



Tennessee Department of Agriculture
Ellington Agricultural Center, Box 40627, Nashville, Tennessee 37204
615-837-5100 / FAX: 615-837-5333

Julius Johnson
Commissioner

Bill Haslam
Governor

Tennessee Department of Agriculture
Debbie Ball-Director of Marketing
Phone: 615-837-5384
Email: Debbie.Ball@tn.gov
Specialty Crop Block Grant Program
Grant # 12-25-B-1255
Final Performance Report
December 22, 2014

Project 1-Know Your Tennessee Farmer

Need for a Grant:

In 2011, it was apparent that mobile technology was rapidly changing consumers' spending habits. Android and iOS operating systems were the dominate operating systems of mobile hand-held computing devices and consumers were incorporating these devices into their spending patterns. Promoting specialty crops using mobile technology was a natural extension for Pick Tennessee Products. In addition to the development of the mobile app, additional funding was needed to effectively market the app to all Tennesseans.

Approach taken for the Project:

Permission from the Tennessee Office of Information Resources (OIR) was the only requirement in place for mobile app development when this project was originally written. However by the time the project was approved, mobile applications along with social media were moving at such a rapid pace the state determined a more definitive policy was needed to assist navigating such a rapidly changing landscape. The development and implementation of this policy took several months.

After the state had a set of mobile app policies in place, TDA had three choices for app development. We checked to see if the mobile app could be developed in-house and determined that it would be cost prohibitive. A bid from the developer with the state contract for mobile applications was higher than the project could absorb. The third approach, and the one TDA chose, was to put the app through the state's competitive bid process. After several months of contract writing, researching answers to questions giving by vendors on a pre-bid conference call, and contract amendments, a vendor was selected in September 2013.

App development started in October 2013 and at the same time the staff of Market Development began developing a marketing plan designed to reach the greatest number of Tennessee consumers of specialty crops. A mix of television, radio, print, billboards, online banners, media day events, news articles, and social media sites were incorporated to maximize the number of Tennesseans who would be exposed to the availability of locally grown specialty crops.

In December 2013, Pick Tennessee Products redesigned its logo to be optimized for mobile devices. We recognized the growing development of mobile devices and social media and that our current branding did not lend its self to these new environments. In order to better position our marketing of specialty crops we rebranded to a more iconic logo which worked well in mobile environments. This rebranding allowed us to improve the brands position in the app stores and mobile devices for both Android and Apple. It also helped us to advertise the new mobile app in the modern mobile environment to get to people on their devices for one touch installs and downloads.

A total of more than 750 hours of TDA staff time has been dedicated to the development and promotion of the Pick TN Products mobile app. This time has been utilized in the following manner:

- Selection of a vendor including approvals/RFP development/post-conference call research/RFP updates/scoring of proposals-120 hours
- Working with the vendor in development of the app and contract compliance-250 hours
- Testing the app before release/working with vendor on app issues-140 hours
- Development and implementation of the marketing plan to maximize budget-125 hours
- Working and testing updates on the app-80 hours
- Updating Pick TN Products database to maximize grower participation on the app-60 hours

Results of the program:

The Pick Tennessee Products mobile app has more than 20,000 downloads in its first growing season. All Tennessee grown specialty crops are available on the app. In addition, many farmers have communicated increased farm sales because the mapping feature on the app allows users to connect directly with the farmer. In addition to the direct downloads of the app our advertising for specialty crops and the app reached more than 6,749,208 Tennessee consumers. This gives the Tennessee specialty crop community a wide presence in the market to consumers who may not have considered buying from their local specialty crop growers. Many of our states specialty crop producers noticed the expanded marketing presence in the market place and were eager to help spread the new branding and app promotions.

In addition, many farmers markets have reported an increase in specialty crop growers that have set up at a local farmers market and an increase in the number of Tennessee consumers buying their specialty crops from farmers markets. The app gives the consumers the ability to locate where their favorite specialty crop growers are selling their products.

A small amount of money was also available to format the website for mobile devices. As we rebranded Pick Tennessee Products we were able to format the website for mobile devices in-house and a vendor was not needed. We were able to utilize that funding in app development and in our marketing plan.

Progress made to achieve the long-term outcome of the program

The Pick Tennessee Products website went live in 1995, making it the state's first consumer website. The mobile app is a natural extension of what started 19 years ago. Feedback on the mobile app has been positive with user comments being favorable in a ratio of 9 to 1. Many users commented on the ease of connecting ~~them~~ with their favorite specialty crop grower and using the app for on-farm visits to pick strawberries, blueberries, peaches and other specialty crops.

A very positive trend has developed with specialty crop growers because of the app. The app has provided an incentive for growers to use online resources to their advantage. For example, before the app, growers never saw the need to update their information at www.picktnproducts.org. However, because longitude/latitude is the most accurate mapping tool, many growers have updated their information because of the app's reliance on this aspect. Many growers have made changes to their website to take full advantage of the mobile app that successfully runs Google Maps and Apple Maps and guides consumers of specialty crops to their location. Because the app provides a direct link to the producer's website, many producers made technological changes to make their website easier to navigate with mobile devices. Beyond this project there is a continued commitment to build, grow and develop this app to increase the

marketing and sales of specialty crops for years to. It will be an integral part of the marketing strategy to engage the consumer and connect them with the producer.

Beneficiaries

The beneficiaries of the project are all specialty crop growers, who are listed on the Pick Tennessee Products site. All specialty crops are listed on the app and Tennessee consumers can locate fruits, vegetables, honey, plants and flowers with just one touch. Another beneficiary of the mobile app is Tennesseans who want to connect to local farmers.

Lessons learned

TDA has learned many valuable lessons from the development of the mobile app:

- 1) Consumers will use technology in locating specialty crops much like they have incorporated mobile technology into their spending habits. Consumers are using the app to find where their favorite specialty crop producer will be selling on any day. They will also use the app to connect to growers to see if a particular specialty crop is in season and available.
- 2) Specialty crop growers will invest in and utilize technology to connect to consumers. Many specialty crop growers are now starting to code their website where it automatically formats to mobile devices. Growers are utilizing mapping features to give consumers the opportunity to more easily locate their farm/roadside stand/farmers market. They are using social media more to connect to consumers and address concerns (the mobile app has a feature that allows a user to connect to facebook/twitter thus allowing the consumer to be an additional promoter of specialty crops to their followers and friends.)
- 3) There is an ever expanding market for Tennessee specialty crops. Farmers market managers are reporting an increase in specialty crop vendors at their locations. The app is playing a role in increasing participation for both consumer awareness and grower participation. By providing information to consumers about the availability of Tennessee specialty crops and giving growers real-time data about consumers' buying habits, we are rapidly building a bridge that connects buyers and sellers. Specialty crops are increasingly becoming a consumer item where the buyer wants a personal connection with the seller.
- 4) There must be a long-term commitment for any entity wanting to incorporate a mobile app to market specialty crops. This includes:
 - Providing on-going technical support to users of the mobile app. Many users contacted TDA about issues ranging from outdated mobile devices that couldn't support the mobile app to technical glitches that we were able to quickly address.
 - Providing financial and labor support for every operating system update. A developer is needed for every app update and resources must be devoted testing the app before it goes live.
 - Maintaining and checking databases with regularity to ensure proper operation of a mobile app.
 - Testing the mobile app periodically to stay ahead of any issues, and to provide a good experience to buyers of specialty crops.

Additional Information:

[You Tube Video on the mobile app](#)

Advertising Examples

	<p>www.PickTnProducts.org</p>	<p>Pick Tennessee on the Go</p> <p>Use our new MOBILE APP and find the good things growing near you!</p> <p>www.PickTnProducts.org</p>
<p>App Promotion Web site</p>	<p>App Danglers</p>	<p>Magazine Ad</p>
<p>Use our new MOBILE APP and find the good things growing near you!</p> <p>Available on the App Store</p> <p>Available on Google play</p>	<p>Pick Tennessee on the Go</p> <p>Use our new MOBILE APP and find the good things growing near you!</p> <p>Download FREE on</p> <p>Available on the App Store</p> <p>Available on Google play</p> <p>www.PickTnProducts.org</p>	<p>Pick Tennessee and Live Local on the Go</p> <p>Use our new MOBILE APP and find the good things growing near you!</p> <p>Available on the App Store</p> <p>Available on Google play</p> <p>Follow us on:</p> <p>www.PickTnProducts.org</p>
<p>Web Ad</p>	<p>Magazine Ad</p>	<p>Magazine Ad</p>



Producer Banners



Billboard



Facebook Ad

Contact information for the subrecipient

Tennessee Department of Agriculture
 Debbie Ball, Director of Marketing
Debbie.Ball@tn.gov

Project 2: Branding Tennessee Farm Fresh (Submitted on 2013's Annual Report)

Need for a grant:

The Tennessee Farm Fresh (TFF) program was started by the Tennessee Farm Bureau federation in 2007 from the Specialty Crop Block Grant Program (SCBGP). The development of the “Buy Local” movement has been strong and has aided the grower in profitability. TFF is bridging the gap between the consumer who wishes to purchase local agricultural products and the growers who are attempting to get their produce to a local customer base. This grant was needed to enhance and complement the work done with the previous SCBGPs, which were used to establish TFF. TFF was able to use this grant to start heavily promoting specialty crops in Tennessee by working to increase and improve TFF offerings to consumers, soliciting new specialty crop growers into TFF, visiting farms to verify specialty crop offerings and production, and conducting outreach to maintain service.

Approach taken for the project:

TFF holds a quarterly workshop in an agriculture area of Tennessee four times a year to help the producers market their specialty crops. These workshops cover many different topics that help the producer reach the consumer who wishes to buy locally. TFF covers many topics during these meetings that are included but not limited to; how to communicate the benefits of GAPs (Good Agricultural Practices) to consumers, the benefits of adding value to specialty crops, how to utilize Point-of-Sale materials to add recognition to your operation, and the importance of using customer service in a retail environment. In addition to the operations all new members are given a publication prepared by the University of Tennessee extension program on direct marketing of specialty crops and an educational book by Sarah Beth Aubrey, "Starting and Running Your Own Small Farm Business."

In addition to working with the producers to help them transition to a retail business TFF recognizes the need to promote specialty crops. TFF's marketing plan reaches over 25% of Tennessee's 6.4 million residents every six months. This is done through a series of print, radio, television, and online advertising as well as live promotional events throughout the state. TFF also placed brochures detailing the availability of Tennessee specialty crops in many areas throughout the state including farmers' markets, fairs, state parks, local attractions, welcome centers, street festivals, and other events throughout the state.

Tennessee specialty crops were promoted through the following series of advertising:

- A) The purchase of promotional items that reach a targeted audience at events with a heavy presence of local food enthusiasts, ex. A new farmers market grand opening.
- B) Advertising on the WCTE "Live Green" series that reaches over 500,000 Tennesseans.
- C) A series of advertising on WTVF, "News Channel 5" that advertises the availability of specialty crops when they were in season and a series of live promotional events on the daily news/human events series "Talk of the Town." These live advertisements spoke about the specialty crops that were in season, the many uses of these specialty crops, and most importantly direction to the website where the consumer could locate these specialty crops.
- D) A series of advertisements and a live remote with WATE-TV in Knoxville, TN. These advertisements were geared towards the availability of in-season specialty crops and the website where the grower could be located.
- E) A series of advertisements on WBBJ in Jackson, TN that detailed the availability of specialty crops. These advertisements ran during news and human events programming.

We tailored our promotional plan to reach the maximum number of consumers with programming that was watched by the demographic we were attempting to reach.

TFF saw an increase of over 10% in the number of people who were following them on Facebook. This free resource has been invaluable in reaching the consumer who is searching for fresh, locally grown produce.

Not only are we able to instantly connect to our consumer base, we are able to give fresh new ideas for uses of specialty crops in recipes. The consumer who seeks out and purchases fresh produce is usually the consumer who wishes to try new recipes and to also share recipes with the online community that follows these two promotional entities on Facebook.

TFF also started a newsletter during the peak growing season that was made available to consumers who wished to learn more about TFF members and their products. Initially, over 1,100 consumers signed up to receive the email newsletter.

Achievement of goals:

We have reached over 50% of Tennessee residents about the availability of specialty crops through the efforts of TN Farm Fresh. Since Tennessee always has the availability of locally produced specialty crops we were able to give all growers advertising time. The summer is when the majority of our fruits and vegetables are available, spring is when we are able to assist nursery and floriculture specialists, fall is when pumpkins and fall squash are available, and winter we are able to market Christmas trees and honey.

While we were not able to gain a percentage of the increase of on-farm cash receipts of sales to consumers, a survey sent to members that allowed them to answer anonymously indicated an average increase of \$30,000 of on-farm cash receipts to our members. Many growers also stated that customer attendance was up and that the amount each consumer spent also increased, though we could not gage an accurate reading in either percentage or dollars spent.

One of the main goals of TFF has been to get the grower heavily invested in marketing their specialty crops. By reaching out to the consumer and inviting them on location to see how their produce is grown, handled, and packaged many growers have made GAPs the standard operating procedure and are employing many other safety and sanitary practices that is making the local producer an inviting place to come and visit and even more importantly spend money. Since the advertising budget for specialty crops mainly consist of the availability and directing consumers to the websites, many of the benefits and uses of the specialty crops as well as the practices of the grower have to be explained by the grower. TFF is extremely proud of the customer service skills that many of our growers have developed and we are enlisting them to assist other specialty crop growers who are attempting to market their produce in a retail setting.

Results of the program:

Tennessee Farm Fresh (TFF) maintained the symbol of fresh and quality produce from a local Tennessee grower. After six years the TFF logo is now a recognizable standard on farms participating in the program. When TFF started it had 76 members, there are now 101 members.

The TFF webpage continues to operate as a main source for information and contact with the consumer and potential producers. This webpage received 9,497 views in 2013 with 27,210 page views. This includes 7,853 "unique" visits indicating multiple returns to the website. We believe these numbers indicate the TFF site is a widespread tool used by consumers to find local produce in there community. We believe a large majority of the 9,497 view represent family units. This belief is based on the following demographics visiting the webpage:

Percentage	Age Range
27%	18-24
18%	25-34
15%	35-44
12.5%	45-54
5.5%	55-64
5.5%	65-Over

This program has experienced some changes in 2013. The coordinator who launched TFF in 2007 took advantage of another job opportunity. This position has not been filled but remains open. A search for a qualified replacement with experience in this type of employment remains underway. Because of this open position, TFF changed policies regarding membership. Membership in the program is now without cost and members have free placement on the TFF website. The TFF program continued to provide promotional material, banners, and other support publicity featuring the TFF logo.

The success of the TFF program along with the open coordinator position provides an opportunity to transition TFF to an organization or institution with a greater capacity to expand the program. We believe TFF's success exceeded expectations and enables the program to evolve to higher level. We want to TFF to grow along with the local food market. Since this market is increasing exponentially, the TFF program must be in a position to do the same. The future expansion of TFF is currently being explored to maintain and enhance this coordinated marketing structure for a growing local food movement.

One of the goals that we stated in the proposal was that we wanted to increase on-farm cash receipts from sales to consumers purchasing locally by 10% over three years. We receive feedback from growers regarding how our advertising and events benefit their operation. However, they are extremely reluctant to give specific numbers pertaining to sales that would allow us to determine how advertising affects on-farm cash receipts. The most recent TFF survey of growers had 38 participants. Of these 38, 6 growers stated they gained 100 or more customers through participation in the program and 6 growers stated that sales increased \$5,000 or more due to their participation in TFF. The majority of survey respondents said that they were not able to measure how TFF increased their customer base or their sales.

Progress made to achieve the long term outcome of the program:

TFF has made tremendous progress to help market the wonderful and varying specialty crops that the state of Tennessee produces. TFF recently upgraded its website to include Google Maps that will help the consumer find the farm that is sometimes off the beaten path. The "Buy Local" movement this initiative has been promoting is now taking off and buyers of agricultural products that do not have a historical record of buying locally, schools, restaurants, and cafes, are now advertising locally grown agricultural products.

Beneficiaries:

The direct beneficiaries of the TFF program are the producers participating in the program and thousands of consumers pursuing locally grown produce. Other producers of locally grown products also indirectly

benefited from the global awareness of locally grown products. Over 100 participants in the program were provided educational tools necessary to enhance their marketing efforts, improve the salability of their products, and reach out to potential consumers. Their operations are better prepared to find, market to, and keep customers through workshops, idea sharing, and one-on-one site visits.

The locally produced market is growing. One of TFF's primary goals is to connect producers with consumers because producers were not organized under a collective symbol for fresh and local produce. All indicators showed an established market and established producers but no prominent link between the two. The Farm Fresh program provided this link for consumers. As a result, consumers are able to find the products they want, the assortment they want, and the convenience in finding those producers.

TFF's promotion of locally grown products extends beyond participants of the program. While participants in the program receive many other services beyond commercialization, the entire market for locally produced products is expanded through TFF. This is an indirect benefit for producers across the state. TFF is an advantage for all of agriculture.

Lessons Learned:

TFF is a new and innovative program. This type of program generally encounters many challenges. TFF learned branding is a critical component, relationships build success, demographics of consumers must be a consideration, and producers need to be prepared for this market.

1. The symbol of a marketing organization is the first introduction to consumers. The Farm Fresh logo was a major first step and ultimately was successful. The logo had to appeal to consumers and make a statement upon first glance. Many concepts for a logo were considered and casually placed in front of several individuals before settling on a final concept. This logo appeared on TV, web advertisements, print media, displays, and on farms. The importance of getting the logo right was one of the first lessons learned in this program.
2. Having a relationship with the producer of your food is core to the locally produced market. TFF had to build relationships with consumers through tradeshow, commercials, web messaging, and one-on-one encounters. One of the best examples of building relationships indirectly was local TV cooking shows. These shows typically highlight local businesses or organizations. Viewers are mostly food buyers for their home and depend on these shows for guidance. Also, producers are trained to develop relationships with their customers. Consumers of local products want to feel like they are a part of the operation. This is a major component to the success of a local products farm operation.
3. If a consumer of locally produced products has made the conscious decision to purchase these products as opposed to the convenience of most retail food stores, then they have a preconceived notion of their producer. Whether the market is on the farm, farmer's market, or roadside market facility, the producer must make sure their facility and presentation is clean, pleasing, the products show quality, and the farm atmosphere is evident. Producers must take into consideration their potential consumer is willing to pay more for quality both in the product and the facility.
4. Some producers are not prepared for this niche market. Some potential members were not allowed to be part of the program because an on-site visit revealed quality issues, food safety concerns, and general lack of concern for the consumer. In some cases these issues were resolved but in others it could not. Saying no to a potential TFF member is not easy but ultimately the producer needs to

realize they are entering a type of retail environment. Being part of the TFF program means the producer has prepared to meet a certain standard. This means the facility must be pleasing, the products must meet market demand, time must be allocated for continuing education through workshops, and customer relations should be a priority.

Additional information:

Information about the Tennessee Farm Fresh program can be found at the website:

[Tennessee Farm Fresh Home Page](#)

Contact information for the sub-recipient:

Stefan Maupin
Tennessee Farm Bureau Federation
931-388-7872 ext. 2231
smaupin@tbf.com

Project 3: Tennessee Wine Grape Competitiveness

Need for a Grant

Tennessee growers have several avenues for sales of their products that include direct-to-consumer sales and grape sales for processed products. However the most significant quantities of fresh grapes are sold to Tennessee wineries (98%). Even though grapes are a significant part of Tennessee agriculture, TFWA needed to expand the industry to meet present demand and additionally to increase membership in TFWA. This project was the catalyst for the organization to hire a vineyard consultant and a Recruitment/Placement manager.

With no focused direct “grower to winery” campaign, TFWA needed to coordinate efforts to match grapes grown with the needs of the industry. This crucial venue for selling grapes was vital to maintaining income from their fruit and as an incentive to be an active participant in TFWA. The vineyard consultant would make sure the quality was superb and provide educational opportunities for the producers. The Recruitment/Placement manager would serve as a liaison for availability, harvest times, delivery options and concerns between the grape growers and their biggest customer, the wineries.

Approach Taken for the Project

The Recruitment/Placement Manager was hired immediately upon Board approval. The initial focus was to meet members and begin a coordinated effort to tie together fragmented marketing efforts within the organization. A new brochure was designed to mimic the new website look and the new logo. Vineyard visits were done in coordination with the vineyard consultant and festival coordination was done with assistance from the TDA marketing specialist.

In addition, a display was created to be utilized at field days, festivals, event promotions, and during educational seminars. Head shots were made of each vineyard owner and wine maker to be used when sending press releases on awards given to particular wines made from 100 percent Tennessee grapes. The Vineyard Consultant embarked on a series of seminars and consulting trips to vineyards across the state. It was decided that the development of a spray schedule was not necessary due to the printing of an identical spray schedule by the UT Extension Service. This significantly cut down on the contract work needed by the consultant.

In the meantime, increasing numbers of vineyards were being established and increasing wineries were being built throughout the state. Demand for quality grapes was rising and continues.

Achievement of Goals

All of the local wine grapes grown during the grant timeline were sold, with the majority purchased by Tennessee wineries. The remaining grapes were purchased by home winemakers and for fresh consumption. There was an increase of sales by 22 percent each crop year the grant was in place. It served to enhance promotion of our industry to key stakeholders and to consumers.

We have annually contacted all existing members and potential members for dues payment and explained the advantages of membership. We have added 11 new wineries, 22 new vineyards and 2 corporate memberships to the Tennessee Farm Wine Growers Alliance. The TFWA Member handbook was printed and distributed to all current paid members. It outlines member benefits, contact information, festival guidelines, as well as hub, website, and app use.

Results of the Program

The impact of being awarded the grant has enhanced the promotion of our industry and the growth of grapes and wines in Tennessee. It fell in line with the Governor's Rural Challenge, which was introduced as a statewide initiative in December, 2012 to increase farm profitability.

We continue to grow in membership to TFWA and to expand as an industry. The 22 new members of our organization are a direct result of promotional efforts from the grant and vineyard visits from both the consultant and recruitment/placement manager.

Additionally, our professional image to consumers has grown since we have upgraded and enhanced both our website and our app. We continue to distribute brochures to tourism welcome stations, Chamber of Commerce offices, festival attendees, vineyards, and wineries to promote our growing industry. The brochure also be downloaded online at our website, www.tennesseewines.com

Our grant funds came into play with the initiative to address supply chain gaps. Tracking the movement of grapes throughout the state and the varieties that are in demand is a key to our continued success. As a result, we began a Grower's Clearing House on our group hub. This gives producers the opportunity to advertise excess products and develop new relationships for sales while giving the winery additional options in case of crop failure from an existing contract.

Progress made to achieve the long term outcome of the program

There are no superstar wines without superstar grape growers. Correct vineyard management is essential to long term success and the recommended spray schedules, pest updates, disease control techniques are highlighted on our member communication via the hub and educational seminars.

The Grower's Clearing House will continue and is a huge selling point for product placement. It is one of the most popular areas of our group hub for the membership and several grape growers have joined the organization just to be a part of that clearing house.

In order to keep members ready for the agricultural issues to come, we have already planned educational seminars to enhance viticulture practices and address production issues that are unique to Tennessee in February, 2015. We will greatly utilize Tammy Algood with TDA and David Lockwood with UT Extension in our programming as well as out of state and regional viticulture, marketing and wine consultants.

We will continue to cement our partnership with Tennessee Tourism for enhancing distribution of our wine brochures. This greatly influences traffic at wineries, vineyards, festivals, and at special on-farm events. We will keep enhancing and updating our website and our app to keep it fresh and user friendly to consumers.

The easiest way to promote growth of our organization and to increase the number of vineyards across the state is to be proactive within our industry. Our new member handbook is a significant marketing tool for joining the alliance.

Beneficiaries

Beneficiaries of impact from the SCBG funds include the vast number of grape growers in Tennessee as well as the consumers of their products and services. This includes wineries as well as home wine makers. Consumers benefit from event avenues, increased education, and the opportunity of supporting local vineyards and businesses. Wineries and vineyards were able to expand new employees and increases from part time to full time by 11 percent. The increase in quality fruit production in Tennessee is substantial, with a 48 percent increase in grape production in past 5 years we have been documenting growth.

Lessons Learned

Through this grant process, our organization has learned what it takes to make sure the TFWA succeeds and prospers. That involves looking at future vineyard consultants and recruitment/placement managers as well rounded within the entire grape to bottle process. Consultants need a deep understanding of vineyard management for our diverse state with pockets of extremely different growing areas and challenges. These challenges can be in the form of disease, insects, regulations and shifting consumer demand. The consultant also needs to have a good understanding of what it takes to make great wine and how harvest practices can influence that negatively or positively. We need a complete package that can lead particularly new grape growers forward.

Proper marketing of this to our membership and grant stakeholders will make the process of moving forward manageable and ultimately successful. The assistance we received from TDA was invaluable to us since this was the first time we had ever dealt with grant funding of any kind.

Additional Information

www.tennesseewines.com

Contact information for the sub-recipient

Scott Paschal
TFWA Grant Chair
Cellar 53 - Hickory Hills Farm, LLC
Spaschal06@gmail.com

Jason McConkey
TFWA Treasurer
(423) 745-3062
jmccconkey@athensins.com

Project 4: Tennessee Horticulture Expo

Need For A Grant

The Tennessee Horticultural Exposition (THE) is a statewide collective meeting of five commodity associations. THE was established in August 2008 to unite agricultural entities within Tennessee into one event, saving producers both money and time by attending one joint meeting rather than separate meetings for each association. In January 2009, THE held the first annual conference in Nashville.

THE requested grant assistance from the Tennessee Department of Agriculture to continue growth, expand attendance at the annual meeting and increase membership of the partnering organizations. THE is managed by an executive committee that consists of volunteer representatives of each participating organization. Grant funds were needed to pay for an Executive Director to serve the needs of all partnering associations. The grant paid for the Executive Director's salary and expenses. Linda Reed was chosen as the Executive Director at the March 2012 Board of Directors Planning Meeting. The Grant period is October 15, 2011 – December 1, 2014. The annual meeting of THE on January 29 – February 1, 2014 was the last meeting on the grant timeline.

Approach Taken For The Project:

THE has organized and facilitated successful annual meetings with professional speakers and informative topics to help specialty crop producers with food safety issues, marketing and emerging regulatory concerns. The keynote speakers were always nationally recognized individuals who were focused on current topics that could enhance the operations of those within the specialty crop area. The program was

designed so that keynote speakers could be utilized by each association after the general session for individualized attention to their memberships.

In addition, THE provided specialty crop producers the opportunity to interact with a wide variety of exhibitors. These vendors returned each year to the meeting due to the enormous interest provided by an expanding array of producers who were new contacts.

Achievement Of Goals:

THE has worked closely with the UT Center for Profitable Agriculture, UT Extension and the Tennessee Department of Agriculture to use different software and layout designs to produce the best program agenda. The annual THE Program is the main thread that connects each individual association into the one combined TN Horticultural Exposition.

Fundraising opportunities for operating expenses were provided via silent and live auctions, sponsorships, donations and exhibitor dollars. These funds were allowing THE to continue operating at the current level even after specialty crop block grants were scheduled to be expended in 2014. At the same time, the participating commodity associations were given a yearly return on their time investment with THE, allowing these groups to enhance their individual marketing plans.

Paid memberships of three THE organizations increased during participation with the combined meeting. Tennessee Farm Winegrowers Alliance membership was the most significant with a jump of 36 percent in paid memberships over the past three years. The Tennessee Flower Grower Association increased a total of 9 percent and the Tennessee Fruit and Vegetable Association increased by 7 percent in dues paid.

Results of THE Program:

Surveys have been conducted annually to measure needs and impact of the program. In 2013 surveys were given out at THE annual conference and evaluated by the UT Center for Profitable Agriculture. In 2014 surveys were given out at THE annual conference. The Executive Director completed an overall report of the evaluations. According to the 2014 Report, THE was improving in all aspects every year and continued to offer a timely, educational, learning experience for the specialty crop producers of Tennessee.

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

Even though THE disbanded, there is an obvious need for continuing to have the three day conference. In 2011, attendance included 436 producers. By 2014, the participation increased to 491 attendees. In addition, THE Treasurer reports the account has a positive balance and was never in the red.

The reason for the achievement of this success was directly tied to the partnership of key stakeholders throughout the agriculture community. In addition, the direct support of individual specialty crop organizations played a vital role in the increase of farmers and producers in the meeting. This was due to the marketing efforts of each association as well as the collective marketing strategies of THE statewide. THE was able to keep registration costs low, while offering participants expanding value for their dollar.

Beneficiaries

Tennessee specialty crop producers have been the recipients of a professionally organized, efficiently run and profitable annual meeting that would otherwise be impossible for each association alone. The speakers and educational seminars have been some of the best offered to the participants. Additionally, specialty crop producers were given the opportunity to enhance their customer direct marketing through value added items offered through exhibitor purchasing specials at the tradeshow.

THE attendees have been able to attend educational classes from all of the industries represented not just their local association community. The centralized Nashville location provided an equal opportunity for producers from the West, Central and Eastern areas to attend.

Lessons Learned:

The organizers realized from the beginning that Expo success depended on the buy-in of interested specialty crop organizations. The multi-year commitment of these associations was a key to planning, getting hotel quotes and negotiations and uniformity of participant expectations. It also made it possible to attract vendors to create a larger and more diverse tradeshow, which greatly expanded interest from attendees. The increasing numbers of those registering and attending created the need for more influential educational speakers, also adding to the marketing of THE.

In the future, initial commitment from a wider array of agricultural associations will guarantee greater success. Then if some of the associations want to break away from the combined meeting for a year or so, the ramifications of that decision will not break the momentum or financial interests of the remaining groups. A more active involvement of recruiting new organizations to the combined efforts of THE will insure greater success in the future.

Contact Information:

Tammy Algood, TN Department of Agriculture
Tammy.algood@tn.gov
(615) 837-5347

Louisa Cooke, Beachaven Vineyards & Winery
bvwinery@aol.com
(931) 645-8867

Project 5-Promoting Tennessee Grown Nursery Plants

Need For A Grant

To promote the Tennessee Nursery & Landscape Association members and allow growers to market their products to a national and/or international marketplace at the Mid-States Horticultural Expo.

The nursery industry has been in a slump since the decline of new home sales and other economic conditions starting in 2009. Many nurseries have not been able to survive the severe decline in plant sales

and have been forced out of business. The nurseries that have survived have been searching for new customers for their products. The grant was used to market the nurseries to out of state nurseries, landscapers and garden centers. With the help of the grant TNLA has been able to travel to Portland, Oregon, Atlanta, Georgia and Dallas, Texas to promote the Tennessee green industry (handing out membership guides, buyers' guides and trade show information). Growers were able to get a 50% booth refund to showcase their products at the Mid-States Horticultural Expo in Louisville, Kentucky (a joint show with the Kentucky Nursery & Landscape Association) .

Approach Taken For The Project

TNLA promoted the 2012 Mid-States Horticultural Expo by mailing 11,739 registration brochures to industry businesses across the U.S. and also handed out the brochures, membership books and buyers' guides at the Farwest Show in Portland, Oregon, and the Texas Nursery & Landscape Expo in Houston, Texas. In August 2013, TNLA also traveled to the Southern Nursery Association Trade Show in Atlanta and the Texas Nursery & Landscape Expo in Dallas to promote the January 2014 Tennessee Green Industry Expo. **TNLA had originally planned to do the Ohio Floral Association and the Pennsylvania Atlantic Nursery Trade Show but since we had previously attended these shows thought it might be better to attend the Farwest, SNA and Texas shows. TNLA received approval from TDA to participate in the shows. The Texas and SNA show management gave TNLA free booth space to participate making the grant cover more shows.**

TNLA maintained the mshe.com, tngie.com and tnla.com websites updated with current information. Attendees and exhibitors at all of these show are potential customers of the Tennessee nursery producers.

Not only did TNLA promote the industry in Tennessee by exhibiting at other green industry events; but TNLA's executive director always visits with other state executives at the shows looking for new ideas and ways to market the industry.

TNLA sent out information to grower exhibitors informing them of an opportunity to market their products at the MSHE show and receive a 50% refund for the booth cost. The only requirement was that they exhibited at the show and completed a questionnaire about the number of potential customers they met and the amount of increased sales they received.

November 2011, TNLA worked with a printing and publishing company to design and print 17, 000 registration brochures and in early December 2011, 11, 739 brochures were mailed to potential customers. January 2012, 4929 registration brochures were mailed to a targeted list in IN, OH, KY, MO and TN. This was the second time the targeted list received the brochures. The purpose was to get the brochure to them just prior to the show. These people were targeted because they were within 6-8 hours drive of Louisville, KY.

December 2011, TNLA again worked with a printing and publishing company to design and print 1000 Mid-States Horticultural Expo program directories.

February 2012, TNLA mailed surveys to all **forty-four TNLA Tennessee grower exhibitors** requesting information about leads received, number of new customers, percentage of sales, etc. Only those who

returned the questionnaire were eligible for the grant refund. These growers reserved 68 booths for a total of \$49,100.00. The amount of the refund was \$24,550.00.

In April 2012, all refunds were mailed to the growers or the amount of the refund was given as a deposit on the 2013 Tennessee Green Industry Expo. TNLA determined that the joint KY and TN show (MSHE) was not increasing in attendance and benefiting the TN growers. The TNLA board voted to return to Nashville, Tennessee and have a Tennessee Green Industry Expo. TNLA worked with the Tennessee Department of Agriculture and received approval to use funding for the TNGIE since there would no longer be a MSHE.

TNLA maintained the TNLA, TNGIE and MSHE websites and updated with new information as it became available.

Achievement of Goals

TNLA was able to promote the industry at two industry events, The Texas Expo in Dallas and the Southern Nursery Association Trade Show in Atlanta. Both events had industry exhibitors and attendees that were potential customers for the Tennessee growers.

TNLA also took TNLA membership directories, buyers' guide and *Greentimes* magazines to the shows for exhibitors and attendees to pick up.

TNLA mailed the Mid-States Horticultural Expo brochures to over 11, 000 potential industry companies. TNLA mailed the surveys to grower exhibitors and analyzed the results for TDA. TNLA maintained the MSHE, TNLA and TNGIE websites with current information.

Results Of The Program

TNLA believes that the project was very successful. Forty-four TN growers exhibited at the MSHE and they had 68 booths. From the survey emailed to all participants, only one said that they did not receive an increase of sales from exhibiting at the show. The survey showed that they obtained 1-7 new customers and had an increase in sales from \$2000-\$49,999. Not only did the growers increase their sales for 2012-13 but gained new customers that will benefit future years.

Not only does the expo allow growers to showcase their plants to attendees; but many of the exhibitors in the show are also potential customers. Several exhibitors commented that they had a great show talking to other exhibitors at the show. They would not have seen the exhibitors if they had not been exhibiting at the show.

Marketing the show, marketing the membership (membership books, buyers' guides and the TNLA website) are all beneficial to the industry.

Progress Made To Achieve The Long Term Outcome Of The Program

TNLA will continue to have a trade show promoting the nursery industry in Tennessee and will also continue going to other shows promoting membership, and the Tennessee Buyers' Guide. TNLA has to continually promote the industry and have a show where the growers can market their plants.

Beneficiaries

All 400 TNLA members benefit from the exposure TNLA gives them on the www.tnla.com website, membership directory and *Greentimes* magazine. TNLA growers who exhibited at the Mid-States Horticultural Expo also benefited from marketing their plants and gaining new customers. The increase in sales will also impact the economy in Tennessee. In addition, exhibitors from other states benefitted by displaying their products and their states will also benefit from sales they received.

Lessons Learned

Promoting the TN Green Industry is very essential to the industry and to the economy. TNLA must remain focused on ways to market the industry... always looking for new ideas.

Additional Information

TNLA would really like to thank the Tennessee Department of Agriculture and the USDA Specialty Crop Grant Program for allowing us to be a partner. Without funding, TNLA would not be able to promote the industry.

Contact Information for The Sub-Recipient

Tennessee Nursery & Landscape Association, Inc.

Louree Walker

Executive Director

115 Lyon Street, P O Box 57

McMinnville, TN 37111

tnurseryasn@blomand.net

931-473-3951

www.tnla.com

Project 6-Vegetable Grafting Techniques (Submitted on 2013's Annual Report)

Need for the Grant:

A USDA research project on grafting was funding in 2011 with North Carolina State University as the lead institution. This is a research project and we are not funded by that project. We hoped to use research information they gained to improve our growers production. However, it was critical to provide training to our growers for them to be able to benefit from the findings from the information gained in that project. Soilborne pest are major problems when producing tomatoes in the same location over several years. Greenhouses are not easy to move so it is critical to be able to address these problems so that growers do not lose the significant investment in greenhouse structures due to soil problems.

There is increasing pressure to restrict use of soil fumigants in the field and most of these fumigants are not allowed for greenhouse use. Organic growers can not use these treatments even when available. Grafting desirable varieties to pest resistant and vigorous rootstocks is widely practiced in much of the world. It is rapidly becoming the dominant source of transplants in Europe and is growing in popularity in the US. The

USDA has now established a full breeding and evaluation program to develop new tomato and other vegetable rootstocks to be used in production. Growers in Tennessee needed to be trained in the production and use of grafted plants so that they could take advantage of this technology and reduce their cost by avoiding pest losses. The primary advantages that we have seen in research at the University of Tennessee are the same as those described by most who utilize grafted transplants.

They are:

- 1) Resistance to soilborne pest
- 2) Increased plant vigor and higher yields with the same water and fertilizer inputs
- 3) Improved plant nutrition and fruit quality

The primary purpose of this project was to train growers and greenhouse transplant producers on how to produce high quality grafted transplants. The secondary purpose was to set up demonstration systems at several grower locations where grower and extension agent training could be provided to reach as many growers as possible. A third purpose was to show growers that the transplants can improve yield and quality in their production systems.

Approach taken for the project:

The approach taken for this project was:

- 1) To educate growers and agents on grafting and its uses, make them familiar with currently available rootstocks and the advantages and disadvantages of each.
- 2) To train growers and agents how to graft vegetables and produce grafted transplants so that our growers will be able to take advantages of the rapid advances being made nationally on utilizing grafting to reduce pest problems, increase plant stress tolerance and improve fruit quality.
- 3) To use the transplants produced to demonstrate how grafted plants will perform on farms in Tennessee (this part of the project was not funded by TDA but we did several field trials on our own funding).

Achievement of goals:

We achieved and exceeded the goals of this project. Over the two years of the project we had training sessions at six statewide grower meetings and field days. We also did one on one instruction and consultation with several individual growers who were interested in trying the grafting techniques. The meetings are listed below and in the two annual reports submitted for this final report. In addition to developing the training materials, presenting the training and providing hands on instruction in grafting we did several field trial with grafted tomatoes. These trials were not funded by this project but we conducted them to determine how the grafted plants would perform in Tennessee. We identified several rootstocks that performed well in our area and increased tomato yields. We will be developing that information into presentation to be given at grower field days in 2014. We will also post this information online for growers to access.

Grafting Training sessions presented during this project:

Project Activities in 2011-2012.

A Specialty Crop Workshop was conducted at the Tennessee Horticultural Expo in Nashville on Jan. 27, 2012. The presentation involved two parts. A PowerPoint presentation was made explaining the history of use of tomato rootstocks, the current world use, and the importance of use of rootstocks to increase yields and control soil borne diseases and then explanations of how to perform different grafting techniques. Grafting of tomato cultivar scions onto rootstocks was demonstrated by the speakers to the audience. The session lasted approximately 2 hours and was attended by about 30 growers and/or extension agents. Dr. Sams and colleagues seeded the cultivars and rootstocks and grew them in a greenhouse at the University of Tennessee at Knoxville (UTK) to have available for the workshop. About 150 notebooks were developed that included PDFs of the presentation on grafting and numerous articles on grafting of vegetables. These notebooks were handed out at this meeting and the other three meetings below along with DVDs that had a compilation of information and several videos on grafting techniques. One of the videos was developed by our team for use at these sessions. The program description is available through <http://tfva.org/> with a citation of:

Sams, C.E. (presenter), D.E. Deyton, D.A. Kopsell, D. Butler, and J.C. Cummins. Can Tomato Grafting Benefit Tennessee Growers? Tennessee. Horticultural Expo, Jan. 27, 2012, Nashville, TN. <http://tfva.org/>. A second workshop on grafting tomatoes was presented on Mar. 24, 2012 to growers in the Tennessee Organic Growers Association. About 50 Growers and/or Extension agents attended.

Sams, C.E. (presenter), D.E. Deyton, D. Butler, D.A. Kopsell and J.C. Cummins. Grafting Vegetables. Tennessee Organic Growers Association, Antioch, TN, Mar. 24, 2012. <http://tnorganics.org/downloads/2012schedule.pdf> A third workshop was presented on Apr. 26, 2012 to the public during a field day at The University of Tennessee Organic Crops Unit of the East Tennessee Research & Education Center. The presentation was conducted twice, using flip-posters to explain grafting techniques and demonstrations of grafting tomato varieties onto disease tolerant rootstocks. More than 180 persons were in attendance (189 was the official attendance at the field day). A short article was prepared and provided to those in a proceeding for those in attendance.

Deyton, D.E. (presenter), C.E. Sams, D. Butler and J.C. Cummins. Tomato Grafting for Organic Producers. Proceedings of Organic Crops Field Tour. Knoxville, TN, Apr. 26, 2012, p. 4-5, <http://organics.tennessee.edu/FieldTour.html> A fourth workshop was conducted on June 11 at Beardsley Community Farm, Knoxville in cooperation with the extension Organic Crop Production Workshop Series as an outreach to community gardeners. About 30 people attended this workshop that featured Hands on Grafting Demonstrations.

Sams, C.E. (presenter), D.E. Deyton, D. Butler, and J.C. Cummins. Ketchup on the Latest in Organic Tomato Production. Organic Crop Production Workshop Series, Beardsley Community Farm, Knoxville, TN, June 11, 2012. <http://organics.tennessee.edu/workshops.htm#tomatoes>

All of our team members participated in the above sessions and worked to help train growers and extension agents on tomato grafting techniques. We feel that the sessions were well received and that growers and extension agents came away with an appreciation for why grafting may be important in

tomato production and more importantly what techniques may be best for tomato grafting and how to do the grafting.

Project Activities in 2012-2013.

A Grafting Workshop was conducted at the Tennessee Horticultural Expo in Nashville on Jan. 26, 2013. The presentation involved a PowerPoint presentation explaining the history of use of tomato rootstocks, the current world use, and the importance of use of rootstocks to increase yields and control soil borne diseases and then explanations of how to perform different grafting techniques. The Workshop also included a session on Grafting of tomato cultivar scions onto rootstocks. Based on experience and feedback from the previous year sessions the PowerPoint portion was reduced to about 15 minutes and the hands on session was expanded to one hour and thirty minutes with 15 minutes for questions at the end of the session. The session was attended by about 25 growers and/or extension agents. Dr. Sams and colleagues seeded the cultivars and rootstocks and grew them in a greenhouse at the University of Tennessee at Knoxville (UTK) to have available for the workshop. Another 200 notebooks were developed in 2013 that included PDFs of the presentation on grafting and numerous articles on grafting of vegetables. These notebooks were handed out at this meeting and at the other meetings below along with DVDs that had a compilation of information and several videos on grafting techniques. One of the videos was developed by our team for use at these sessions. The program description is available through <http://tfva.org/> with a citation of:

Sams, C.E. (presenter), D.E. Deyton, D.A. Kopsell, D. Butler, and J.C. Cummins. Tomato Grafting Will Benefit Tennessee Growers? Tennessee. Horticultural Expo, Jan. 26, 2013, Nashville, TN. <http://tfva.org/>. A second workshop on grafting tomatoes was presented on Feb.26, 2013 to growers in the Tennessee Organic Growers Association. About 75 Growers and/or Extension agents attended.

Sams, C.E. (presenter), D.E. Deyton, D. Butler, D.A. Kopsell and J.C. Cummins. Grafting Vegetables. Tennessee Organic Growers Association, Antioch, TN, Feb. 26, 2013. <http://tnorganics.org/downloads/2013schedule.pdf>

A third workshop was presented on March. 18, 2013 at the **Grainger County Extension Pavilion** in Rutledge, TN. About 30 growers and agents were in attendance. This session followed the same format as the earlier presentations with a short PowerPoint on Grafting and extensive hands on session on grafting with the growers. This session lasted about 3 hours.

We feel that the sessions were well received and that growers and extension agents came away with an appreciation for why grafting may be important in tomato production and more importantly what techniques may be best for tomato grafting and how to do the grafting.

Dr. Sams also made visits to several growers at their farm locations in East and Middle Tennessee and discussed grafting techniques with interested grower's one on one.

In the late summer and fall of 2013 our team made an extensive grafting video demonstrating several types of vegetable grafts with the assistance of the UTIA Marketing and Communications group. We are currently making copies of this video that will be sent to all county extension office in December once the copies are finished.

Results of the project:

We produced and distributed about 350 notebooks and DVDs on grafting techniques over the two years of this project. We also produced a video on grafting that will be posted online in 2014 and distributed to agents in Tennessee in early 2014. This was done in addition to the stated objectives of the project to give presentations on grafting and hands on grafting lessons to growers and agents. As previously stated we presented the grafting information and had hands on lessons in grafting at seven meetings over the two years of this project. The locations and times of these demonstrations are included in the two attached annual reports. Growers in Tennessee are now more aware of grafting techniques for vegetables and how the grafting may help in their production. They will be able to utilize grafting to decrease soilborne pest and to improve fruit quality and yield on their farms.

Beneficiaries of Project:

This project benefited growers in Tennessee who are growing tomatoes and having problems with soil borne pests. It also benefited growers who do not have production problems with pests because the grafting systems can improve fruit quality and yield even in the absence of pest pressure.

We provided grafting education materials and hands on training to over 250 growers and agents.

We developed and distributed educational written manuals on grafting and DVDs on grafting to growers and agents. The presentations and the materials provided will provide a strong base of knowledge to growers in Tennessee about grafting and how it may fit into their production systems. Growers in Tennessee now have information and materials available to them to utilize grafting in their commercial (and home) vegetable production systems. Based on reports from an increasing number of State Experiment Stations and USDA research, our growers should be able to use grafting to control numerous soilborne pest and to increase fruit yield and quality in their operations. This should lead to increased profits due to fewer losses to pest and to increased yield.

Outside of this project (unfunded by this project) we conducted two yield and quality evaluations in commercial grower fields and one at the UT experiment station in Knoxville. Two of the rootstocks tried improved yield by 20 to 30 percent in these trials in the absence of pest pressure.

Data continues to be published by surrounding states that shows when fields have heavy disease pressure the grafted plants have up to 50 % or higher yield than ungrafted plants of the same variety (particularly for Heirloom Varieties).

Lessons Learned:

Many growers learned how to do the three most popular grafts for tomatoes and other vegetable crops (melons, peppers, etc.). With this knowledge they should be able to graft the varieties they wish to grow on their farms and get the benefits of the rootstocks that have superior vigor and pest resistance. Grafting takes some practice and experience and the growers will need to practice the grafting before they get high percentages of success in the grafts. Growers also learned that the grafts will require 10 to 14 days longer to produce than plants from direct seeding. They also learned that they need to maintain cleanliness in the grafting process and that they need to keep the humidity high during the graft healing process. Now that

growers have been taught how to do the grafting and what the potential benefits of grafting are to their production system the next focus should be to work with growers to demonstrate the impact of grafting on a larger scale on their farms. Demonstration research projects should be conducted on several farms to establish the potential value of the grafted plants in commercial operations in Tennessee. We are working to select growers who are interested in utilizing grafted plants in their production and will submit proposals next year to support this on farm effort to improve the economic returns by increasing crop yield and quality through grafting with superior rootstocks.

Additional information:

The training sessions conducted and the educational materials developed will assist Tennessee growers in using grafting techniques in their commercial (and home) production systems. This should result in resistance to soilborne pest and provide an increase in fruit quality and yield for these growers. We will continue to update and develop this information to assist with answering grower questions on grafting. The material will be online and thus allow more growers to benefit from the grafting techniques as they desire in the future.

Contact information for Sub-recipient:

Dr. Carl E. Sams

The University of Tennessee

Department of Plant Sciences

Rm 252 Ellington Plant Science Building

2431 Joe Johnson Drive

Knoxville, TN 37996-4561

Phone: 865-974-8818

Email: carlsams@utk.edu

Project 7: Cultivating Specialty Crop Marketing in Tennessee

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. By 2012, the census indicated the number of farms direct marketing to consumers was 3,679 and the total value of products sold was \$19.2 million, an increase of 2.7 and 24.7 percent respectively from 2007 to 2012. The number of farmers markets in the state rose from approximately 55 in 2006 to more than 125 in 2014.

Direct-marketing may be on the rise, but success does not come easy. Farmers directly marketing products to consumers often face challenges not experienced in their traditional farming enterprises. Producers may need to gain knowledge and skills in several areas to increase their potential for success in new businesses and foster continued growth in existing businesses. Marketing is a particularly challenging aspect for many farmers. The purpose of the *Cultivating Specialty Crop Marketing* project was to enhance the marketing knowledge and skills of specialty crop producers in Tennessee directly marketing products to consumers.

Approach Taken for the Project

The approach to *Cultivating Specialty Crop Marketing* was twofold:

1. To supply educational publications and 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 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 workers who are tasked with providing assistance to the increasing number of farmers seeking information on 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.

Achievement of Goals

The proposal listed five expected measurable outcomes. They are listed below with a description of how each was achieved.

- 1. Three to five educational fact sheets or publications will be developed and made available through UT Extension offices, the Center for Profitable Agriculture and online.***

Five new publications were developed, and one existing publication was updated. PDFs of the publications are available online from the UT Extension and Center for Profitable Agriculture websites. Several copies of the publications will be sent to each of the 95 Tennessee county Extension offices. Copies are also available from the UT Extension and Center for Profitable Agriculture websites. Copies will be distributed at workshops, conferences and trade shows. Copies will also be provided to clients as needed in individual consultations. A description of the publications is provided in the next section.

- 2. Three to four regional workshops will be held with a goal of reaching at least 100 participants.***

Five Direct Farm Marketing for Success VII: Using Advertising to Your Farm's Advantage workshops were held in March 2014. Workshops were held in White Pine, Athens, Cookeville, Spring Hill and Milan for a total of 113 attendees.

In addition, a workshop called Orchard Production 101 was held February 28, 2014 in Montgomery County for 69 participants.

A total of 182 attendees participated in workshops offered as part of the Cultivating Specialty Crop Marketing Project.

3. *Workshop participants will be asked to rate the effectiveness of the workshop in increasing their knowledge and skills.*

Direct Farm Marketing for Success workshop participants were asked to complete an evaluation form to help determine increases in knowledge and skills. A total of 101 completed evaluation forms were collected. Evaluations were also conducted for the Orchard Production 101 workshop, and 19 completed evaluations were collected. Results are summarized in the next section of the report. A total of 120 evaluations were collected for all of the workshops conducted in conjunction with this project.

4. *More than 90 percent of workshop participants will indicate an increase in knowledge and skills related to marketing.*

From the five Direct Farm Marketing for Success workshops, one hundred workshop participants answered an evaluation question indicating their level of agreement to the statement “I gained knowledge and/or skills to market my enterprise. Ninety-three of those 100 respondents (93 percent) rated their agreement as “Somewhat Agree,” “Agree” or “Strongly Agree.”

For the Orchard Production 101 workshop, evaluation respondents were asked to rate the level of knowledge they received from each presentation. All 15 respondents (100 percent) who answered this question related to the session called “Direct Marketing Opportunities” by Megan Bruch from the Center for Profitable Agriculture all rated the knowledge received as “Good,” “Very Good” or “Excellent.”

5. *Extension agents attending the Tennessee Horticultural Expo/Agritourism Conference and North American Farm Direct Marketing Association Conference will be asked to complete a follow-up evaluation indicating knowledge and skills learned as well as ideas on how they plan to utilize the information in their Extension programming.*

A total of 27 Extension personnel attended professional development conferences as part of Cultivating Specialty Crop Marketing. As shown in the table below, twelve agents attended the 2012 Tennessee Horticultural Expo (THE), 13 participated in the 2013 Tennessee Horticultural Expo and two attended the 2013 North American Farmers Direct Marketing Association Conference (NAFDMA). Agents attending the THE conferences responded to a follow-up evaluation in the form of an online survey. NAFDMA participants completed a written report of their experiences by answering a questionnaire. Results of these follow-up evaluations will be summarized in the next section of the report.

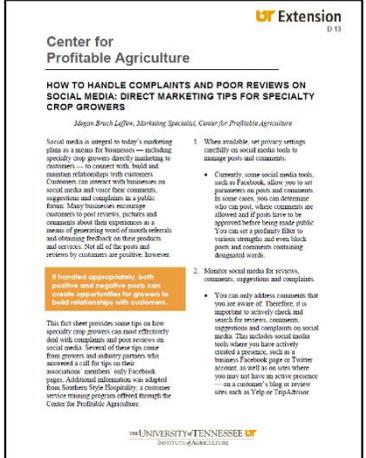
Professional Development Conference	Number of Agents/Specialists Attending
2012 Tennessee Horticultural Expo (THE)	12
2013 Tennessee Horticultural Expo (THE)	13
2013 North American Farmers Direct Marketing Association (NAFDMA)	2

Results of the Program

1. *Develop Educational Publications*

Five new publications were developed, and one existing publication was updated. The tables below include a screenshot of the cover, title, publication number, authors, URL to the publication online and a brief description. A news release is being developed to be distributed to the more than 1,000 contacts on the Center for Profitable Agriculture news lists.

New Publications

	<p>Title – Buying Advertising: Guidance for Specialty Crop Growers Direct Marketing to Customers</p> <p>Publication Number – PB 1824</p> <p>Authors – Megan Bruch Leffew, Matthew D. Ernst, Amy Ladd</p> <p>URL – https://extension.tennessee.edu/publications/Documents/PB1824.pdf</p> <p>Description – This publication examines advertising as an essential part of a specialty crop grower’s marketing plan and provides guidance to producers to help make advertising less intimidating, more cost-efficient and more effective in attracting customers and increasing sales. Topics discussed include identifying the target audience, defining the goals for the advertising campaign and developing a marketing budget, selecting the right advertising channels, tips for negotiating advertising purchases, and evaluating the effectiveness of advertising.</p>
	<p>Title – How to Handle Complaints and Poor Reviews on Social Media: Direct Marketing Tips for Specialty Crop Growers</p> <p>Publication Number – D 13</p> <p>Authors – Megan Bruch Leffew</p> <p>URL – https://extension.tennessee.edu/publications/Documents/D13.pdf</p> <p>Description – Social media is integral to today’s marketing plans as a means for businesses — including specialty crop growers directly marketing to customers — to connect with, build and maintain relationships with customers. Customers can interact with businesses on social media and voice their comments, suggestions and complaints in a public forum. Many businesses encourage customers to post reviews, pictures and comments about their experiences as a means of generating most of their referrals and obtaining feedback on their products and services. Not all of the posts and reviews by customers are positive, however.</p>
	<p>Title – An Introduction to Marketing Opportunities on the Web for Specialty Crop Growers</p> <p>Publication Number – PB 1823</p> <p>Authors – Megan Bruch Leffew, Matthew D. Ernst, Amy Ladd</p> <p>URL –</p>

<https://extension.tennessee.edu/publications/Documents/PB1823.pdf>

Description – This publication provides an introduction to many of the marketing opportunities on the Web for specialty crop growers. It is designed to familiarize specialty crop growers with some opportunities to market their products via the Internet, help growers identify methods to promote their products on the Web, provide resources where they can find up to date information on Internet use and marketing tools and provide some basic tips on how to effectively use the Web to market their products. Topics discussed include Internet usage, website basics, email marketing, social networking and social media, online ads, online deal sites and Quick Response (QR) codes.



Title – Creating Signage that Sells: Guidance for Specialty Crop Growers Direct Marketing to Consumers

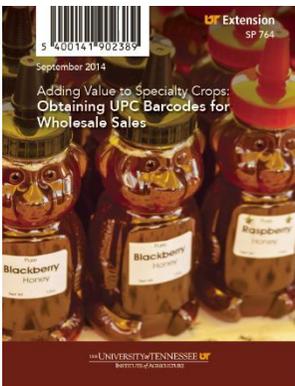
Publication Number – SP 766

Authors – Megan Bruch Leffew

URL –

<https://extension.tennessee.edu/publications/Documents/SP766.pdf>

Description – Signage is an important marketing tool that can help specialty crop growers market crops directly to consumers. This publication provides guidance to help growers effectively use signage. The various uses of signs — including directional signs and signs to encourage farm safety, promote product purchases, and add value to the farm experience — are discussed. The publication also provides tips for developing effective signs.



Title – Adding Value to Specialty Crops: Obtaining UPC Barcodes for Wholesale Sales

Publication Number – SP 764

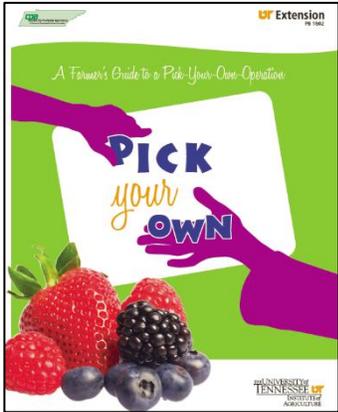
Authors – Megan Bruch Leffew and Faith Critzer

URL –

<https://extension.tennessee.edu/publications/Documents/SP764.pdf>

Description – Specialty crop growers interested in marketing products through the wholesale market to retail stores will likely be required to have Universal Product Codes (UPCs) for most products. While some retailers may only require UPCs for packaged products, others may require them for every product sold to them including bulk fresh produce. This publication provides growers with information to help assess their needs for and obtain UPCs.

Revised Publication

	Title – A Farmer’s Guide to a Pick-Your-Own Operation
	Publication Number – PB 1802
	Authors – Megan Bruch Leffew and Matthew D. Ernst
	URL –
	Description – Farmers interested in starting a PYO operation should carefully analyze their potential in such a venture based on their particular resources and market situation. Producers who decide to move forward with a PYO should spend time planning for the management and operation of the enterprise by developing thorough written business and marketing plans. This publication provides information that may be helpful to farmers considering the development of a PYO operation and issues that should be addressed in written plans. Topics discussed in this publication include: Characteristics of Common PYO Crops, Examples of PYO Operations in Tennessee, Is a PYO a Good Marketing Channel Choice?, PYO Planning and Operation and Additional Resources.

Please note that Specialty Crop Block Grant funds paid for 95 percent of the costs associated with printing this revision of PB 1802, A Farmer’s Guide to a Pick-Your-Own Operation. Funds from the sub-recipient covered the remainder.

2. Plan and Conduct Regional Direct Marketing Workshops

Five Direct Farm Marketing for Success VII: Using Advertising to Your Farm’s Advantage workshops were held in March 2014. The workshops were developed to assist Tennessee specialty crop growers directly market their products to consumers more efficiently and effectively.

The day-long workshops included sessions on buying advertising, designing effective ads, creating signs that sell, working the wonders of word-of-mouth advertising and an update on the Tennessee Agricultural Enhancement Program (TAEP) Producer Diversification Cost-Share. Speakers included Amy Ladd of Lucky Ladd Farms, Erica Alexander from the Tennessee Department of Agriculture and Megan Bruch (now Leffew) from the Center for Profitable Agriculture. Workshops were held in White Pine, Athens, Cookeville, Spring Hill and Milan for a total of 113 attendees.

An evaluation form was developed to help program planners determine the effectiveness of the workshops in meeting goals, impacts of the workshops, methods to improve future workshops and additional resources needed by participants. A total of 101 completed evaluation forms were collected. CPA Info #218 was developed as a full summary of information collected from

the workshop evaluation and is available online at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20218.pdf>. Key points from the summary are included below.



Amy Ladd, co-owner of Lucky Ladd Farms, answers questions from participants about advertising during a session at the Milan workshop.

Participants were asked to rate the degree to which they agreed or disagreed with several impact statements on a scale of Strongly Disagree (1), Disagree (2), Somewhat Disagree (3), Somewhat Agree (4), Agree (5) or Strongly Agree (6). The statements, number of responses, range of responses, number of Somewhat Agree to Strongly Agree responses and average rating are provided in the table below.

Ninety-three respondents agreed that they gained knowledge or skills to market their enterprises and improve returns from their operations. Ninety-two will implement or change at least one practice or procedure. Ninety-four would recommend the workshop to others. The average ratings for all statements were between 5.32 and 5.38, indicating respondents agreed with each statements on average.¹

Statements (Due to this workshop, ...)	Number of Responses	Range of Responses	Number of Responses of Somewhat Agree to Strongly Agree (4-6)	Average Rating
I gained knowledge and/or skills to market my enterprise.	100	1-6 Strongly Disagree to Strongly Agree	93	5.34
I gained knowledge and/or skills to improve returns from my operation.	100	1-6 Strongly Disagree to Strongly Agree	93	5.32

I will implement or change at least one practice or procedure.	99	1-6 Strongly Disagree to Strongly Agree	92	5.35
I would recommend this workshop to others.	101	1-6 Strongly Disagree to Strongly Agree	94	5.38

Participants were asked to report how they planned to use the information learned at the workshop. Eighty-nine participants provided a comment. Comments were sorted into categories. Fifty three- comments were related to creating better or doing more or different advertising. Twenty-two comments related to developing new signs or improving signage. Thirteen comments indicated participants planned to develop a formal marketing or advertising plan. Eight people suggested they would use the information in developing a TAEP application. Four comments related to helping others (clients or students) with the information learned. A sample of comments is provided by category below.

Better, More or Different Advertising

- Call radio stations for ad time now that I have more confidence about how to deal with them.
- Help to spend my money wisely.
- Begin to use other means of advertisement.
- Develop social media.
- Plan to start advertising to increase visits to the farm.
- I plan on developing a website and possibly a couple of billboards.

- I will create a full marketing plan now.

TAEP

- Apply for TAEP.
- Better able to apply for TAEP.

Help Others

- I will use this information to help others market their businesses.
- I plan to teach what I learned today to my students.

New or Improved Signage

- Will be adding new signs to our farm.
- Make better signs and follow up on highway DOT signs.

Other

- Go through each handout and check to see if I am using best practices in all areas of our business.
- Hopefully avoid bad marketing mistakes and create good marketing that creates great sales.

Develop a Marketing or Advertising Plan

- Plan an advertising campaign and budget.

An Orchard Production 101 Workshop was held February 28, 2014 at Shade Tree Farm in Adams, Tennessee. Topics included site selection considerations, variety selections and planting techniques, insect identification and control methods, disease identification and control, direct marketing opportunities and irrigation techniques. An orchard walk and learn was also conducted. A total of 69 participants attended the workshop, and 19 completed an evaluation form.

The evaluation asked respondents to rate the content of each speaker’s information and rate the level of knowledge received from each session on a scale of 1=Poor, 2=Fair, 3=Good, 4=Very Good and 5=Excellent. Sessions, speakers and average ratings are listed in the table below.

<i>Session and Speaker</i>	<i>Average Rating for Content of Speaker’s Information</i>	<i>Average Rating for Knowledge Received</i>
Site Selection Considerations – Dr. David Lockwood	4.63	4.44
Variety Selection and Planting Techniques – Karla Kean	4.44	4.12
Insect ID and Control Methods – Dr. Frank Hale	4.18	4.06
Direct Marketing Opportunities – Megan Bruch	4.18	4.20
Irrigation Techniques – Chris Robbins	4.31	4.20
Orchard Walk & Learn – Dr. David Lockwood and Others	4.93	4.79

Offer Professional Development Activities to Extension Agents

A total of 27 Extension personnel attended professional development conferences as part of *Cultivating Specialty Crop Marketing*. Twelve agents attended the 2012 Tennessee Horticultural Expo (THE), 13 participated in the 2013 Tennessee Horticultural Expo and two attended the 2013 North American Farmers Direct Marketing Association Conference (NAFDMA). Participants were asked to complete follow-up evaluations or reports for the events attended.

2012 Tennessee Horticulture Expo and Agritourism Conference

Twelve Extension personnel received registration and travel scholarships to attend the 2012 Tennessee Horticultural Expo and Agritourism Conference (THE). Attendees included one Extension Marketing Specialist, three Area Farm Management Specialists and eight County Agricultural Extension agents. Four attendees are located in east Tennessee, four in middle Tennessee and three in west Tennessee. The specialist covers the entire state.

A follow-up survey of Extension personnel attending the 2012 THE was conducted using SurveyMonkey.com. The results were summarized in CPA Info #186 available online at <https://ag.tennessee.edu/cpa/Information%20Sheets/cpa186.pdf>. Key points from the summary are included below.

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 conference received the highest average rating, 4.83 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 4.50. For increasing knowledge and skills in production of specialty crops, the average rating was 4.20. Finally, the topic of rules and regulations for direct marketing or agritourism operations received an average rating of 3.88.

Agents were asked to indicate how they planned to use the information learned at the 2012 Horticultural Expo and Agritourism Conference. As shown in Figure 1, all respondents indicated they will use the information to assist individual clients in their county or area. Fifty-eight percent (7) respondents indicated they planned to develop educational programs such as workshops for groups of clients in their county or area. Half of respondents reported they planned to develop educational materials such as fact sheets, news articles or radio programs with information learned at the conference. One respondent indicated that he or she will encourage local producers to attend the conference.

The fact sheet provides additional information provided by agents such as suggested topics for future events and ways to improve the conference.

2013 Tennessee Horticulture Expo and Agritourism Conference

Regional Agriculture Extension Program Leaders were contacted to select Extension agents who will attend the 2013 Tennessee Horticultural Expo and Agritourism Conference (THE). The conference was held January 24-26, 2013 in Nashville, TN.

A follow-up survey of Extension personnel attending the 2012 THE was conducted using SurveyMonkey.com. The results were summarized in CPA Info #200 available online at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20200.pdf>. Key points from the summary are included below.

Thirteen Extension personnel received registration and travel scholarships to attend the 2013 Tennessee Horticultural Expo. Attendees included one Extension Marketing Specialist, two Area Farm Management Specialists and 10 County Agricultural Extension Agents. Two attendees were from east Tennessee, five in middle Tennessee and four in west Tennessee. The specialist covers the entire state.

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 conference received the highest average rating, 4.55 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 4.33. For increasing knowledge and skills in production of specialty crops, the average rating was 4.09. Finally, the topic of rules and regulations for direct marketing or agritourism operations received an average rating of 3.89.

Agents were asked to indicate how they planned to use the information learned at the 2013 Horticultural Expo and Agritourism Conference. Eleven respondents indicated they will use the information to assist individual clients in their county or area. Five respondents (41.7 percent of respondents) indicated they planned to develop educational programs such as workshops for groups of clients in their county or area, and five respondents also reported they planned to develop educational materials such as fact sheets, news articles or radio programs with information learned at the conference. One respondent indicated that he or she would blog about what was learned at the conference. Another agent indicated he or she would use information gained and demonstrated strategies experienced at this conference to assess local grower interest in forming a county producer group and further the facilitation and adoption of information presented at this conference.

The fact sheet provides additional information provided by agents such as suggested topics for future events and ways to improve the conference. The fact sheet was provided to the Tennessee Horticultural Expo Board to consider in planning for future events.

2013 North American Farmers Direct Marketing Association (NAFDMA)

Megan Bruch, Marketing Specialist with the Center for Profitable Agriculture, and Andy Davis, Area Farm Management Specialist 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. Their experiences and lessons learned are summarized below.

1. 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?
 - How powerful social media can be in advertisement/promotion as well as its power to harm a business when it comes to unhappy customers or bad reviews.
 - The conversations I had with growers while on farm visits reaffirmed the need and importance of detailed record-keeping for both the production and financial aspects of farming operations.
 - Signage, creative displays, a good reputation and cleanliness are all important factors in drawing and retaining clientele. Cleanliness could rival a good reputation as the most important factor.
 - Educational events/contests (i.e. how to make freezer jam, best pumpkin pie contest) could be a great marketing tool.
 - Diversification appears to be a key to success in the operations we visited engaged in “you-pick” or retail enterprises. This could mean taking something that’s already being produced and adding value somehow or adding additional commodities to a crop mix.
 - TAKE IT SLOW. Don’t try to do too much too fast. PLAN, PLAN AND THEN PLAN SOME MORE.
2. What are the best ideas that you learned or saw that would help Tennessee specialty crop growers market their crops?

- The effective use of roadside signage.
- The effective use of point of purchase signage.
- The use of creative and elaborate product displays.
- The use of social media in advertising and relationship building – Facebook, Pinterest and Instagram in particular.
- Partnering with local businesses or other producers for special events.
- Diversification of products and/or some sort of value added product include fruit ciders, cider slushes, pick-your-own flowers (tulips, zinnias), fruit snow cones or popsicles, mobile corn roaster (made roasted corn, potatoes, acorn squash, apples, peaches)
- Incorporating experiences is a powerful marketing tool – pick-your-own, on-farm retail, farm to table dinners, classes and demonstrations on the farm.



NAFDMA participants saw the value of attractive point of purchase signage at this on-farm retail market.

- Incorporate fun into the workplace and with customers. One farm had a great poem/song with hand gestures to help children remember safety rules on the wagon ride touring the farm. “This is the hammer, this is the nail, when the wagon’s a movin’, keep your bottom on the bale.”
- School or group fundraiser program partnerships incorporating farm product sales

3. Do you have any ideas for new educational program/materials topics that should be addressed through publications, workshops, etc.?

- A comprehensive workshop involving tackling the “monster” that is social media. So many seem to be intimidated by social media and confused about topics like: “Should I use all social media outlets or choose just a few? How often should I post something? Should I post prices?”
- Some sort of publication about carrying a hobby into a business to answer questions like: “Do I need a business plan?” “Where do I start?” “Do I need a business permit?” “Do I need product liability insurance?” Some sort of step-by-step guide I think would be helpful not only to specialist crop growers but any sort of start-up agribusiness.
- Possibly a workshop involving on how to go about building a structure such as a retail store/ or produce stand on farms that will help address questions like recognizing the need, regulations involved, obtaining the financing, selecting a contractor, etc.
- A workshop on farm safety for operations that invite the public to the farm.
- A workshop on customer service.



These acorn squash were seasoned and roasted on a corn roaster and sold on the farm for visitors to enjoy. NAFDMA participants were able to see the equipment used to make various products such as these squash, roasted apples and roasted peaches and sample the results.

4. Do you have any ideas on how we can improve educational programs in Tennessee for specialty crop producers based on your experience at NAFDMA?

- Allow time in programs for networking, feedback, and sharing ideas among producers. I find that I learn almost as much during networking sessions as I do in actual educational programs.
- Incorporate business owners as speakers or operation tours into educational programming whenever possible as they can be valuable learning opportunities.
- Incorporate fun and activities into educational programs.

5. Other comments, suggestions, ideas, thoughts?

I can't tell you how great it was to visit both retail and agritourism operations and have the opportunity to pick the brains of the managers and owners. The opportunity to network with other educators and operators across the country was also incredible. I hope I have the opportunity to attend next year's conference. I think we should push to get this thing in TN in the near future! I think we have a lot to be proud of and show off as well as some operators that could use some critiquing and encouragement from other producers across the country. I would be happy to help out with that project in any way I could!

Experiences and lessons learned at NAFDMA have resulted in several benefits to date:

- Representatives from the University of Tennessee Extension and Tennessee Department of Agriculture have been working with NAFDMA in efforts 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. Four more customer service workshops are scheduled for December 2014.
- Many concepts learned or reinforced at NAFDMA were incorporated into the new and revised publications developed as part of the Cultivating Specialty Crop Marketing project.

Progress Made to Achieve the Long Term Outcome of the Program

The number of farms direct marketing products to consumers in Tennessee continues to grow. According to 2012 Census of Agriculture data, farms direct marketing products for human consumption alone grew 2.7 percent to 3,679. The value of sales and average sales per farm grew even faster at 24.7 percent and 21.4 percent respectively. The value of products sold in 2012 was \$19.2 million in Tennessee while average sales per farm were \$5,214. These figures do not account for the many specialty crops that grown and direct marketed to consumers for uses other than human consumption such as Christmas trees and nursery products.

More farms are direct marketing specialty crops, and the farms that are direct marketing are increasing sales through these channels. This project has helped to increase marketing knowledge and skills of specialty crop growers who will be able to implement what they learned to build their businesses. This project has provided professional development opportunities that have already positively impacted educational programs and materials produced by Extension to assist specialty crop growers. Educational publications have been developed that will serve as resources for future educational efforts. The resources provided through this project will continue to assist farmers in overcoming the many challenges in marketing not experienced in traditional farming enterprises and increase their potential for success.

Beneficiaries

Beneficiaries of *Cultivating Specialty Crop Marketing* include 182 workshop attendees who have the opportunity to use knowledge and skills learned to more effectively market their products and increase revenues. Participants of the Direct Farm Marketing for Success workshops were asked to report how they planned to use the information learned at the workshop. Eighty-nine participants provided a comment. Comments were sorted into categories. Fifty three-comments were related to creating better or doing more or different advertising. Twenty-two comments related to developing new signs or improving signage. Thirteen comments indicated participants planned to develop a formal marketing or advertising plan. Eight people suggested they would use the information in developing a TAEP application. Four comments related to helping others (clients or students) with the information learned. A sample of comments is provided by category below.

Better, More or Different Advertising

- Call radio stations for ad time now that I have more confidence about how to deal with them.
- Help to spend my money wisely.
- Begin to use other means of advertisement.
- Develop social media.
- Plan to start advertising to increase visits to the farm.
- I plan on developing a website and possibly a couple of billboards.

New or Improved Signage

- Will be adding new signs to our farm.
- Make better signs and follow up on highway DOT signs.

Develop a Marketing or Advertising Plan

- Plan an advertising campaign and budget.
- I will create a full marketing plan now.

TAEP

- Apply for TAEP.
- Better able to apply for TAEP.

Help Others

- I will use this information to help others market their businesses.
- I plan to teach what I learned today to my students.

Other

- Go through each handout and check to see if I am using best practices in all areas of our business.
- Hopefully avoid bad marketing mistakes and create good marketing that creates great sales.

In addition, 27 Extension agents and specialists gained knowledge and skills from attending professional development conferences and are able to better serve specialty crop growers in their areas. Educational materials developed for the workshops and the new and revised publications are available to assist specialty crop growers now and well into the future.

Lessons Learned

Workshop evaluations asked participants to indicate what key resource, information or training they feel is still needed in developing or growing a direct marketing enterprise. Forty-eight people provided responses. Suggestions may be categorized by marketing/promotion/advertising, websites/Internet/social media, direct marketing channels, technical assistance, business/risk management and additional resources/contacts/networking. A full listing of key resources needed can be found in the workshop evaluation summary at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20218.pdf>.

Responses to follow-up evaluations by agents participating professional development conferences provided insight in how to improve educational programs offered. Ideas for resources needed by specialty crop growers and by agents serving specialty crop growers were also collected. Results of these evaluations are described in the previous section.

Several delays were experienced in the project. Direct marketing workshops were cancelled in March/April 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. Workshop dates scheduled into April also made it difficult for producers to plan to attend as they may be busy with their operations already. Workshops were revamped and held in March 2014. In the future, program planners will attempt to schedule workshops when there are not so many other events occurring and when producers are not likely to be as busy.

It was expected that publications would be completed earlier in the project, however, time constraints prevented their completion at the expected time. Authors found the topics overlapped and fit together such that it was beneficial to develop all of the drafts before proceeding to the next step in the publishing process. In the future, project planners will attempt to include more time for unexpected circumstances in publishing timelines.

Additional Information

Hard copies of the publications and evaluation summaries developed will be delivered 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
P.O. Box 1819
Spring Hill, TN 37174
mleffew@utk.edu
(931) 486-2777

Project 8-Making Sense of Sales Tax (Submitted with 2013's Annual Report)

Need for a Grant

Tennessee specialty crop growers are often confused about sales tax rules and exemptions. Sales of specialty crops sold by the grower who raised them are exempt from sales tax but sometimes a grower buys other specialty crops to resell or makes and sells a value-added product. Growers may also transfer the specialty crops they grew to another entity that markets them. The issue of sales tax when specialty crops and value-added products are sold can be quite complicated.

The purpose of this grant is to educate Tennessee growers of specialty crops about how to recognize situations where sales tax is due on the sales of farm products. Knowledge about which sales are and which are not subject to sales tax is needed to help specialty crop growers comply with the law and plan accordingly. Specialty crop growers who become aware that they are required to collect and remit sales tax will need to understand how to register for sales tax, collect sales tax and remit it when due.

Approach Taken for the Project

An advisory team was assembled with individuals from Tennessee Department of Agriculture Market Development Division (Tammy Algood), University of Tennessee Department of Plant Sciences (David Lockwood and Annette Wszelaki) and Center for Profitable Agriculture (Hal Pepper, Megan Bruch and Rob Holland). A teaching team consisting of University of Tennessee Extension specialists (Hal Pepper, Megan Bruch, David Lockwood and Annette Wszelaki) was selected and plans were made to develop and conduct educational workshops on sales tax, marketing and production topics that would appeal to specialty crop growers and agents.

Plans were made for two specialists (Hal Pepper and Rob Holland) to write a publication about sales tax rules on farm products sold by farmers, sales tax liability, registering with the Tennessee Department of Revenue and sales tax applications on the sale of value-added farm products and agritourism activities. Numerous scenarios were discussed with the Tennessee Department of Revenue in an effort to clarify the authors' understanding of the sales tax rules and exemptions as they apply to the sale of farm products. This publication would be published and distributed to farmers across the state electronically and in hard

copy format. The publication would serve as an important training resource for specialty crop growers and Extension agents for years to come.

Using the information contained in the sales tax publication, a presentation was developed about sales tax rules on the purchase and sale of farm products. Presentations on pricing and merchandising were developed that incorporated an example of a farmers market vendor's display table with specialty crops for sale. Basic presentations on variety selection and knowing when to harvest were developed as well as the more advanced and seldom taught topics of handling and storage. All of these presentations were designed to help specialty crop growers make good decisions from the point of harvest to the cash register. The 4-hour workshop called "Decision Making at Harvest and Beyond" would deliver these presentations to specialty crop growers in 4 locations.

An evaluation form would be developed to assess Decision Making at Harvest and Beyond Workshop participants' increase in understanding on the topics of sales tax, pricing fundamentals, merchandising, determining when a crop is ready to harvest, storage and variety selection. Participants would be asked about their overall rating of the workshop, most important thing learned, best part of the training, actions planned and suggestions for improving the workshop. Results from the evaluation forms would be used to improve these and future workshops.

Decision Making Inservice Training Workshops for Extension agents were also planned. In addition to presentations on sales tax, pricing and merchandising, variety selection, knowing when to harvest, handling and storage, the full day inservice training workshops would include more time for agents to ask questions about these topics. A field trip to a nearby specialty crop farm would allow agents to learn about the production of specialty crops through hands-on experience with growing systems and equipment. An evaluation form would be developed to assess agents' increase in understanding on the topics of sales tax, pricing fundamentals, merchandising, determining when a crop is ready to harvest, storage and variety selection. Agents would be asked about their overall rating of the workshop, most important thing learned, best part of the training, actions planned and suggestions for improving the workshop.

Planning was conducted with Extension agents and specialists to conduct 4 Decision Making at Harvest and Beyond Workshops in various locations across the state. Based on the success of these workshops, 2 additional workshops were also planned, for a total of 6 Decision Making at Harvest and Beyond Workshops. Plans were made with regional program leaders to schedule 3 Decision Making Inservice Training Workshops for agents. Planning was also conducted with agents and specialists to offer additional training about sales tax on the purchase and sale of specialty crops at various grower workshops.

A quiz consisting of 4 True/False questions about sales tax would be developed to measure participants' improvement in understanding of the complex sales tax issues. The quiz would be given before and after the training session on sales tax and would provide feedback to the presenter as to which issues are not well understood.



Achievement of Goals

The publication *UT Extension PB1806 Sales Tax in Tennessee on the Purchase and Sale of Farm Products* was published in January 2013. This 45-page publication contains an explanation of the rules concerning sales tax on farm products sold by farmers, sales tax liability, registering with the Tennessee Department of Revenue and sales tax applications to value-added farm products and agritourism activities. This publication was distributed to 95 county Extension offices and is available online at <https://utextension.tennessee.edu/publications/Documents/PB1806.pdf>.

A goal was set for 70 percent (7 on a scale of 0 to 10) of Decision Making at Harvest and Beyond Workshop participants to increase knowledge and skills through participating in these educational workshops. The increase in knowledge and skills for participants was measured by asking participants to rate on a scale of 0 to 10 (where 0 represented no increase in understanding and 10 represented a huge and profound increase in understanding), their change in understanding for various topics taught in the workshops. Average ratings ranged from 7.34 for pricing fundamentals to 8.53 for storage conditions. The average rating for change in understanding about sales tax was 8.42. All of these average ratings represent increases in knowledge and skills for at least 70 percent of workshop participants.

The goal of reaching 375 participants was surpassed by conducting 6 Decision Making at Harvest and Beyond Workshops (in Spring Hill, Ethridge, Morristown, Jackson, Clarksville and Chattanooga) and 3 Decision Making Inservice Training workshops (in Spring Hill, Cookeville and Humboldt) and by presenting the sales tax training at 23 various grower workshops. As Table 1 shows, the 6 Decision Making at Harvest and Beyond Workshops had 179 participants. The 3 Decision Making Inservice Training workshops had 34 agents and regional program leaders in attendance. The 23 presentations on sales tax at various grower workshops reached 988 participants. The project reached a total of 1,201 specialty crop growers, Extension agents and agricultural leaders through these workshops over the two year time period of November 2011—October 2013.

Table 1, Summary of Deliverables, Events and Contacts for Understanding Sales Tax, November 2011—October 2013

	Total Number of Workshops	Total Contacts
Decision Making at Harvest and Beyond Workshops	6	179
Decision Making Inservice Training Workshops	3	34
Sales Tax Presentations at Various Grower Workshops	23	988
Totals	32	1,201



Figure 1, Decision Making at Harvest and Beyond Workshop, Spring Hill, November 3, 2011



Figure 2, Hal Pepper explains sales tax rules at Pumpkin Field Day, Jackson, TN, September 26, 2013.



Figure 3, Megan Bruch explains how to merchandise products at Decision Making at Harvest and Beyond Workshop, Morristown, TN, February 16, 2012



Figure 4, Hal Pepper explains sales tax rules at Decision Making at Harvest and Beyond, Chattanooga, TN, October 5, 2013

Results of the Program

Throughout the time period from November 2011—October 2013 this project reached 1,201 people through presentations at workshops. In addition, 148 one-on-one direct consultations about sales tax were provided for people through emails, phone calls and visits.

Approximately 1,200 copies of the publication *UT Extension PB1806 Sales Tax in Tennessee on the Purchase and Sale of Farm Products* were distributed in 2013 to specialty crop growers at 13 workshops and to Extension agents in 95 county offices. The information contained in the publication was used as a teaching manual at the 6 Decision Making at Harvest and Beyond Workshops, 3 Decision Making Inservice Training Workshops and 23 various grower workshops. It was also used to answer one-on-one questions about sales tax with 76 growers at the workshops. The publication was also used to address sales tax questions in 22

one-on-one consultations with specialty crop growers, other farmers and farmers market managers in 2013.

Respondents from the six Decision Making at Harvest and Beyond Workshops indicated that the total value of fruits, vegetables and value-added products they expect to sell is \$2.2 million annually. As a result, workshop participants have a better understanding of when sales tax is due on the products they sell and can be confident they are reporting sales tax correctly. They also gained knowledge about pricing fundamentals, merchandising products, determining when a crop is ready to harvest, storage conditions and variety selection.

An evaluation summary for the 6 Decision Making at Harvest and Beyond Workshops is available as CPA Info #205: *2011-2013 Decision Making at Harvest and Beyond Workshops Evaluation Summary*. This summary is available online at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20205.pdf>. The evaluation summary provides information about the participants' enterprises and summarizes participants' ratings of their change in understanding on various topics taught in the workshop. The evaluation summary also identifies what participants learned in the workshop and specific actions that are planned as a result of the workshop. On a scale of 0 to 10 where 0 is Poor and 10 is Excellent, respondents' overall rating of the Decision Making at Harvest and Beyond Workshops was 8.92.

Three Decision Making Inservice Training Workshops provided training for agents on sales tax, pricing fundamentals, merchandising and product displays, how to determine when a specialty crop is ready to harvest, options for storing and extending the shelf life of specialty crops and variety selection for direct and wholesale markets. The workshops for agents also included a field trip to a nearby farm and provided hands-on experience with growing systems and equipment used in producing specialty crops. Agents rated the workshop training overall as 8.88 on a scale of 0 to 10 where 0 is Poor and 10 is Excellent. When asked to rate their change in understanding for topics taught in the workshop, the highest average ratings were for change in understanding about storage (8.19) and sales tax (8.16). Average ratings for change in understanding for the other topics were not far behind: determining when a crop is ready to harvest (8.00), variety selection (7.68), merchandising products (7.65) and pricing fundamentals (7.35).

When agents attending the Decision Making Inservice Training Workshops were asked to identify the most important thing learned in the training, sales tax information was mentioned 12 times, storage and/or handling of fruits and vegetables 4 times. When asked to list specific actions that agents planned as a result of things learned in the workshops, participants most frequently said they intend to share information with their clientele. The specific information most often mentioned that would be shared was sales tax information. Clientele mentioned were producers, clients starting orchards, Master Gardeners, school and community gardens, consumers, homeowners, farmers market meetings, farmers market vendors, local vegetable growers and vegetable classes. Agents said they would encourage producers to consider refrigeration for fruits and vegetables, provide information in newsletters, direct homeowners to All American Selection Winner produce varieties, advise producers, answer questions from growers on produce they sell and communicate with producers to make sure they are in compliance.

The sales tax quiz was given to participants at the Decision Making at Harvest and Beyond Workshops, Decision Making Inservice Training Workshops and various grower workshops. Before and after the session on sales tax, participants were asked to take a quiz consisting of 4 True/False questions about sales tax. The purpose of the quiz was to measure improvement in participants' understanding of the complex sales tax

issues and to provide feedback to the presenter as to which issues are not well understood. A total of 517 participants took the quiz before the sales tax training and 505 participants took the quiz afterwards. Sixty-six percent of the questions were answered correctly before the training and 91 percent were answered correctly after the training.

Beneficiaries

The 179 specialty crop growers and Extension agents who participated in the 6 Decision Making at Harvest and Beyond Workshops received in depth educational information on the topics of sales tax on the purchase and sale of farm products, pricing, merchandising, variety selection, knowing when to harvest, handling and storage. When asked to list specific actions that are planned as a result of things learned in these workshops, participants most frequently said they intend to improve harvesting, storage and/or handling of fruits and vegetables, pay more attention to marketing, pricing and/or merchandising, address sales tax issues, make better variety selections and keep better records.

In-service training provided training for 34 Extension agents and regional program leaders in sales tax, pricing, merchandising, variety selection, knowing when to harvest, handling and storage. The training also allowed these individuals to obtain hands-on experience with specialty crops growing systems and equipment.

The 23 sales tax presentations at various grower workshops were designed to reach specialty crop growers and these presentations reached 988 growers, agents and agricultural leaders. In addition there were 148 one-on-one direct consultations with growers, agents, and accountants through emails, phone calls and visits.

Approximately 1,200 copies of the publication *UT Extension PB1806 Sales Tax in Tennessee on the Purchase and Sale of Farm Products* were distributed in 2013 to specialty crop growers at 13 workshops and to Extension agents in 95 county offices. This publication is also available online for immediate access to any specialty crop grower at <https://utextension.tennessee.edu/publications/Documents/PB1806.pdf>.

Lessons Learned

Sales tax on the purchase and sale of farm products is an important topic to specialty crop growers as they consider the impact of sales tax rules on their operations. The evaluation summary of participants in the Decision Making at Harvest and Beyond Workshops and the in-service training identified sales tax information as the most important thing learned by specialty crop growers and agents. When rating their change in understanding about specific topics they rated sales tax as the topic with the second highest change in understanding. The only topic with a higher change in understanding was storage conditions.

The sales tax quiz containing 4 True/False questions taken before and after the presentation on sales tax was used to measure improvement in participants' understanding of the complex sales tax issues and to provide feedback to the presenter as to which issues are not well understood. One example of a complex issue that participants had difficulty understanding was the requirement that the same entity must both grow and sell the farm product in order for it to be exempt from sales tax. Additional time was taken to explain this concept and participants were able to answer the question correctly. It makes no difference

whether the entity is a sole proprietorship, partnership or LLC. As long as the same entity grows and markets the farm product, the sale is exempt from sales tax.

Progress Made to Achieve the Long Term Outcome of the Program

Participants in Decision Making at Harvest and Beyond Workshops and Decision Making Inservice Training increased their knowledge about sales taxes and sales tax exemptions, harvesting decisions and post harvest handling of fruits and vegetables. Participants at various grower workshops increased their knowledge about sales taxes and sales tax exemptions.

Participants at all of the workshops learned when sales tax exemptions apply to them and they learned how to apply for a Certificate of Registration with Tennessee Department of Revenue and they learned how to collect and remit sales tax.

Since these specialty crop growers have a better understanding about which transactions are subject to sales tax, they are better positioned to market their products more competitively and to improve the likelihood for increasing their profits. Long term outcomes anticipated are participants' increased number of sales, increased volume of sales and increased income.

Additional Information

The publication *UT Extension PB1806 Sales Tax in Tennessee on the Purchase and Sale of Farm Products* may be found at <https://utextension.tennessee.edu/publications/Documents/PB1806.pdf>.

CPA Info #205: *2011-2013 Decision Making at Harvest and Beyond Workshops Evaluation Summary* is available online at <https://ag.tennessee.edu/cpa/Information%20Sheets/CPA%20205.pdf>.

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

Contact Information for the Sub-Recipient

Hal Pepper, Financial Analysis Specialist
Center for Profitable Agriculture
P.O. Box 1819
Spring Hill, Tennessee 37174
Phone: (931) 486-2777
Fax: (931) 486-0141
Email: hal.pepper@utk.edu

Contact Information for Team Members

Megan Bruch, Marketing Specialist
Center for Profitable Agriculture
P.O. Box 1819
Spring Hill, Tennessee 37174
Phone: (931) 486-2777
Fax: (931) 486-0141
Email: mlbruch@utk.edu

David Lockwood, Fruit and Nut Crops Extension Specialist
Department of Plant Sciences
2431 Joe Johnson Drive
University of Tennessee
Knoxville, Tennessee 37996
Phone: (865) 974-7324
Fax: (865) 974-1947
Email: lockwood@utk.edu

Annette Wszelaki, Vegetable Extension Specialist
Department of Plant Sciences
2431 Joe Johnson Drive
University of Tennessee
Knoxville, Tennessee 37996
Phone: (865) 974-7324
Fax: (865) 974-1947
Email: annettew@utk.edu

Project 9: Specialty Crop Awareness in Tennessee Farmers Markets

Need for Grant:

Through advertisements, workshops and media days, the Tennessee Department of Agriculture works diligently to help promote specialty crops and to help farmers who grow specialty crops generate significantly more income. One way to do this is through Pick TN Products (PTP) marketing and consumer outreach through farmers markets. For this project, TDA promoted specialty crops to consumers at farmers markets and educated consumers on how to incorporate specialty crops in their lives.

Approach Taken for the Project:

TDA conducted a statewide series of publicized and promoted media days at numerous farmers markets throughout the summer. Press releases were written and dispersed and media outlets gave attention and coverage of the event. PTP bags and promotional items were purchased and distributed to the media and local and government officials. In addition, Market Development funds purchased baskets of artisan

Tennessee products to use as giveaways to customers who attended these events. These media days were well received and according to the market managers, boosted the foot traffic of the farmers markets. It is at these farmers markets that consumers become more aware of specialty crops.

Statewide print advertisements were purchased during the peak farmers market season, summer and fall. Full color companion print advertisement was placed in three regional "eat local" magazines and four regional "Parent" magazines. TDA funded underwriter radio broadcasts spots were rotated on WPLN, Nashville Public Radio and its stringer stations across the state directing listeners to the PTP website for listings of farmers market locations, seasonal produce tips and information on farm to kitchen measurements (see attached). These spots ran daily for 6 months, May-Oct.

Advertisements increased traffic to the Pick TN products website as shown below:

June 2012	29, 456	June 2013	32, 846
July 2012	25, 341	July 2013	34, 739
August 2012	23, 884	August 2013	25, 296
June 2014	33, 034		
July 2014	38, 928		
August 2014	27, 670		

At the local level, a Pick Tennessee Products Farmers Market Promotion Kit, funded by TDA, was provided to each farmers market in Tennessee to help them promote their markets and their local farmers who produce specialty crops.

Items received in 2013 were:

PTP farmers market price cards, two Specialty Crop Grant 22"x36" vinyl banners for each market to use as a permanent fixture, one banner that features "Farm Measures to Kitchen Measures Conversion Chart" and a second banner that features "Produce Picking and Storage Tips" and recipe cards featuring specialty crops.

A statewide survey was conducted at the Tennessee Association of Farmers Markets to gather information from farmers market managers regarding the promotions TDA did in 2013 and then another survey was given at the end of the farmers market season in 2014. Data was gathered to determine if farmers markets can effectively track sales and foot traffic to give us a better idea of whether or not the specialty crop promotions were effective.

Results of the Program

At the October 2013 TN Association of Farmers Market meeting, feedback from 70 farmers market managers was very positive on PTP promotional items for specialty crops who said that their vendors used the materials and felt that they had an increase in sales and consumer awareness. At the January 2014 Department of Agriculture Tennessee Horticulture Expo there were over 300 attendees who benefited from classes on specialty crop production and marketing. PTP promotional items were distributed. Items distributed at the expo included: PTP farmers market price cards, recipe cards featuring specialty crops,

static cling seasonality charts, kitchen conversion rack cards and specialty crop Tennessee produce stickers. Static cling seasonality charts and specialty crop TN produce stickers were incorporated into promotional items in 2014 at the expense of TDA.

A second survey was given to the farmers market managers in August 2014 to determine the effectiveness of the advertisements and the effectiveness of the PTP materials distributed to each market. Specialty Crop Block Grant underwriter television spots were filmed and aired on statewide public television, WCTE to direct consumers to the PTP website for directories of local farmers markets and where to purchase specialty crops, in addition to tips for choosing and storing fresh produce and season/availability charts.

Progress Made to Achieve the Long Term Outcome of the Program

The USDA reported that TN was one of ten states with the biggest increases in the numbers of farmers markets in 2014 (Release No. 0167.14). We are pleased that TN's farmers markets have increased and we will continue our support of that growth through our dedicated farmers market marketing specialist on staff. We have plans for a farmers market manager training in March 2015 and will provide marketing materials purchased from the TN Department of Agriculture that will increase the knowledge and sales of specialty crops at farmers markets.

Beneficiaries

Beneficiaries of the grant are the TN Association of Farmers Markets, TN consumers of specialty crops, TN Specialty Crop Growers, TN farmers market managers and TN farmers market vendors.

Lessons Learned

In January 2013 the TN Association of Farmers Markets was formed with help from TDA. Farmers Market managers are spread out across our state and it takes several attempts for TDA to reach all the managers. The new association has provided a means of communication that has proven to be invaluable. We have learned that managers need more support in training in addition to the marketing of their markets. Several markets have managers who are volunteers and it is hard to measure foot traffic and sales. Our surveys to gauge the effectiveness of our promotions were hard to gather in such circumstances. However, we have learned that managers use our marketing materials and promotions and are in need of even more to continue the momentum.

Additional Information

The Pick TN Products campaign is invaluable in increasing specialty crop awareness among consumers. We have been able to use the recipe cards and conversion cards at several tradeshow and farmers market media days across the state. We conducted 6 media days in 2013 and 6 media days in 2014 connecting farmers markets with local media. At these media days we also connected with consumers and distributed the specialty crop promotional materials purchased through this grant.

Specialty Crop Block Grant underwriter television spots were filmed and aired on statewide public television <http://www.youtube.com/watch?v=RHvhqighZQI>



www.PickTnProducts.org

"PICK A PECK OF TENNESSEE PRODUCE!"

Don't know the difference between a bushel and a peck? Here are approximate weights for fruits and vegetables by the bushel for some of Tennessee's most popular farm-direct produce.

Farm Measures

Just find the weight per bushel for the product you want, then use the Kitchen Equivalents chart to find weights and measures of smaller amounts of that product.

Apples:	1 bushel	=	48 lb.
Cherries, sweet or sour:	1 bushel	=	48-50 lb.
Peaches:	1 bushel	=	48 lb.
Pears:	1 bushel	=	50 lb.
Plums:	1 bushel	=	56 lb.
Beans, snap, green or wax:	1 bushel	=	32 lb.
Corn, sweet, in husk:	1 bushel	=	35 lb.
Potatoes, Irish:	1 bushel	=	56 lb.
Potatoes, sweet:	1 bushel	=	50-55 lb.
Squash, summer:	1 bushel	=	40 lb.
Tomatoes:	1 bushel	=	53-56 lb.

Contact Information for the Sub-Recipient

Amy Tavalin

TN Department of Agriculture

615-837-5163

Amy.tavalin@tn.gov

