gained knowledge and/or skills to incorporate Good Agricultural Practices.	44	37	4.86
I gained knowledge and/or skills to manufacture value-added foods.	42	36	4.76
I gained knowledge and/or skills to conduct a financial analysis for my operation.	43	36	4.63
I gained knowledge and/or skills to better manage risk.	43	36	4.81
I gained knowledge and/or skills to market my products.	43	36	4.86
I gained knowledge and/or skills to improve financial returns from my operation.	44	37	4.73
I will implement or change at least one practice or procedure to improve customer service.	42	35	4.79
I would recommend this workshop to others.	44	37	5.02

Regional Direct Marketing Workshops for Adding Value to Fruit and Vegetable Products through Food Processing

April 2014

Bruch and Critzer conducted three *Food for Profit* workshops in April 2014 with assistance from Winifred McGee from Penn State Extension. During the week of April 7 – 11 2014, workshops were held in Alcoa, Chattanooga and Murfreesboro. A total of 61 people received training; what follows are post-survey responses from 38 of those who participated (62% response). An overall analysis of the responses indicated that these sessions were well-received by most participants, and, when combined with instructor observations, showed significant increases in knowledge and skills. Topics covered included business planning, marketing, pricing, financing, food manufacturing regulations, food safety considerations and product packaging. In addition, an existing food manufacturer shared the realities of a food business.

Respondents were asked to rate several facets of course effectiveness, using a scale of “poor,” “fair,” “adequate,” “good,” and “excellent.” In relation to meeting the participants’ needs, 16 out of 38 (42 percent) rated the workshop “excellent,” and 19 (50 percent) rated “good.” The remaining three or 8 percent said the program was “adequate” or “fair.”

Food for Profit includes presentations by trained instructors and guest speakers. In relation to quality of speakers, 76 percent (n=29) rated the presenters “excellent,” and 24 percent (n=9) rated “good.”

Food for Profit provides a substantial handout packet with printed resources to supplement the information presented, a set of fact sheets, and a workbook for initial business plan development. Respondents rated the quality of materials (choosing from “poor,” “fair,” “adequate,” “good,” and “excellent”). A total of 70 percent (n=27) rated the materials “excellent,” and 29 percent (n=11) rated them as “good.”

It is generally acknowledged that participants come to a class with some expectations of what they will learn, and how it will apply to their future activities. Participants were asked to describe the level to which their expectations were realized (selecting from “no,” “not sure,” “met,” or “exceeded”). Fifty-two percent (16 of 31) of respondents said their expectations were met; 48 percent (n = 15) indicated that expectations were exceeded. No one said “no” or “not sure.”

The post-survey asked series of questions to assess pre-/post-workshop knowledge about the topics that are central to food entrepreneurship. For each topic, the respondents were asked to recall their level of knowledge prior to attendance, and assess the level attained by attending (scale of “non-existent,” “minimal,” “moderate,” and “considerable”). In relation to an assessment of knowledge of how to start a food business, 4 respondents showed no change, 16 respondents indicated a gain of one level, and the remaining 15 indicated a gain of two to three levels.

In relation to an assessment of understanding of Tennessee Food Code/Regulations and general business liability issues related to their business ideas, 5 respondents showed no change, 19 respondents indicated a gain of one level, and the remaining 13 indicated a gain of two to three levels.

In relation to an assessment of understanding about how to identify a target market and develop specific strategies to reach this group, 10 respondents showed no change, 24 respondents indicated a gain of one level, and the remaining 2 indicated a gain of two to three levels.

In relation to an assessment of understanding about ways to price a food product, 19 respondents showed no change, 11 respondents indicated a gain of one level, and the remaining 6 indicated a gain of two to three levels.

In relation to an assessment of understanding about packaging and labeling of food products, 8 respondents showed no change, 21 respondents indicated a gain of one level, and the remaining 7 indicated a gain of two to three levels.

September 2014

Three *Food for Profit* workshops were offered for specialty crop growers in Tennessee in September 2014. Critzer and Leffew served as the teaching team. A total of 64 people participated in the workshops with 48 completing evaluation forms for a 75 percent response rate.

The post-survey asked a series of questions to assess pre-/post-workshop knowledge about the topics that are central to food entrepreneurship. For each topic, the respondents were asked to recall their level of knowledge prior to attendance, and assess the level attained by attending (scale of “non-existent,” “minimal,” “moderate,” and “considerable”).

In relation to an assessment of knowledge of how to start a food business, 5 of the 48 respondents (11%) indicated that their knowledge had not changed, 27 respondents (56%) indicated a gain of one level, and the remaining 16 (33%) indicated a gain of two to three levels.

In relation to an assessment of understanding of Tennessee Department of Agriculture and general business liability issues related to their business ideas, 7 of the 48 respondents (15%) indicated that their knowledge had not changed, 24 respondents (50%) indicated a gain of one level, and the remaining 17 (35%) indicated a gain of two to three levels.

In relation to an assessment of understanding about how to identify a target market and develop specific strategies to reach this group, no one indicated a decrease in knowledge, 23 (out of 48 – 48%) respondents showed no change, 18 respondents (37%) indicated a gain of one level, and 7 (15%) people indicated a gain of two to three levels.

In relation to an assessment of understanding about ways to finance a business and price a food product, no one indicated a decrease in knowledge, one person did not respond; 18 out of 47 respondents (38%) cited no change; 23 respondents (49%) indicated a gain of one level, and the remaining 6 (13%) indicated a gain of two to three levels.

In relation to an assessment of understanding about packaging and labeling of food products, one person did not respond, 14 out of 47 (30%) indicated no change, 14 respondents (30%) indicated a gain of one level, and the remaining 19 (40%) indicated a gain of two to three levels.

It is generally acknowledged that participants come to a class with some expectations of what they will learn, and how it will apply to their future activities. Participants were asked to describe the level to which their expectations were realized (selecting from “no,” “not sure,” “met,” or “exceeded”). Sixty-seven percent (31 out of 46) of respondents said their expectations were met; 30 percent (14 out of 46) indicated that expectations were exceeded. One person said “Not Sure,” and no one said that the program did not meet expectations.

May 2015

One *Food for Profit* workshop was offered for specialty crop growers in Tennessee in May 2015. Critzer and Leffew served as the teaching team. A total of 19 people participated in the workshops with 11 completing evaluation forms for a 58 percent response rate.

The post-survey asked a series of questions to assess pre-/post-workshop knowledge about the five topics that are central to food entrepreneurship. For each topic, the respondents were asked to recall their level of knowledge prior to attendance, and assess the level attained by attending (scale of “non-existent” = 1, “minimal”= 2, “moderate” = 3, and “considerable” = 4). As shown in the table below, after the workshop, all participants indicated they had gained knowledge to the moderate to considerable level.

Topic	Before or After Workshop	Number of Responses					Average Rating
		Non-existent	Minimal	Moderate	Considerable	Total	
How to start a food business	Before	0	6	4	1	11	2.55
	After	0	0	4	7	11	3.64
Understanding TDA regulations and general business liability issues	Before	0	7	1	3	11	2.64
	After	0	0	4	7	11	3.64
How to identify a target market and develop marketing strategies	Before	0	3	4	3	10	3.00
	After	0	0	8	3	11	3.27
Methods to finance a business and price a food product	Before	0	4	4	3	11	2.91
	After	0	0	7	4	11	3.36
How to package and label a food product	Before	0	6	1	3	10	2.70
	After	0	0	4	7	11	3.64

Ten of 11 respondents increased their knowledge by at least one step in the “non-existent,” “minimal,” “moderate” and “considerable” range for “Steps to start a food business.” Also, 8 of 11 increased their knowledge of regulations, inspections and business liability by at least one step. Although one person still thought it only “moderately important” to have a business plan, 4 out of the 11 noted an increase in importance of having a plan – two from “somewhat important” to “very important,” and two from “moderately important” to “very important.”

It is generally acknowledged that participants come to a class with some expectations of what they will learn, and how it will apply to their future activities. Participants were asked to describe the level to which their expectations were realized (selecting from “no,” “not sure,” “met,” or “exceeded”). Sixty-three percent (7 out of 11) of respondents said their

expectations were met; 27 percent (3 out of 11) indicated that expectations were exceeded. One person said “Not Sure,” and no one said that the program did not meet expectations.

Direct Marketing Sense Workshop

Direct Marketing Sense workshop participants asked to rate each workshop session on its effectiveness in providing information needed to enhance the success of their current or potential direct farm marketing enterprise. Responses were requested on a scale of 1=Not Effective to 5=Very Effective. Average ratings for all sessions ranged from 4.45 to 4.78 and are listed below:

Average Ratings for Workshop Sessions (Scale: 1=Not Effective to 5=Very Effective)

<i>Sessions</i>	<i>Average Rating</i>
a. An Introduction to Direct Marketing and Direct Marketing Sense	4.64
b. Key Concepts for Developing a Business Plan	4.45
c. Key Concepts for Successful Marketing	4.55
d. Sales Tax Considerations	4.60
e. Merchandising Considerations	4.70
f. Developing Effective Marketing Materials	4.50
g. Food Processing & Regulatory Considerations for Direct Farm Marketers	4.60
h. An Introduction to Marketing on the Web	4.70
i. Customer Service	4.70
j. Risk Management Considerations	4.50
k. Additional Resources	4.78

Participants were also asked to indicate the overall effectiveness of the workshop in providing information needed to enhance the success of their current or potential direct farm marketing enterprise or in preparing them to serve clients on direct farm marketing issues. Responses were given on a scale of 1=Not Effective to 5=Very Effective. The average rating on the overall effectiveness of the workshops was 4.68.

A complete summary of evaluation form responses is available online at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20Info%202010%20Direct%20Market%20Sense%20Evaluation%20Summary%202013.pdf>.

Professional Development Activities for Extension Agents and TDA Specialist

Thirty-one professionals from Extension and the Tennessee Department of Agriculture attended four professional development activities. Outcomes from each are presented in this section by event.

2013 NAFDMA

Pamela Bartholomew, Marketing Specialist with the Tennessee Department of Agriculture Market Development Division, attended the 2013 North American Farmers Direct Marketing Association (NAFDMA) conference in Oregon and Washington February 1-6. The conference included an all-day workshop, roundtable discussions, educational sessions, a trade show and three days of operation tours.

Pamela answered five questions related to her experience at NAFDMA. Questions posed and answers provided are listed below:

1. What are your top five ideas that you learned or saw that would help Tennessee specialty crop growers market their crops?
 - a. Be open to share ideas with other farmers, networking is an important key to success.
 - b. Social Media is a very effective tool for farmers to use to promote their specialty crops. It is a free resource, but takes time and effort to maintain.
 - c. Take time to make a marketing plan, budget, and keep good up to date records.
 - d. Employee handbook and training was the topic I heard the most that saved farmers time and money.
 - e. Safety is always important and proper safety training for all employees is a must. Having set procedures for bad weather or lost child is something every PYO should have.
2. Do you have any ideas for new educational program/materials topics that should be addressed through publications, workshops, etc.?
 - a. Bookkeeping and budgeting would be a great program for Tennessee farmers.
3. Do you have any ideas on how we can improve educational programs in Tennessee for specialty crop producers?
 - a. Target specialty crop growers when promoting programs.
 - b. Focus on specialty crop growers by having workshops/bus tour/programs that is specific to their needs.
4. Do you know of existing educational materials that need updated based on what you learned at NAFDMA?
 - a. Agritourism in Focus
 - b. Pick Your Own booklet
5. What did you learn at the conference that will help you in your job of providing technical assistance to producers or in marketing specialty crops for the state?
 - a. NAFDMA opened my eyes to see how farmers from other states market their specialty crops. I will be able to share the new ideas on marketing, diversifying, safety, and help develop new programs for Tennessee farmers.

Experiences and lessons learned at NAFMDA have resulted in several action steps to date.

- Ideas for speakers and sessions for specialty crop growers have been incorporated into the Tennessee Horticulture Expo.
- Ideas for new publication topics for specialty crop growers have been included in new grant proposals and projects.
- Representatives from the University of Tennessee Extension and Tennessee Department of Agriculture worked with NAFDMA to host the conference in the state in 2015 giving more Tennessee operators and service providers an opportunity to attend.
- Two farm safety workshops were held in the summer of 2013 for 44 participants with Marsha Salzwedel from the National Farm Medicine Center due to connections made at NAFDMA.
- Five customer service workshops were held in August 2013 with 103 participants.

2014 NAFDMA

Two University of Tennessee Extension personnel and one Tennessee Department of Agriculture marketing specialist attended the 2014 North American Farmers Direct Marketing Association Conference in Kansas City, Missouri on January 31 to February 5, 2014. Megan Bruch, Extension marketing specialist for the Center for Profitable Agriculture, and Janie Becker, Extension agent in Rutherford County attended from UT Extension. Pamela Bartholomew attended from the Tennessee Department of Agriculture. The conference included educational sessions, farm tours, a trade show and valuable networking time with farmers and industry partners from across the United States, Canada and England.

Participants were asked to answer several questions following the trip to document knowledge and skills gained and ideas for materials and programs to assist Tennessee specialty crop producers. Ideas on how to help specialty crop growers market crops, ideas for new educational materials and programs, thoughts on how to improve existing educational materials, potential speakers for future educational events and what participants learned to help specialty crop growers were summarized, CPA Info #219 called "Lessons Learned at NAFDMA 2014." The fact sheet is available on the Center for Profitable Agriculture's website at

<https://ag.tennessee.edu/cpa/Information%20Sheets/cPA%20219.pdf>.

Following the conference, the participants have been using the information learned in the planning, development and updating of teaching materials and educational publication designed for specialty crop growers. The information has also been used in the one-on-one technical assistance provided to specialty crop growers. Additional impacts included:

- One Emergency Preparedness workshop was held in August 2013 for 34 participants taught by Ohio State University Extension representatives, in part, due to connections and networking at NAFDMA.
- Three additional customer service workshops were held in Tennessee in December 2014 for 48 participants.
- The 2015 NAFDMA conference was scheduled to be held in Tennessee, giving more Tennessee operators and professionals the opportunity to attend.

2015 NAFDMA

Five University of Tennessee Extension personnel and one Tennessee Department of Agriculture marketing specialist attended the 2015 North American Farmers Direct Marketing Association Conference in Tennessee on February 1-6. Janie Becker, Extension agent in Rutherford County; Adam Hopkins, Extension agent in Jefferson County; Celeste Luckey Scott, Extension Agent in Madison County; Megan Bruch Leffew, Extension marketing specialist for the Center for Profitable Agriculture; and Hal Pepper, Extension financial analysis specialist for the Center for Profitable Agriculture attended from UT Extension. Pamela Bartholomew, marketing specialist with the Market Development Division, attended from the Tennessee Department of Agriculture. The conference included educational sessions, farm tours, a trade show and valuable networking time with farmers and industry partners from across the United States, Canada and England.

Participants documented knowledge and skills gained and ideas for materials and programs to assist Tennessee specialty crop producers in an Extension fact sheet. The fact sheet, *Lessons Learned at NAFDMA 2015*, contains ideas on how to help specialty crop growers market crops, ideas for new educational materials and programs, potential speakers for future educational events and what participants learned to help specialty crop growers. CPA Info # 235 may be accessed online at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20235.pdf>.

2014 Tennessee Horticulture Expo

Twenty-one Extension personnel received registration and travel scholarships to attend the 2014 Tennessee Horticultural Expo through the Tennessee Department of Agriculture from a Specialty Crop Block Grant. Attendees taking part in this professional development opportunity included two Extension Specialists, one Area Farm Management Specialist and 18 County Agricultural Extension Agents. Six agents were from east Tennessee, seven from middle Tennessee and five from west Tennessee. The specialists cover the entire state.

Following the conference, an online survey was created in SurveyMonkey to evaluate the agents' experiences at the conference. Eighteen agents responded to the seven question survey.

Respondents were asked to rate the effectiveness of the conference through the sessions and events attended in increasing their knowledge and skills in four areas. Ratings were given on a scale of 1 (Not Effective) to 5 (Very Effective). The topics, number of respondents giving a rating, the range of ratings given and the average rating are provided in Table 1.

The conference received the highest average rating, 4.72 out of a possible 5, for effectiveness in enabling networking. The effectiveness of the conference in increasing knowledge and skills in marketing of specialty crop and agritourism products received an average rating of 4.56. The topic of rules and regulations for direct marketing or agritourism operations also received an average rating of 4.56. For increasing knowledge and skills in production of specialty crops, the average rating was 4.54.

Ratings for Effectiveness in Increasing Knowledge and Skills on Four Topics (On a scale of 1=Not Effective to 5=Very Effective)

Topic	Number Providing Rating	Range of Ratings	Average Rating
Through networking – did you make contacts that will be helpful to you in your Extension work?	13	4 to 5	4.72
Marketing of specialty crop and agritourism products	16	4 to 5	4.56
Rules/regulations for direct marketing/agritourism operations	16	4 to 5	4.56
Production of specialty crops – fruits, vegetables, horticultural products, etc.	18	4 to 5	4.54

Agents were asked to indicate how they planned to use the information learned at the 2014 Horticultural Expo. All 18 respondents indicated they will use the information to assist individual clients in their county or area. Fourteen respondents (77.78 percent) indicated they planned to develop educational programs such as workshops for groups of clients in their county or area, and seven respondents (38.89 percent) also reported they planned to develop educational materials such as fact sheets, news articles or radio programs with information learned at the conference.

A full summary of the follow-up evaluation can be found in CPA Info #217 online at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20217.pdf>.

Beneficiaries

Beneficiaries of the project include 282 producer workshop attendees and clients of the 31 Extension agents and specialists who participated in professional development activities. Total participation in project activities is summarized below:

Project Component	Number of Participants
Direct Marketing Workshops	103
Food Processing Workshops	166
Direct Marketing Sense	13
Professional Development Opportunities (NAFMDA and THE)	31
Total	313

Direct marketing workshop participants were asked how they planned to use information learned at the workshops. Comments included:

- Will help in the decision making process as to whether or not to try a PYO operation.
- Prepare a plan for financial analysis and risk management.
- Never knew I could grow peaches and will have them in the ground this year.
- Use in my startup CSA operating.

Participants from *Food for Profit* workshops indicated they planned to use the information learned to:

- Decide whether or not to start manufacturing foods
- Develop a business plan
- Develop a recall procedure
- Consider producing more products
- Explore additional market opportunities
- Take food safety classes online

Lessons Learned

Workshop participants were asked to describe key information or resources needed to help increase their potential for success. Topics provided included:

- Electronic media and marketing
- Fruit production techniques
- Actual financial planning for my operation
- Good Agricultural Practices/Good Handling Practices
- Quickbooks training
- Creative packaging
- Marketing to institutions, restaurants and grocery stores

Two Direct Marketing Sense workshops were cancelled in March 2013 due to lack of registrations. There were a multitude of workshops offered during that timeframe that may have contributed to the lack of registrations. Two Food for Profit workshops were cancelled in May 2015. It was likely too far into the production season to achieve an adequate participant turnout.

Additional Information

Electronic copies of workshop evaluation summaries developed will be sent to the Tennessee Department of Agriculture for their files to supplement this report.

Contact Information for the Sub-recipient

University of Tennessee
Principal Investigator:
Megan Bruch Leffew
Marketing Specialist
Center for Profitable Agriculture
University of Tennessee Extension
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Project 10: Promoting the 2013 Tennessee Green Industry Expo; Marketing Tennessee Grown Nursery Plants and Providing Education for the Nursery, Landscape & Garden Center Industry (Submitted and Approved on 2nd Annual Report)

Project Summary

The purpose of this project was to provide a marketplace in Tennessee for growers and industry related businesses to showcase their products to a national audience. And to provide education to growers, landscapers and garden center owners and employees so they would have expert advice regarding industry related pests, new products, services and ways to improve their businesses.

Project Approach

On October 9, 2012, TNLA paid a second deposit on the show hall at the Nashville Convention Center in the amount of 7,143.75 and November 26, 2012 paid the balance of the show hall rental for the 2013 Tennessee Green Industry Expo. This is the first tradeshow the Tennessee Nursery & Landscape Association has had since breaking away from the Mid-States Horticultural Expo with the Kentucky Nursery & Landscape Association.

In November 2012, TNLA had 12,600 registration mailers printed for the January 2013 TNGIE. TNLA mailed 11,867 programs to green industry companies across the U.S. promoting the TNGIE.

TNLA secured three business management and 6 industry professionals to speak for the 2013 TNGIE educational program. There were con-current sessions allowing attendees to choose which session would be more beneficial to their business. The owner of the business could choose to attend the business management session and the employee could attend the sessions that directly related to plants, pests, or insects.

The speaker selection was chosen to draw an audience of both business owners and employees. The business tract focused on Selling and account managing. The technical tract focused on growing, designing, and maintaining plants. There were also classes on pesticide, insecticide and herbicide updates along with entomology and plant pathology. The speakers chosen for the business tract were selected for their history of consulting and books written on the subjects. They were industry specific and internationally known and regarded experts. The technical tract was designed with local experts that would be more suited to our geographical area. They were all experts in their field and most worked for the state as an extension agent or professor of horticulture. The speakers notoriety and content were a great draw for both Landscapers and Nurserymen. All speakers were well received and it brought many people to the show that may not have come otherwise. Combining education with the trade show was considered a success by all and was recommended to the Board as a need to continue.

There were 59 people who attended the educational sessions. TNLA did not have education with the MSHE.

In 2012, the combined show with Kentucky, there were more attendees from KY, followed by TN, IN, OH and AL. In 2013, the Tennessee Green Industry Expo, there were more attendees from TN, followed by KY, AL, GA and IN. Also, the breakdown of attendees showed that 34% of those attending were the President/Owner for both years (unchanged). In 2013, 37% were wholesale growers and in 2012, 32% were wholesale growers (+5%). In 2013 and 2012, 21% were landscapers (unchanged).

After the booths were filled with material and products; on January 2, 2013 carpet was installed on the exhibit hall floor making the hall ready for attendees to walk the hall and visit the vendors. TNLA had requested funding for the carpet.

TNLA used grant funding to secure speakers for the 2013 TNLA Winter Education Program held in Pigeon Forge, Tennessee. TNLA also used grant funding to print 1250 registration mailers and mail 1100 of the mailers to prospective attendees. TNLA secured Dr. Dough Tallamy, University of Florida, and Mr. Don Shadow, Shadow Nursery, Winchester, Tennessee, both well known to the nursery industry to speak on "How Landscaping Plant Selection Impacts Pest Populations and Pest Management" and "Flora and Fauna As Only Don Can Explain". TNLA also secured speakers from the University of Tennessee, (speaking on pests, diseases, insects, turf weeds, plant problems and plants that resist pests and perform in the landscape) the Tennessee Department of Agriculture (Pesticide Regulations) and Mrs. Jenny Hardgrave with Simply Flowers, Atlanta Georgia. Jenny spoke on "Marketing, Maintenance and Pest Management For Annual Color Beds". The educational sessions started at 8:00a.m on Monday, February 18th. and concluded at 4:00p.m. and then started at 8:30a.m. Tuesday, February 19th and ended at 12:15p.m. Tuesday.

All sessions were for growers, landscapers, and garden center owners and employees and many were concurrent allowing attendees to pick the session that best suited them. There were 100 attendees.

Grant funding was used for speaker expenses, (food, lodging, travel expenses, speaker fees,) room rental and audio visual needs. Without the funding, TNLA would not have been able to secure great industry professionals.

Goals and Outcome Achieved

TNLA received very positive feedback from both exhibitors and attendees regarding moving the tradeshow back to Nashville. Tennessee grower exhibitors were excited about having the show in Tennessee allowing them to market their plants close to home and saving them time and money exhibiting. Also those attending were excited about the show being in Nashville allowing more Tennessee nurseries, landscapers and garden center owners and employees an opportunity to attend.

Having a tradeshow and education in Tennessee allowed growers, and other industry owners and employees an opportunity to gain knowledge of new plants, products and equipment and also to learn from industry professionals. TNLA believes that it is beneficial not only to the Tennessee nursery and landscape industry but also to the economy in Tennessee. TNLA will continue to promote and market the industry and offer education to keep the industry updated on issues that might adversely affect the way business is being done. The industry must stay updated to achieve excellence.

Beneficiaries

All TNLA members could have benefitted from exhibiting or attending the TNGIE. They could market their plants and products or attend the tradeshow and educational sessions. Also, exhibitors from other states benefitted from marketing their plants or products at the TNGIE or by buying from suppliers at the tradeshow. Other Tennessee nurseries (non-members) could also have benefitted by selling their plants to TNLA member nurseries who sold to other nurseries, garden centers and landscapers nationally.

Not only did industry businesses benefit but because the show is in Tennessee, the

economy of Tennessee benefitted. Nashville restaurants, hotels and retail businesses benefitted from show attendees and exhibitors being in Nashville.

Grant money was only used to promote or enhance the tradeshow and to provide education (including speaker expenses) for industry personnel.

Lessons Learned

Because TNLA represents the nursery, landscape and garden center industry in Tennessee, it is very important for TNLA to focus on new ways to promote and market the industry to the national and/or international marketplace and provide education for its membership. TNLA had been having education in Pigeon Forge; but with the tradeshow being in Nashville, the board decided to offer education with the tradeshow. Having the tradeshow and education in one place helped bring attendees to the tradeshow that might not have come if they had not been attending the educational sessions.

The board decided that having two events with education within two months (even though they were in different areas of the state) might not be such a good idea. People were having to choose which one to attend. They decided not to have education in Pigeon Forge in 2014. They thought that it would be better to offer education at the tradeshow and at the Tennessee Green Industry Field Days.

Having the tradeshow in Tennessee made it easier for landscapers, garden center owners and retail nursery owners in Tennessee to attend. In 2012, there were 190 attendees from Tennessee and in 2013, there were 434 attendees from Tennessee.

Contact Information for the Sub-Recipient

Tennessee Nursery and Landscape Association
115 Lyon Street
McMinnville, TN 37110
931-473-3951

Project 11: Marketing Local Christmas Tree Growers

Need for a Grant:

After speaking with TN Christmas tree farmers, and learning of their retail marketing needs, TDA used the funding from SCBG 12-25-B-1255, project 6, *Creative Nursery Marketing, Practical Solutions* and project 11, *Marketing Local Christmas Tree Growers*, with a combined budget of \$19,701.55 to increase consumer awareness for TN Christmas tree growers.

Approach Taken for the Project:

In March of 2014, after it was determined that the Tennessee Christmas tree industry could not support large wholesale buyers, TDA representatives met with the Christmas tree growers at their spring meeting to see how we could use the grant award to effectively market their specialty crops to Tennessee consumers. Their input was invaluable to the development of our marketing plan.

August-October 2014, four marketing specialists from TDA met and developed a media plan to help the Christmas tree growers. Two Facebook ads specifically targeted to Tennessee consumers, one print ad, and one commercial were

developed. These ads started running during the first part of November to make consumers aware of the availability of Tennessee Christmas trees. In addition, TDA complemented the award by utilizing its own funding to give Tennesseans the opportunity to win a Christmas tree. The winners would have to visit the farm in order to pick up their tree. Comments from the winners that were posted on social media spoke about how much they enjoyed the farm visit, the helpfulness of the staff, and the quality of the locally grown tree. Tennesseans speaking about the quality of the products on social media were some of the best advertisements the Christmas tree growers could have received.

Facebook Ad:



We created a 30 second commercial that has aired on Public Television, WCTE statewide:

[Tennessee Christmas tree ad](#)

Print Advertisements were made for Local Table Magazine:



October 2014 A Pre season survey was sent to all Christmas Tree Growers through Survey Monkey:

[TDA Survey for Christmas tree growers](#)

Results of the Program:

The project was very successful. We worked with advertising partners to ensure maximum exposure to at least 300,000 Tennesseans for the TN Christmas tree industry. Performance was measured by surveys given to the TN Christmas Tree Association to evaluate if foot traffic to their farms increased. The survey showed a 25% increase in sales as compared to last season and a 77% increase in foot traffic as compared to last season.

Further measurement came from the Pick TN Products website analytics measuring the number of clicks on the Pick TN Products advertisement. The Pick TN Products website experienced an 82% increase during the promotion. We also measured how many clicks from the TV station website and TV station phone apps to Pick TN Products website. The total clicks on the Pick TN website measured 5,901, and the total ad impressions were 1,730,799 during the promotion.

Progress Made to Achieve the Long-Term Outcome of the Program:

We had never attempted a project to connect Tennessee consumers to Tennessee Christmas tree growers, so we were able to utilize the data we gathered to see how many people were aware of cut/carry and TN grown Christmas trees. After a successful 2014 marketing campaign for the Christmas tree growers, they are looking forward to another fruitful season in 2015. They are improving their social media outreach and mimicking the marketing campaign we did for them in 2014.

Beneficiaries:

This project had two beneficiaries. The Tennessee Christmas tree growers benefitted from this project by having a direct marketing campaign tailored specifically for them. Tennessee consumers were made aware of an abundant supply of Tennessee grown Christmas trees.

Lessons Learned:

This grant was first started to improve wholesale Christmas tree growers, but little research was done to see if this would be a viable option. Upon starting our research to assist the wholesale Christmas tree industry, TDA discovered the lack of wholesale growers in Tennessee who could competitively provide Tennessee Christmas trees to large wholesale buyers in major markets. Wholesale growers in TN provide to medium scale outlets and were content with their contracts in place. These small wholesale growers communicated a desire to see TDA help assist with the retail side of TN Christmas trees as many of them are heavily involved in the cut and carry industry. After speaking with TN Christmas tree farmers, and learning of their retail marketing needs, TDA decided to use the funding awarded to assist TN Christmas tree growers reach the retail market. In the future, we will first contact the industry we wish to assist to ask the most effective way TDA can assist in developing a project.

Additional Information:

One additional outcome of this grant is that we learned how valuable social media marketing campaigns can be. By working with representatives of social media we have been able to reach more Tennesseans for less money than we have using other forms of advertising. We have gone on to use what we did for the Christmas tree growers as a template to help other agricultural sectors.

Contact Information for the Sub-recipient:

Organization Name: Tennessee Department of Agriculture

Contact Name: Amy Tavalin

Email: amy.tavalin@tn.gov

Phone Number: 615-837-5163

Project 12: Increasing Competitiveness of Grapes Through Regional Wine Trail

Need For a Grant

The purpose of this project was to make visitors to the Upper Cumberland Region and residents alike more aware of the existence of the six wineries located here and the fine selection of wines being produced by these agritourism businesses. The Upper Cumberland's wineries are small and widespread throughout the fourteen counties of the region. Only three are located at or near an interstate (I-40). None of the six are large and most have budgets that do not allow for the strong, consistent promotion necessary to create a healthy volume of business.

The Upper Cumberland Tourism Association has stepped in to assist these wineries (all of which are Association members) to “get the word out” about the excellent product that they have to offer. In turn, the Upper Cumberland Tourism Association is a small non-profit; and, while this organization has and continues to market the region’s wine industry with diligence and enthusiasm, funding beyond what is currently available is necessary to take their marketing effort to the next level.

The funds received from this grant were used solely to market the six Upper Cumberland Region wineries and their grape-growing, wine producing industry. This Upper Cumberland Tourism Association Wine Trail Project has not been (nor will be) submitted to or funded by another Federal or State grant program.

Approach Taken for the Project

To accomplish the objectives of this project, the Upper Cumberland Tourism Association and Upper Cumberland Wine Trail wineries developed a work plan. All activities necessary to accomplish the objectives of this project were determined and defined. It was understood by all those involved, that the association is responsible for recording inquiries received from potential winery visitors and that the wineries are responsible for recording inquiries that come directly to their businesses.

UCTA developed Marketing Plan

Receive and disburse grant funds received as a result of this grant application and in accordance with the budget submitted

Implementation of the marketing plan developed with input from the Wine Trail wineries and submitted as part of this grant application

Receiving, tabulating and interpreting data gathered from inquiries regarding the Wine Trail that are made to the UCTA by mail, phone, website and social media such as Facebook, Twitter, etc., as a result of the cooperative marketing project funded by this grant

Making this data available to all the participating wineries in order that they might use it to develop their individual marketing plans, and determine future production levels and schedules

Monitoring progress of this project and reporting as required to the grantor

Publicizing the Wine Trail and this project, giving recognition to the grantor

Wine Trail wineries are responsible for:

Participating in and giving input into the development and implementation of the marketing plan

Gathering, tabulating and interpreting data gathered from surveys of winery visitors during the grant project period for the purpose of developing individual marketing plans and determining future levels of production

Sharing this data with other wineries on the Wine Trail and with the Upper Cumberland Tourism Association

Participating in cooperative activities with other wineries on the Trail and the UCTA

Publicizing the Wine Trail and this project, giving recognition to the Upper Cumberland Tourism Association and the grantor

Projects financed with Grant funds

2 Billboards along I-40/East & West traffic – 12 month contract

Ad in 2013 TN Vacation Guide

Radio Ad with Cookeville Communication

Fox 17 – Television ads

Several ads in leisure magazines in neighboring states and nation wide

Results of the Program

The Upper Cumberland Wine Trail has enjoyed the benefits of the Tennessee State Department of Agriculture Specialty Crop Block Grant program funding to improve and expand our collective marketing program.

Over the past years we have been able expand on the initial programs and we created a perfect marketing program that enables us to better promote our newly established wine trail.

Consequently, the Upper Cumberland Wine Trail has grown into a vital tourism attraction for our region and has an economic impact on each individual winery and on the Upper Cumberland's wine industry as a whole. The Upper Cumberland Wine Trail has now eight wineries as part of the coop.

Marketing of the Upper Cumberland Wine Trail has resulted in an increase of new visitors by +/- 35%. The repeat customers' numbers have increased by 30% +/-

Especially the smaller wineries in more remote locations are benefiting from the marketing efforts

For non-growing wineries: grape purchase increased by up to 40% +/- i.e. Seyval, Vidal, Concord and Blackberry

Grape growing wineries: planted additional 700 +/- new vines and increased their total vine growing acreage.

Progress made to achieve the Long-Term Outcome of the Program

We are continuously marketing the trail in co-op ads in the UC magazine and other leisure magazines. The Trail members are co-op producing rack cards, radio announcements and give a ways. All UC wineries are listed individually in the official Tennessee Vacation Guide.

Beneficiaries

The increased business at our eight wineries and subsequent increased wine production has benefited Tennessee grape growers, as well as those in the southeast region of the US due to the demand for more wine grapes.

Lessons Learned

The billboard advertisement that we had for over one year has been a great success. Individual UC wineries now have their own billboards or co-oping with UCTA. Radio, as well as television advertisement has to be more selective.

Additional Information

Because the UC wineries' cooperation we are the only Tennessee wine trail working with TDOT to get directional signs along I 40 and state roads for Upper Cumberland Wine Trail wineries. The signage is offered to each winery for a very reasonable fee and will have positive impact on the visitors.

Contact Information for the Sub recipient

Upper Cumberland Tourism Association

P.O. Box 2411

Cookeville TN 38506

Ruth Dyal

Email: uctourism@gmail.com

Phone: 931- 537-6347

Project 13: The Tennessee Tomato Initiative

Need for a Grant

The fresh tomato industry in Tennessee has seen growth over the past decade, becoming a major source of income for many farmers. However, the industry has also seen competition from exports. As a result, sales have varied with Tennessee ranking between 3rd and 6th nationally in production in any given season. While the industry has strong potential, there is not a recognizable brand that sets Tennessee tomatoes apart from other tomatoes that are imported from other areas. Tennessee's geographical length and location is a major asset, but it also contributes to fragmentation of the industry. By educating growers about branding Tennessee tomatoes, the potential exists to create a unified message for consumers and to also unite the growers in effectively marketing their specialty crops.

Approach taken for the Project

Several steps were taken to educate the growers of Tennessee tomatoes about the benefits of forming a grower-owned association funded through assessments.

- 1) An advisory committee was formed to oversee the consultant's work on the project. The committee consisted of educational professionals, tomato growers, and nonprofit professionals with a stake in the tomato industry.
- 2) The committee reviewed and approved the consultant's research, networking and planning efforts and provided general guidance. Research was compiled and printed that outlined challenges that tomato growers are facing in today's economic climate and that illustrates the benefits of forming a nonprofit grower-owned association.
- 3) Grower-owned associations in neighboring states were visited to determine their organizational structure, learn about challenges and opportunities and the benefits they provide to specialty crop growers. This information was shared with Tennessee tomato growers. Regional Meetings were held that were attended by more than 50 tomato growers, in addition to industry professionals. USDA-AMS representatives also attended the meetings to share information about the benefits and challenges of an assessment-funded association and to address grower concerns.
- 4) In January, an initial organizational meeting was held with the board and any grower who wished to attend. Two representatives of USDA AMS also attended this meeting to discuss the two different types of grower owned associations that were funded through assessments and the benefits and challenges of each. Many different topics pertaining to the tomato industry were discussed at the meeting and research from the association visits were presented as well.
- 5) In March, information was distributed to the press and public informing tomato growers about the regional meetings and the opportunity to vote on whether or not to form a grower-owned association.

Achievement of Goals

Three regional meeting were held and TDA representatives were present to address grower questions and concerns. However, early feedback from growers indicated there was a lack of understanding and strong opposition to an assessment, therefore a vote was not taken. It was determined that more time and educational outreach was needed in order for growers to be able to make an informed decision. There was also concern about whether there was adequate representation of the tomato industry in the process. As a result, TDA notified the consultant that only direct expenses related to the three regional meetings would be allowed.

Progress Made to Achieve the Long-Term Outcome of the Program

While a vote on a grower assessment was never held, the effort has resulted in a stronger relationship with tomato growers and the formation of a loose affiliation that has the potential to lead to grower-owned association.

Since the regional meetings were held, 15 of the largest East Tennessee growers have organized a networking group to share information about all aspects of tomato production, including weather, crop status, maturation, supply and demand and challenges unique to the eastern U.S. We believe this will significantly increase growers' ability to work together in identifying opportunities and overcoming challenges in today's market.

Beneficiaries

Significant, positive relationships were formed between TDA and Tennessee tomato growers despite a misperception that there was too much government influence in the process. The more successful approach has been to facilitate discussions and to provide support for the new grower led initiative.

Other benefits have been to educate and inform growers about many of the resources available to them including the Specialty Crop Block Grant Program, Tennessee's Ag Enhancement farmer cost share program and the Pick Tennessee Products marketing program. Growers also gained insight as to how an association could be beneficial to the industry if they ever collectively decide to revisit that option.

Lessons Learned

Information gained from this effort will be important for strengthening our relationship with specialty crop growers going forward. The purpose of the Tennessee Tomato Initiative was to give growers the information and resources they needed in order to determine if a grower-owned association would be beneficial to them and their industry. In the event that this effort is undertaken again, TDA would be more deliberate and intentional in its communication with growers about the stated purpose so as not to influence the decision making process.

This effort served to confirm that Tennessee tomato growers do want and value our assistance in marketing Tennessee tomatoes to consumers and retailers. As a result, Pick Tennessee Products promotional materials have been effectively used statewide in letting consumers know about the availability of specialty crops.

Additional Information

All printed materials are on file at the Tennessee Department of Agriculture.

Contact Information for the Sub-recipient

As the Tennessee Tomato Initiative is no longer active, inquiries can be directed to:

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