

Fruits and Vegetable Programs

Specialty Crop Block Grant Program Description of Funded Projects

Fiscal Year 2007

The Specialty Crop Block Grant Program (SCBGP) was authorized on December 21, 2004, by Section 101 of the Specialty Crops Competitiveness Act of 2004. The Act authorized the Department of Agriculture (USDA) to provide grants to states to enhance the competitiveness of specialty crops. The agency, commission, or department responsible for agriculture within the 50 States, the District of Columbia, and the Commonwealth of Puerto Rico are eligible to apply for grant funds directly to the USDA. Specialty crops are defined as "fruits, vegetables, tree nuts, dried fruits, and nursery crops (including floriculture)."

Fifty-two U.S. States and Territories were awarded Fiscal Year 2007 funds. All the elibigible states submitted their applications by the established deadline of April 11, 2008. The approved awards are listed alphabetically.

Alabama Department of Agriculture and Industries

Amount Funded: 108,926.78 **Number of Projects:** 2

- The Alabama Department of Agriculture and Industries assisted specialty crop producers in direct marketing efforts and general promotions. ADAI was able to provide support for a State Logo A+ Program focused on increasing local sales of local produce. The Alabamian public responded by purchasing locally-grown specialty crops and specialty crop producers benefitted from these sales. This program has been a starting point for Alabama's participation in the USDA initiative "Know Your Farmer, Know Your Food."
- The Alabama Department of Agriculture and Industries partnered with the Alabama Cooperative Extension Service, Tuskegee University and the Federation of Southern Cooperatives to assist specialty crop producers who wanted to diversify their crops and increase production. The original goal was to increase production to the point that producers could supply produce to local schools through the Farm to School program, but production was not sufficiently large or diverse to meet the needs of the program. As a result, the project was scaled back and 10 specialty crop farmers were selected to use plasticulture in producing collard greens. Through this project, ADAI offered farmers a new opportunity to be profitable, exposed the local community to the benefits of plasticulture production, and created an opportunity for economic growth in rural Alabama.

Alaska Division of Agriculture

Amount Funded: 100,520.67 Number of Projects: 8

- The Alaska Department of Natural Resources, Division of Agriculture provided travel stipends to specialty crop producers, allowing them to travel to educational events at a reduced cost. This effort was in response to the specialty crop producers themselves, who have indicated that a barrier to successful production in Alaska is the lack of grower workshops. As a result of the project, 12 specialty crop producers attended workshops and conferences outside of Alaska. All participants then returned to Alaska where they spoke at various conferences to more than 400 specialty crop producers, sharing what they learned on their respective trips.
- The Alaska Department of Natural Resources, Division of Agriculture enhanced the competitiveness of specialty crops in Alaska by providing training on Good Handling/Good Agricultural Practices (GHP/GAP) to state inspectors and providing audit stipends to specialty crop producers, allowing them to complete GHP/GAP audits at a reduced price. Through the program, one state inspector completed the GHP/GAP certification training and was able to conduct audits for Alaska Grown specialty crop producers and two specialty crop producers were audited.
- The Alaska Department of Natural Resources, Division of Agriculture provided a minigrant to the Kodiak Future Farmers of America to build a greenhouse and develop corresponding curriculum and outreach to students and community members. More than 100 students benefited from the curriculum and learned about Alaska Grown specialty crops, growing practices, greenhouse design concepts and community outreach.

- The Alaska Department of Natural Resources, Division of Agriculture encouraged consumers and restaurant owners to purchase more Alaska Grown specialty crops by launching the Eat Local Challenge (ELC), a week long campaign of targeted advertising and coordinated promotional events. The Division created a promotional tool kit that was distributed to 50 restaurants and created a 30-second TV spot that directed consumers to a special website to complete a survey. Seventy-five percent of respondents indicated that the Eat Local Challenge gave them new ideas on how to buy and eat Alaska Grown produce. As a result of this campaign, 17 Alaska Grown specialty crop producers reported increased sales.
- The Alaska Department of Natural Resources, Division of Agriculture hosted three new specialty crop meetings to meet the needs of the growing Alaska Grown specialty crops industry. Because potatoes represent 14% of the total sales of Alaska Grown specialty crops and one of the only products available year round, a Potato Field Day was developed to address topics of interest including new potato varieties and advances in potato-related technologies. At the same time, direct marketing was identified as a topic of interest because it is the primary form of sales in Alaska, so a Direct Marketing conference was held to introduce growers to new ideas in marketing. The final event, a farm tour, was held to help producers outreach to potential new customers. More than 130 specialty crop producers participated in the three events and all benefitted greatly from the introduction to new ideas, technologies and marketing techniques.
- The Alaska Department of Natural Resources, Division of Agriculture created the 2008 Food and Farm Products Directory (FFPD) and launched a new promotional item Alaska Grown key chains to help raise awareness of the availability of Alaska Grown specialty crops. The FFPD is the only statewide listing of Alaska farmers and ranchers and has become an invaluable resource for members of the public who are interested in sourcing Alaska Grown specialty crops. Thirty-five hundred copies of the FFPD were produced and distributed to the public. The FFPD was also posted to the Division website at www.dnr.alaska.gov/ag. In addition, 11,000 key chains were distributed throughout the state.
- The Alaska Department of Natural Resources, Division of Agriculture established a Specialty Crop Innovation Grants program, designed to encourage specialty crop producers to invest in new technologies that will extend the growing season and increase crop productivity. Given Alaska's short growing season and cold climates, producers have a limited production window and new technologies are vital to maximizing production. The seven minigrants funded through this project allowed individual producers to develop methods for season extension and increased crop productivity as well as to access technologies such as a water wheel transplanter, high tunnels, a solar greenhouse, a heated irrigation system and soil blocks. Minigrant recipients also presented their findings and shared their experiences with other growers throughout the state, reaching an estimated audience of 950 specialty crop producers.
- The Alaska Department of Natural Resources, Division of Agriculture designed a Farmers Market Manual to address the growing need for information about creation of new markets. In 2005, only 13 markets existed in Alaska. In 2011, that number has more than doubled to 30 markets. At the end of the project, the Manual was under final review and it will be distributed state-wide immediately following approval.

Arizona Department of Agriculture

Amount Funded: 133,290.44 Number of Projects: 12

• The Arizona Department of Agriculture (ADA) produced and printed 5,000 copies of the Arizona Specialty Crop Guide. The guide was designed to educate consumers about where our food comes from and the benefits of buying Arizona-grown produce. The guides have been distributed to libraries, educational institutions, farmers' markets, and conferences with a link posted to the ADA website, www.azda.gov. ADA conducted a survey to determine the efficacy of the guide in educating consumers. Thirty-three percent of the respondents said they had changed their shopping habits or consumption practices since reading the Arizona Specialty Crop Guide. The most common change for respondents was that they now try to make more "locally grown" purchases. Sixty percent of respondents reported having shared information from the Arizona Specialty Crop Guide with 1-3 people and 7 percent reported having shared information with four or more people. ADA estimated that, by the end of the grant, the guide had already reached approximately 12,500 consumers and a second printing of the guide was already scheduled.

- The Arizona Department of Agriculture (ADA) partnered with the Community Food Bank, Community Food Security Center, to make and distribute an educational marketing video that raises awareness of the personal health and community benefits of eating fresh fruits and vegetables. The project was carried out by Community Food Resource Center (CFRC) staff, who collaborated with local farmers, market managers and local food enthusiasts in designing a script. A local video company then created the video in English with Spanish subtitles. The video was distributed through a variety of outlets in Tucson, including the Community Food Bank (CFB) website (communityfoodbank.com), YouTube, local theaters, educational events and local food organizers who presented the video to their community groups. The educational potential was further enhanced by a Peace Corps Fellow who worked at the CFB to develop a supplemental handout including discussion questions and up-to-date information on farmers' market locations in Tucson.
- The Arizona Department of Agriculture (ADA) partnered with the Western Growers Charitable Foundation (WGF) to connect educators with nutrition education curricula and encourage students to develop gardening and life skills with improved attitudes towards fruits and vegetables. Through this project, 30 school gardens were established or improved and training was provided to educators. WGF initially solicited applications from interested schools and received 126 applications, from which 30 were selected to participate. These schools served more than 15,000 students. Teachers and administrators then participated in "train-the-trainer" training and received various materials and access to resources to assist them in their efforts to educate the children about fruits and vegetables. Efficacy of the project was measured through pre- and post- assessments administered to students at the participating schools. Among those students who participated in these tests, a 20 percent increase in health and nutritional knowledge was observed. In addition, there was a 10 percent increase in the number of students eating at least 1 serving of vegetables a day, a 12 percent increase in the number of students having a fruit or vegetable snack after school, and a 16 percent increase in the number of students asking parents to purchase fruits and vegetables.
- The Arizona Department of Agriculture partnered with the Arizona Nursery Association to conduct an Economic Impact Survey of the Arizona Nursery Industry. The study included full market research of the entire nursery crop industry. The resulting report was summarized and published as a brochure, which was distributed to more than 1,000 interested parties through conferences and Association distribution mechanisms. In addition, the report was submitted to the USDA's National Agricultural Statistics Service and was posted to the Arizona Nursery Association's website, www.azna.org.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona and the Yuma Agricultural Center to examine the effect of irrigation systems and schedules on the microbial quality of lettuce. Risk levels associated with the different water management programs and the survivability of E. coli, under the conditions prevalent in Arizona during winter, were also reviewed. Through testing, the team demonstrated the effectiveness of drip, sprinkler and furrow irrigation schemes to determine final postharvest quality, estimate uptake and survival of E. coli in romaine and head lettuce grown in Yuma, and cost/benefit analysis were all examined. Results confirmed the enhanced risk of E. coli contamination when using overhead sprinkler irrigation, but also revealed the importance of an early irrigation termination for both spray and furrow irrigation. In addition, the team confirmed that the E. coli survival rate is longer in colder months. The results of this study have helped the industry establish new guidelines. For example, knowing the survival rate of E. coli in the field when it is transmitted by water that was in contact with leaf tissue has prompted several companies to develop more stringent guidelines for crops that are sprinkler irrigated.
- The Arizona Department of Agriculture (ADA) partnered with the USDA's Agricultural Research Service to determine the inheritance of tipburn resistance in lettuce and develop molecular markers linked to tipburn resistance genes that are suitable for marker assisted selection. The team conducted field experiments and classic quantitative genetics analysis, developed an SSR marker and genetic map, and conducted analysis of quantitative trait loci (QTL). Furthermore, given the results of the study, the team was able to select and characterize individual recombinant inbred lines with improved tipburn resistance for potential release to the lettuce industry. Field trials on these lines are ongoing, but promising, with the possibility of the release of a superior performing recombinant inbred line as early as 2012.
- The Arizona Department of Agriculture (ADA) partnered with the Yuma County Task Force to take the first step to better understanding Cucurbit Yellow Stunting Disorder Virus (CYSDV), a whitefly-transmitted crinivirus that resulted in \$25 million in losses to the US fall melon crop in 2006. Through this study, researchers were able to get a better understanding of the enemy by putting into place a sensitive, rapid turn-around molecular assay for Cucurbit Yellow Stunting Disorder Virus (CYSDV) detection. They developed a technology for sample collection and elution to provide a method that surpasses presently available approaches. Researchers then implemented this virus-specific diagnostic assay to identify CYSDV in cultivated and wild plant hosts where the results were mapped throughout the production season. Results of the study were shared through presentations and publications, outreach to growers, and the distribution of fact sheets.

- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona to develop and test strategies to stop or prevent the loss of effectiveness of critical chemical tools (like fungicides) that growers use to combat powdery mildew on melons. The researchers conducted two field trials on cantaloupe plants and evaluated the effectiveness of various fungicide treatments, utilizing products with different modes of action that are registered for use on melon crops. The unexpected outcome of this study was the fact that products less effective in controlling powdery mildew by themselves could be incorporated into treatment programs in alternation with highly effective fungicides and result in the achievement of a high level of disease control. These results represent a significant cost savings potential to growers when less effective fungicides are typically less costly. Results of the research were presented to approximately 2,000 stakeholders through conference presentations as well as various online and written publications.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona and the Yuma Agricultural Center to assess the heavy metal content and its potential health risks on fruit and vegetable crops produced in Arizona. To do so, the team collected vegetable and fruit crops irrigated with Colorado River water, prepared and processed them as if they had been ingested and digested, and measured the levels of various heavy metals. In general, accumulations of metals were generally higher in edible leafy vegetables, such as lettuce and spinach, compared to fruiting crops such as citrus, tomatoes, and dates. The team has presented its findings to more than 1,000 stakeholders at various conferences and workshops and anticipates the release of its findings through fact sheets, publications and websites.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona to develop a biocontrol strategy for management of lettuce drop disease. One effort included the optimization of the application rate and timing of Contans in the development of effective, yet economical biocontrol of lettuce drop caused by Sclerotinia minor. Through their experiments, researchers learned that 6 lbs of Contans per acre is just as effective as 10 lbs and significantly more effective than 4 lbs, at medium inoculum levels. This finding alone could have significant economic impact for lettuce growers. The research supported by this project will directly translate into improved disease management strategies. If enacted, this could potentially result in increased productivity for lettuce producers in Arizona and an overall increased competitiveness of the winter lettuce industry in southern Arizona. More broadly, this research will advance agriculture in desert areas, and elucidate at least one mechanism by which many biocontrol strategies fail upon moving laboratory findings to field applications.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona to evaluate changes in harvest and postharvest leafy vegetable nutritional value in response to nutrient solutions of increasing salinity. The results suggest that while the influence of salinity on antioxidants in crucifers may be unique to a specific species or cultivar. They do support the premise that moderate salinity levels do not compromise the quantities of the polyphenols, vitamin C, and yields. While the focus of the research was not concerned with the utility of a re-circulating ebb and flow irrigation system as a viable production system for leafy greens, research does demonstrate the efficacy of recycling a nutrient solution with a loss in quality. A system that limits water use, in arid land agricultural regions where irrigation water is an increasingly limited resource, compromised by salinity, suggests value. The findings from this work were presented at an International Society of Horticultural Science conference held in Tucson, AZ in October 2008 and are being disseminated through various websites and publications.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona to generate data that will allow the Arizona date producers to be more efficient with their nitrogen applications while maintaining or improving yield, fruit size and fruit quality. Through this study, researchers collected growth data which suggests that for young trees on both flood and drip irrigation, one to two kilograms of nitrogen per tree leads to the greatest tree growth rate. For older trees on flood irrigation, one to two kilograms of nitrogen per tree appears to lead to the greatest growth rate as well, however for older trees on sandy soils using drip irrigation, as much as 3.5 kilograms of nitrogen per tree appears to lead to the greatest growth rate. This may be because nitrogen is applied much less efficiently on sandy soils than on the heavier soils that are commonly flooded. Data developed through this study has been shared with date producers, who use it to ensure that they are maximizing yields and plant growth and meeting the needs of their plants.

Arkansas Agriculture Department

Amount Funded: 102,675.16 **Number of Projects:** 7

• The Arkansas Agriculture Department recruited specialty crop producers to attend the 2009 Produce Marketing Association Fresh Summit International Convention and Exposition in Anaheim, California. The five Arkansas producers who participated reported that their participation resulted in more than 15 sales leads each and several even executed contracts which were valued at more than three times the cost of their participation in the event.

- The Arkansas Agriculture Department developed and implemented a program to assist specialty crop producers meet
 organic certification requirements and to encourage the expansion of organic production in Arkansas. Through the project,
 five producers received financial support as they pursued organic certification. Due to the implementation of the USDA
 National Organic Program in the state, this Organic Certification Cost Share program was discontinued.
- The Arkansas Agriculture Department created, printed, and disseminated decorative sacks as a point of sale promotional item promoting Arkansas Grown products. Nearly 200,000 bags were printed and disseminated at Arkansas farmers' markets. Vendors have appreciated the upscale uniformity the bags bring to the participating markets and consumers use and reuse the bags throughout the market season. The bags also drive consumers to the Arkansas Grown website, which has seen a 12 percent increase in average monthly hits.
- The Arkansas Agriculture Department partnered with the University of Arkansas Cooperative Extension Service to conduct Good Handling Practices (GHP) and Good Agricultural Practices (GAP) workshops for Arkansas producers, handlers, and the government agents they use as a resource for food safety information. Eighteen producers and food handlers attended the workshop and four county extension agents were trained. In addition, grower participation in GHP/GAP audits nearly tripled.
- The Arkansas Agriculture Department partnered with the Arkansas Department of Human Services to establish Electronic Benefits Transfer (EBT) programs in farmers' markets throughout Arkansas. Establishing functional EBT programs at farmers' markets would allow participants of the Supplemental Nutrition Assistance Program (SNAP) and the Women, Infants, Children (WIC) program to utilize their benefits to purchase locally grown produce. Ultimately, five farmers' markets established EBT programs through this project and sales had increased to well over \$10,000 by April 2011.
- The Arkansas Agriculture Department designed and built a booth to be used at the 2008 Produce Marketing Association Fresh Summit Show, providing an opportunity for four specialty crop producers to participate in the event. The participating producers indicated that their participation resulted in a significant number of promising sales leads. Three of the four companies garnered more than 20 sales leads each.
- The Arkansas Agriculture Department partnered with the University of Arkansas Cooperative Extension service to conduct a floriculture workshop for producers and others interested in floriculture. The agenda for the workshop was so strong that it unexpectedly attracted attendees from other states, including Mississippi, Louisiana, North Carolina, and Minnesota. The 40 workshop attendees participated in a post-workshop survey in which they rated the increase in their understanding of issues associated with floriculture. On average, participants' knowledge of specialty cut flower markets and resources increased from 2.2 out of five at the beginning of the workshop to an average of 4.2 out of five by the end of the workshop. At the same time, their understanding of market opportunities increased from 2.4 to 4.1 out of five and their understanding of ways to expand markets rose from 2.3 to 4.6 out of five.

California Department of Food and Agriculture

Amount Funded: 652,477.90 **Number of Projects:** 17

- The California Department of Food and Agriculture aimed to increase public awareness of the effect of invasive species on specialty crop production. Project staff printed and distributed 10,000 Invasive Species Booklets, created by the California Invasive Species Advisory Council, that include highlights and information from the list of invasive plants, vertebrates, arthropods, invertebrates, and diseases as well as 5,000 Invasive Species Posters showing what Californians can do about invasive species from each of the invasive groups. These materials were also posted to the Invasive Species Council of California website, www.iscc.ca.gov. A video explaining the effects of invasive species in California, including commentary from various members of the California Invasive Species Advisory Council, was unveiled at the Invasive Species Council of California meeting. A thirty-second public service announcement (PSA), that focused on the damage caused by invasive species on fruits and vegetables and introduced the "Don't Pack a Pest" message, was submitted to three main network affiliates. These networks have an audience exposure of over 1.4 million households in the Sacramento, Stockton and Modesto region. The PSA currently runs 3 to 15 times a month on a filler basis, continuing for over and year until it is revisited.
- The California Department of Food and Agriculture (CDFA) partnered with the Fresno Center for International Trade Development (CITD) to qualitatively evaluate which export services significantly increase exports for California specialty crop growers. A series of roundtable discussions with 28 specialty crop companies and 32 exporters were held on June 3 and June 10, 2010. The CITD/CDFA used input from these discussions to tailor current export services and implement new programs that will assist specialty crop growers in doubling their exports. The outcome of these sessions showed that the most noted barriers that experienced exporters reported can be sorted into 3 categories: finance, logistics, and business development/sales and marketing. The top barriers that new exporters face are finance, inexperience and market knowledge. Based on the sample of exporters who participated in the focus group, several areas of opportunity for the Center and for California's trade programs emerged. One area is the development of an up-to-date on-line trade portal that contains information and links to relevant trade information, including creation of a database of information on importers and detailed country briefs. It was also illustrated that there are significant differences in the needs and ability to pay for CITD services between experienced and new exporters. New exporters, who often would benefit most from the training, technical assistance, and matchmaking functions of the Center, reported limited resources to pay for such services at anything close to market rates. Larger exporters appeared to long for the days when California was able to do more on the marketing side, but seemed realistic in accepting the need for some fee-based services. This suggests a staggered offering for the Center, which would offer relatively inexpensive "Getting Started" programs and progressively more expensive information services and consulting. Also, participants report the highest value service of CITD is connecting qualified importers and exporters. This has traditionally been done through the trade mission. These missions where highly recognized and utilized by participants. Focusing on improving the quality of the delegates on inbound missions was a consistent theme. This may require better coordination between trade program sponsors. Lastly, the top markets exporters are currently involved and want to expand along with China, Mexico, and Canada who are also in the program. The CITD/CDFA can use this information to plan future trade shows and better match buyers and exporters.
- The California Department of Food and Agriculture organized a specialty crop trade mission to Australia to raise awareness and educate California farmers and agricultural and water officials on the impact of long-term drought on specialty crop viability and competitiveness. In 2010, California entered its fourth consecutive year of drought and the on-farm challenges associated with this drought can be likened to Australia's environmental conditions. Australia has experienced similar environmental conditions for over the course of a decade. Two specialty crop and agricultural representatives traveled to Australia to meet with farmers and tour irrigation projects. This trip allowed the representatives to see first-hand how irrigators are responding, with application technology, to the critical challenges of reduced rainfall/reductions in irrigation water availability for specialty crops. The trade mission results were presented in two public forums. The State Board of Food and Agriculture held a public meeting attended by 20 specialty crop stakeholders including the California Department of Water Resources, Agriculture Commissioners, and industry trade groups. A second public meeting was held at the World Affairs Council. A panel roundtable discussion was held at this meeting on what participants observed and learned as well as their insights on Australia's response to the long term drought. Further success will occur when members of the State Board use their newly acquired knowledge to use innovation water saving techniques that increase California specialty crop production and efficiency.

- The California Department of Food and Agriculture partnered with the Buy California Marketing Agreement to present retail grocery partners with a set of user-friendly templates, via a web connection, with the intent to share the "California Grown" logo, and other generic marketing related materials, in combination with in-house materials. The online download center is featured on the homepage of the California grown campaign website (www.californiagrown.org) in a section titled "attention retailers". A "lift kit" was promoted to help retailers boost sales by using the CA GROWN logo on their instore materials. The project provided the "California Grown" campaign and the California agriculture industry a very valuable tool for promoting California grown specialty crops and helped the Buy California Marketing Agreement gain access to retail locations that would not accept preprinted point of sale materials. Other uses for the site and download center, outside its original purpose, have been discovered since the launch date. For instance, companies who license the CA GROWN logo for product packing and marketing materials now can access the online download center to obtain the logo. Previously licenses were sent to users on a disk containing the logos. In addition, the download center provides easy access for other stakeholders such as media, board members, agencies and other industry cooperators. As a result of this project, 168 total users, 58 of which are retailers, have registered and are using the download center today.
- The California Department of Food and Agriculture partnered with the Central Coast Vineyard Team (CCVT) to develop a certification program that furthered the adoption of conservation practices through market-based incentives. Project activities included conducting a pilot certification program to certify, through a third-party, the sustainable wine growing practices of ten Central Coast vineyards. Project staff also developed a report of findings and recommendations based on lessons learned during the pilot program, disseminating the results of the pilot program and developing a financial plan to create a sustainable long term program. Marketing materials were also developed to promote the program and certify vineyards while summarizing the acreage and overall certification program. As a result of the pilot program, 14 Central Coast vineyards representing over 3,700 acres achieved third party certification in 2008 through implementation and documentation of practices as stated in the certification standards. This represents twenty-four (24) wines that are eligible to use the certification seal on the bottles. Following the pilot certification program, second year vineyard applicants totaled over 9,000 acres applying for sustainable certification. CCVT anticipates between 40 and 50 wines to be eligible to use the certification seal by the end of 2009.
- The California Department of Food and Agriculture partnered with the California School Nutrition Association to provide 33 elementary schools with salad bars ("Garden Bars") and promotional materials to help increase the access and consumption of nutritious fruits, vegetables, and nuts at breakfasts and lunches on campus and at home. Participants in the project were elementary schools that had no previous salad bar equipment and therefore, limited student access to specialty crops as part of their daily school meal program. Prior to adding a Garden Bar, the average purchase of specialty crops per student was \$2.41 per month. With the Garden Bar, the average purchase increased to \$3.96 resulting in an increase of \$1.55 per student, per month on specialty crop purchases. In addition, the "Garden Bar" project brought parents into the process through a survey that required parent/child discussion. The surveys showed that 90 percent of parents believed the Garden Bar was an improvement, 71 percent said their child's opinion of fruits and vegetables improved, and 71 percent said their child eats more fruits and vegetables on a weekly basis.

- The California Department of Food and Agriculture partnered with the University of California, Davis (UCD) to supplement the \$15 million California Instructional School Gardens Program (CISGP) that funds gardens in public schools and develops training courses that link garden activities to California instructional standards. Project activities included the UCD Children's Garden Program (CGP) and the Life Lab Science Program (LLSP) offering "Creating and Sustaining Your School Garden" (CSYSG) Train-the-Trainer Workshops to increase the number of personnel equipped to instruct school children in garden-based education. A total of 135 participants representing 64 different organizations attended the five train-thetrainers' workshops. The University of California Children's Garden Program, in collaboration with the California Department of Education (CDE), researched successful middle school instructional garden programs across California. Eleven schools were selected as model programs, with program activities captured through observations and photographs. In collaboration with the California School Garden Network (CSGN), UCD created a middle school area as part of the content for the "California Instructional School Garden Program" web pages. On a per month basis, these pages had a 71 percent increase in visits. The "California Instructional School Garden Program" webpage was created within www.csgn.org. The page includes information on the program, where the funding went, which schools received funding, and links to help schools that are applying for or receiving the grants. On average, the number of unique visitors to the CSGN website has increased by 2560 visits per month between 2007 and 2009 and since the start of the project, 1466 new CSGN members have joined, bringing the total to 3066. Over 3,849 schools applied for the CISGP. A Garden Grant Follow-up Survey was sent to schools that completed the application process and a subset of schools that did not apply. The survey resulted in 749 schools (38 percent of pool) used in the analysis finding that schools were 3.7 times more likely to apply for CISGP if they had a garden coordinator, 3.1 times more likely to apply with dedicated parent or community volunteers, but only 1.4 times more likely to apply if other funding sources were present. A manuscript detailing the findings from the project was written and submitted to a peer reviewed journal so that the findings will be accessible to schools throughout the state.
- The California Department of Food and Agriculture partnered with the California Sustainable Winegrowing Alliance (CSWA), in collaboration with industry and academic partners, to examine existing climate change knowledge and research pertaining to vineyard greenhouse gas (GHG) emissions and offsets in order to gain a fuller understanding of the sector's GHG footprint. Grant funding was used to produce and disseminate a comprehensive report and user-friendly handout that consolidates information on topics such as carbon sequestration by vines, energy use, nitrogen management, and other vineyard farming practices. Information was shared with partner organizations and their respective wine, raisin and table grape memberships, and incorporated findings into a GHG footprint project that takes into account both winery and vineyard emissions and offsets. The report was also integrated into CSWA's outreach and education efforts through the Sustainable Winegrowing Program.
- The California Department of Food and Agriculture partnered with the University of California, Davis to provide walnut growers with information on the potential impacts of climate change on walnut production and the economic and environmental impact tradeoffs of various pest management strategies as a consequence of reducing impacts to water quality. A recommendation from the project is the adoption of the Dynamic Model of chill portion by California walnut growers as their standard method for estimating winter chill. The commonly used Chilling Hours Model appears to overestimate the chilling decline as climate gets warmer. Another project conclusion is that overall pest pressure can be expected to increase substantially. More information on the impact of climate change on complex agro ecological food webs and the response of pests to high temperatures is needed to improve the reliability of projections. The results from the water quality study indicated that 96 percent of the pest management strategies analyzed were candidates for reducing the impact on water quality. Replacement of current pesticides by alternative pest controls lowered probable impact, but resulted in an economic tradeoff in the form of higher costs for the majority of growers. If biological control could eliminate the need for miticides and aphicides, this tradeoff could be replaced by savings for nearly half of the samples analyzed. The results of the project were published in six peer reviewed journal articles and over 50 articles, blogs, and summaries via a diverse range of organizations, including many local grower and commodity sites, environmental non-profits, scientific research based sites, as well as many high impact news sites with wide distributions such as the LA Times, the San Francisco Chronicle, and Fox News.

- The California Department of Food and Agriculture partnered with the University of California, Davis to research environmentally sensitive control alternatives that will control the spread of Diaprepes and allow the nursery industry to continue to meet quarantine restrictions. The following project goals were accomplished: 1) identify insecticidal products (conventional, biological and bio-based) that either alone or in combination will prevent neonate (first instar), and provide control for larvae up to the third instar from establishing in potted nursery plants; 2) identify insecticidal products that will result in the death of adult weevils after feeding on treated foliage, and/or causes the adult weevils to avoid feeding on treated foliage; 3) identify the combination of insecticidal products that will eliminate large (6th 8th instar) larvae from potted nursery plants; and 4) determine the effects of soil type and watering regimes on the successful combinations of insecticidal products found in goals 1 through 3. The results of the project were presented at scientific meetings, in a publication, and two manuscripts. Successful management programs will be submitted to State regulators for approval. If accepted, the programs will be made available to nurserymen.
- The California Department of Food and Agriculture partnered with the University of California, Davis to assess the likely spread of the Tomato yellow leaf curl virus (TYLCV), from the initial introduction point and identify plant reservoir hosts for the disease to form the basis for an integrated pest management strategy. Project staff monitored the spread of TYLCV in Southern California in 2008-2009. Through surveys, TYLCV was detected in homeowner gardens and commercial tomato fields in the Imperial Valley. In addition, TYLCV infection was also found in a late-planted tomato field in Riverside County and in a single plant in a late-planted fresh market field in Merced County. A third survey was conducted that found two tomato plants from a field in Niland infected with TYLCV. These results indicate that TYLCV is established in the Imperial Valley, but not at levels sufficient to have high populations of virus-carrying whiteflies. Surveys of processing tomatoes in Fresno and Merced County failed to reveal TYLCV-infected plants, except for a single fresh market tomato plant from a late-planted field in Merced. Rapid tests to detect TYLCV in weeds and whiteflies were developed and applied to show that the virus could be detected in weeds and whiteflies from Imperial County. This indicates that the virus is persisting in certain weeds, especially those in the Solanaceae family. A rapid and quick test to differentiate Trialeurodes and Bemisia whiteflies was developed and helped show that Bemisia whiteflies are able to move north into some of the major tomato growing areas of California. As a consequence of the California drought, the goal to conduct field trials with TYLCV-resistant tomato varieties could not be accomplished. A vector-independent means, agroinoculation, was developed for screening tomatoes for their response to the California isolate of TYLCV. It was shown that the major processing tomato varieties grown in California were susceptible to the virus, that different varieties show different types of symptoms, and that it was age-dependent. Numerous talks and presentations to growers provided symptoms of the virus and the relative threat it provided to tomato production in California. In addition, samples from growers and homeowners are routinely tested for TYLCV. Finally, tools are in place to facilitate breeding efforts for incorporating TYLCV resistance into tomato varieties for California.
- The California Department of Food and Agriculture partnered with the University of California, Davis to evaluate a broad range of combinations of natural product herbicides and surfactants for effectiveness and economy. Natural product herbicides, including Vinegar, C-Cide, Green Match, Green Match EX, Matran, Raps, Racer, and Weed Zap were tested in the greenhouse (GH) on both junglerice (Echinochloa colonum) and yellow mustard (Brassica sp.). Products were applied at different concentrations (depending on product label and previous results), spray volumes (35 and 70 GPA), and with and without different organic surfactants (Natural Wet, NuFilm P, NuFilm 17, Humex, Mix Well, Bio-link, and Monterrey Organic Adhesive). GH trials were ongoing throughout the two years of the study (2007 to 2008), and were used to guide decisions regarding treatments used in field trials. Results showed that GreenMatch EX, Racer, Matran and Raps were the most effective herbicides. Vinegar and C-Cide were the least effective in controlling weeds in the GH trials. Mustard was much easier to control than junglerice in GH studies. The addition of surfactants generally improved weed control, regardless of the type of herbicide or surfactant. Higher surfactant concentrations initially appeared to give improved control, particularly with Natural Wet, NuFilm P, and NuFilm 17. Thus, in GH trials, increasing concentration or spray volume improved control of mustard and junglerice, increased concentration of surfactant improved control although it does not seem dependent on the product used. The information generated in these studies, on efficacy and ideal application conditions for each organic herbicide, has been and will continue to be made available to extension agents, pest control advisors and growers through extension presentations, journal articles, the UC Weed Research and Information Center (WRIC) website, and through the UC Integrated Pest Management (IPM) guidelines. This information should support the expansion of environmentally friendly weed management options in specialty crop systems, making production in California both more sustainable and more competitive, and will benefit both organic and conventional growers.

- The California Department of Food and Agriculture partnered with the University of California, Davis to field-test an automatic system for mechanical weed control, using a real-time kinematic global positioning system. The study successfully developed an automatic, one inch-level precision transplant mapping and in-row weed control system for Californian vegetable crops. The system utilized RTK GPS location and planting wheel sensors to produce highly accurate GIS maps of crop plant location. A ruggedized, real-time, embedded controller was developed that could automatically control a pair of weed knives to provide in-row weed control based upon the GIS maps. The system is suited for use in both organic and conventional vegetable crop production systems and shows excellent potential to help Californian farmers reduce their weed control costs and decrease their reliance on chemical herbicides.
- The California Department of Food and Agriculture partnered with the USDA, Agricultural Research Service to explore the feasibility of using various combinations of new generation environmentally sensitive pesticides and lures for maximum effectiveness in the statewide detection and eradication programs for exotic fruit flies. The goals of the project were to: 1) determine how long spinosad takes to effectively kills fruit flies when deployed in male annihilation treatments in Hawaii and California and whether the addition of UV light inhibitors will extend the effective period of the spinosad; 2) determine whether the trap catch of ME and C-L baited traps using spinosad can be made equivalent to those using Dibrom (naled) using either the current wick dispenser or a solid matrix dispenser; 3) determine if melo-lure will enhance the effectiveness of cue-lure for flies attracted to this C-L analog; 4) determine if new plant-derived extracts are more effective at attracting female fruit flies to our traps than the current hydrolyzed-protein based lure; and 5) determine if we can substitute spinosad on a solid matrix for Dibrom on a wick in our fruit fly traps. The results and accomplishments of this project were published in several articles and the data will be the basis for recommendations on detection and eradication of exotic fruit flies.
- The California Department of Food and Agriculture partnered with Project Apis m (PAm) to develop field evaluation of honey bee health and nutrition status. A study was conducted that focused on the technical feasibility of a program for infield sampling of honey bees for health. The feasibility study proposed three methods for field testing of bees: 1) train pest control advisors; 2) develop easy-to-use field test kits; and 3) provide access to diagnostic laboratories. The project highlighted that a beekeeper's primary challenge is keeping bees alive and successful over-wintering of bees is key to complete and efficient pollination of California specialty crops. In addition, pollination services have become the primary income-producing activity for beekeepers, rather than honey production. Interviews conducted through this project illuminated the fact that beekeepers do not have the tools they need to determine if a colony is healthy or not and growers of pollinated crops have little information on bee supply and health. This project resulted in the development of diagnostic laboratories and services to more objectively evaluate bee health.
- The California Department of Food and Agriculture partnered with the California Agricultural Export Council to organize and facilitate an Agricultural Trade Roundtable to discuss common trade issues and to arrive at a list of important trade issues that impact a large number of CA specialty crops and to convey these to Federal officials and trade negotiators as "high priority" items for California agriculture. A total of 28 agricultural entities participated in the two-day forum. As a result of the Roundtable, seven priority trade issues were identified. Of these, the four highest priority issues were explored by the group, with regard to possible "action items" to meet and overcome those issues. A total of 21 "action items" were identified and associated with the individual trade issues. The four high priority trade issues included trade agreements, market access (tariffs), TASC (Technical Assistance for Specialty Crops), and China. One key item, of strong interest to most participants, was the concept of jointly marketing California Agricultural Products along with California Tourism in foreign markets. The key California issues will be provided not only to the industry participants, but also to both Federal and State Government entities to provide insight into the most current items of importance in California. As a follow-up activity to the Roundtable, project staff conducted a survey of the participants to determine their feelings on the value of participation. The draft responses indicated that 100 percent of the participants gained value from the event, and would participate again in the future, if the opportunity arises.
- The California Department of Food and Agriculture performed pre-award and post-award activities in order to administrate the Specialty Crop Block Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

Colorado Department of Agriculture

Amount Funded: 116,139.35 **Number of Projects:** 5

- The Colorado Department of Agriculture partnered with Colorado State University to conduct variety trials for high value organic vegetable crops. The variety trials provided small acreage producers, students, and extension personnel with research information and training about the performance of more than 20 high-value crops raised under organic production management and in high tunnels. The inclusion of high tunnels provided for analysis of production methods to extend the marketing season, and also the feasibility of mitigating insect vectored diseases by means of insect exclusion. The trials placed a special focus on the evaluation of season extension and production methods for tomatoes, cucumbers, strawberries, salad greens, and blueberries. Unfortunately, two hail events in August destroyed many of the field trials and as such, limited results were recorded for the field trials. However, trials conducted in the high tunnels survived the hail, presenting growers with a stark and valuable contrast of field and protected cultural systems. A Field Day event about the trials drew more than 300 attendees. Findings were also presented to more than 200 producers at the Colorado Agriculture Big & Small Conference. Results have also been posted online at http://www.specialtycrops.colostate.edu/SCP rmsofp varietytrials.htm.
- The Colorado Department of Agriculture partnered with the Colorado Wine Industry Development Board (CWIDB) in cooperation with Colorado State University (CSU) and Rocky Mountain Association of Vitners and Viticulturalists (RMAVV) to develop a new Wine Quality Evaluation Program to allow Colorado wineries to test their wines locally. As Colorado wineries are considered small by national standards, most do not have proper laboratory equipment to test their own wines. Less than half of Colorado's wineries regularly send their wines to out-of state labs for testing, and even those submit only a small number of samples due to the expense of out-of-state testing and shipping. Prior to the project, the Wine Quality Evaluation Program had to rely on a tasting panel of winemakers and retailers to identify flaws and concerns with the wine. Those wines identified with issues were then sent to the out-of-state laboratories for testing with costs paid for by the CWIDB and the RMAVV. A wine quality evaluation laboratory at the CSU Orchard Mesa Ag Research Station in Grand Junction, Colorado was established and furnished with a Gas Chromatograph & Mass Spectrometer system. CSU enologist marketed the Wine Quality Evaluation Program to wineries and at meetings and demonstrated the new testing capabilities to all interested Colorado wineries. As of December 31, 2009, 56 of 84 wineries had initial assessments of wine quality conducted through the Wine Quality Evaluation Program and nine (including four new) wineries have sent samples to the local wine quality evaluation lab.
- The Colorado Department of Agriculture partnered with the American Culinary Federation Colorado Chefs Association (ACFCCA) to expand its regular chef education programs to include programs that educate Colorado culinarians on the value of incorporating Colorado specialty crops to the menu offerings of their respective dining and foodservice operations. The ACFCCA held various educational programs, product demonstrations, competitions, and hands-on exercises in order to educate its chef members on the value and economic and environmental benefits of incorporating locally grown produce to their menus. Specifically, a Colorado potato tour included 10 Executive Chefs and 25 culinary students and instructors from Western Colorado Community College. They were given a tour of the potato fields and packing plants in Colorado's San Luis Valley and following the tour, the group participated in the Colorado Potato Harvest. At this event five of Colorado's professional chefs conducted five different seminars and demonstrations highlighting the various uses of Colorado potatoes for approximately 500 attendees. Educational training was also conducted at the Colorado Culinary Salon for nearly 3,000 culinary students to acquaint leading Colorado chefs and culinary students on the use of Colorado specialty crops in menus through competition. The results of an initial survey in the fall of 2008 and a follow up survey in the summer of 2009 showed that the percentage of chefs that are generally knowledgeable that Colorado is a producer of fruits and vegetables increased from 72 percent in 2008 to 84 percent in 2009. Additionally, the percentage of chefs reporting that at least 10 percent of fruit and vegetable purchases come from Colorado increased from 36 percent in 2008 to 60 percent in 2009 and the percentage of chefs that identify the Colorado origin of fruits and vegetables on their menus increased from 13 percent in 2008 to 47 percent in 2009.

- The Colorado Department of Agriculture (CDA) migrated Colorado food and agricultural supplier data from their technologically obsolete Food and Agricultural Directory (TRADIRS) that has been an important tool to help the Department connect buyers and sellers during the past 10 years to Colorado's Market Maker (CMM). The Market Maker site (www.comarketmaker.com) went live in late summer 2009 and CDA began to raise initial awareness in early winter 2009. As of December 31, 2009, CMM contained 1,568 new entries of which 1,262 are Colorado Proud Members. Monthly visitor count was 146,381 based on a six month average (July Dec 09) and 54 percent business suppliers credited CMM for increased annual sales.
- The Colorado Department of Agriculture partnered with the Colorado Onion Association (COA) to participate in the Colorado Pavilion at the Produce Marketing Association's 2008 Fresh Summit Exposition. COA developed resources necessary to support their participation including a website at http://www.coloradoonion.com/, "Simply Colorado Onions" brochure, and a handler and shipper list. The Expo helped COA to create greater awareness among retail and foodservice buyers of Colorado as a supplier of onions, as well as foster the development and/or expansion of business opportunities for Colorado's onion producers. As a result of attending the Expo, 35 new domestic and 18 new international leads were established. Suppliers participating at the show reported sales of \$300,000. The new web site received 103 visits when launched in January 2009 and this increased to 254 visitors (75 percent were new) in September during Expo participation. All association members overwhelmingly approved of the site and all are currently using it.

Connecticut Department of Agriculture

Amount Funded: 107,934.62 **Number of Projects:** 15

- The Connecticut Department of Agriculture created customized banners that included the Connecticut Grown logo and distributed them to all 114 Connecticut Farmers' Markets. In the year of its implementation, the number of farmers markets increased by 24 percent and helped these new markets establish themselves. The banners also helped increase visual presence and brought additional customers into the markets which consequently increased the awareness and profits of specialty crop producers.
- The Connecticut Department of Agriculture purchased costumes and created and distributed coloring books to increase support from school food service directors at schools and with wholesalers, farmers and other groups to purchase and use CT Grown specialty crops. Project staff distributed a total of 3,915 coloring books to schools, libraries, town halls, cooperative extension offices, state USDA offices, and food service directors across the state that explained the process of growing produce. The costumes were borrowed by 83 groups in 2008 which was up from 27 in 2007. At the end of this project, 46 farmers were members of the farm to school program and 87 schools pledged to be farm-to-school program participants, which is 40 percent of the public schools in the state.
- The Connecticut Department of Agriculture conducted two tours and workshops at farms in Milford and Bridgewater for 99 chefs to increase their understanding and appreciation for Connecticut Grown specialty crops. Project staff also held a farm-to-chef program meeting that attracted 120 registrants to facilitate communication between chefs and producers in order to utilize CT Grown specialty crops. Attendees were asked to complete a follow up survey and of the 18 culinary professionals, or users of CT Grown products, that responded, 39 percent had increased their use of Connecticut Grown fruits, vegetables, greens, and herbs by at least 50 percent, along with 24 percent who had increased their use of Connecticut Grown honey, maple, floriculture, and nursery crops by at least 50 percent. The meeting resulted in 100 percent of the attendees stating that the program led to increased awareness, understanding and utilization of Connecticut Grown produce and aided in communication between chefs and producers.
- The Connecticut Department of Agriculture created a project that responded to the lack of marketing for farm stands and stores in Connecticut. Project staff designed a total of 30,000 brochures listing CT farm stands and farm stores for Connecticut consumers to have easier access to Connecticut Grown specialty crops. The brochures were distributed to 122 participating farms, six Connecticut Welcome Centers, USDA and Cooperative Extension offices, and 169 town halls and libraries. The website (www.ctgrown.gov) was also created listing farm stands and stores, sorted by county. After the brochures were distributed, all brochure participants received a survey. The respondents reported an average increase of on-farm revenue of 1-3 percent and an average increase of specialty crop direct sales of 4-7 percent.

- The Connecticut Department of Agriculture purchased promotional materials for supermarkets, roadside markets, farmers markets, and schools to promote their CT Grown specialty crops. Some of the promotional items purchased consisted of tents, pens, pencils, magnets, t-shirts, pins, hats, sweatshirts, and aprons. The marketing items were so popular that supply did not meet the demand of Connecticut specialty crop producers and a waiting list was established. The items provided were useful and effectively spread the message about CT Grown specialty crops.
- The Connecticut Department of Agriculture partnered with the Center for Survey Research and Analysis at the University of Connecticut to conduct a telephone survey with Connecticut residents to learn whether or not they had any recollection of the 2007 state-wide, multi-media advertising and marketing campaign promoting Connecticut Grown products. Project staff contacted a total of 500 residents with a 25 question survey regarding the consumer's recollection of the campaign materials, recognition of the CT Grown logo, use of www.CTGrown.gov, and food buying habits. Of the five different marketing campaign materials (television, posters, radio, billboards, and bus tails), survey participants cited television ads and posters as the most memorable. Sixty-six percent of those who saw the advertisements remembered seeing television spots, while 48 percent recalled seeing CT Grown posters or signs. Eighty percent of respondents who recalled seeing advertisements thought the message was effective in showcasing CT Grown variety and availability.
- The Connecticut Department of Agriculture partnered with the Northeast Organic Farming Association (NOFA) to address the growing interest from Connecticut residents, businesses, and institutions in buying local and organic food from Connecticut's organic and sustainable farmers. In both 2008 and 2009, project staff printed and distributed a total of 25,000 copies of an updated Connecticut NOFA Farm and Food Guide and posted the Guide on their website, www.ctnofa.org. The data from the farms and businesses listed in the Guide was used to create a Google Map that can be found at http://www.ctnofa.org/Farms.php to assist consumers in finding organic and sustainable specialty crop producers in their area.
- The Connecticut Department of Agriculture partnered with the Connecticut Greenhouse Growers Association and the Connecticut Nursery and Landscape Association to create a "trail" as a way of marketing the facilities that display, grow, and sell ornamental garden plants. Project staff designed a logo used by the state's green industry companies to signify that they are on the "trail." Solicitations were mailed out to 3,000 green industry companies asking for their participation and to place ads in the initial Trail brochure. Fifty thousand full-color Garden Trail brochures were printed and distributed with maps inserted into the centerfolds that contained information on the newly created CTGardenTrail.com website. The new "trail" was released and unveiled during the Connecticut Flower and Garden Show, in Hartford which received 30,000 attendees. Over 70 advertising orders were received from green industry companies in support of the Trail brochure. A major television market and local newspapers promoted the Trail as well. With all the media coverage, companies noticed an increase in customer traffic.
- The Connecticut Department of Agriculture partnered with the Maple Syrup Producers of Connecticut to enlighten the public that maple syrup is a viable part of Connecticut's farming economy through signage, maple syrup kits, education materials for producers, and a Connecticut maple cookbook. Project staff produced and distributed 250 public awareness signs and one thousand maple syrup kits to producers that enabled consumers to see differences in maple syrup color, grade, and taste. A total of 125 maple syrup producers attended two educational events that were held to increase their knowledge and skills to produce and sell high quality maple syrup. A template was created and added to the Association's website for people to submit recipes for the cookbook and plans to publish 500 cookbooks were underway.
- The Connecticut Department of Agriculture partnered with the six New England state departments of agriculture (Harvest New England Association) to offer a conference on how producers can market their product to consumers. Project staff contacted nearly 28,000 farms and developed promotional materials to increase awareness of Harvest New England program and the conference itself. Over 800 producers attended the conference, which was a 10 percent increase in attendance from the previous year. Feedback entailed comments about the conference "being helpful," "networking and connecting was extremely beneficial," and "being surrounded by other farmers was a great learning experience."
- The Connecticut Department of Agriculture partnered with the Connecticut Beekeepers Association to create a brochure and update their website to educate the public and beekeepers on important issues facing bees. The website, www.ctbees.com, was redesigned for use with ease in exploring the 'links' section so people can navigate to other websites concerning bee issues. Other additions included forms for membership, short video clips, a history of the club, and hive registration. The brochure addressed why honeybees are so important to the human race as well as basic bee information. Project staff also designed a one day Bee School for new beekeepers to network with experienced beekeepers. Of the 170 new beekeepers that signed up for the school, about 160 started a hive in the spring of 2008.

- The Connecticut Department of Agriculture partnered with the CT Christmas Tree Growers Association to educate and update growers, award scholarships, hold a coloring contest, and update the website www.ctchristmastree.org in order to encourage growers to practice successful habits to ensure that Christmas trees are promoted in Connecticut. Scientists performed experiments at several farms and presented research findings at meetings and a field day. Project staff awarded four \$500 scholarships to help students in college who pursued studies in plant science, horticulture, forestry or the Christmas tree industry. The coloring contest was announced on the website and over 900 entries were received from Connecticut school children. Website hits were up 16 percent during this time because parents not only had to submit their entry online, but also surf the web to find "choose and cut farms". To complete the competition parents also had to take their children to harvest a tree, which, in return, increased tree sales.
- The Connecticut Department of Agriculture partnered with the Connecticut Farm Wine Development Council to enhance the consumer awareness of local wineries. Specifically, project staff created a Passport program that listed all the farm wineries in Connecticut and encouraged the consumers to have their passport stamped by 14 of the 30 wineries. Once the passport was stamped, consumers could submit their Passport to win international and local prizes. Project staff distributed 50,000 passports to customers, which were attributed to an increase in the amount of visitors to all wineries, and their purchase of at least one bottle of wine which added up to approximately \$15 22,000 in cash flow for each winery.
- The Connecticut Department of Agriculture partnered with the Connecticut Greenhouse Growers Association and the Connecticut Nursery and Landscape Association to create a "trail" as a way of marketing the facilities that display, grow, and sell ornamental garden plants. Project staff designed a logo used by the state's green industry companies to signify that they are on the "trail." Solicitations were mailed out to 3,000 green industry companies asking for their participation and to place ads in the initial Trail brochure. Fifty thousand full-color Garden Trail brochures were printed and distributed with maps inserted into the centerfolds that contained information on the newly created CTGardenTrail.com website. The new "trail" was released and unveiled during the Connecticut Flower and Garden Show, in Hartford which received 30,000 attendees. Over 70 advertising orders were received from green industry companies in support of the Trail brochure. A major television market and local newspapers promoted the Trail as well. With all the media coverage, companies noticed an increase in customer traffic.
- The Connecticut Department of Agriculture partnered with the Connecticut Apple Marketing Board to redesign the Connecticut apples logo as well as two brochures that contain a collection of recipes, grower, and apple varietal information. The Board's website, www.CTApples.com was also redesigned with new photos and graphics including grower information, apple information and uses, and links to the Connecticut apple industry. In 2009, project staff printed and distributed a total of 43,500 brochures. During this time period, the website received a total of 196,010 hits. Growers and consumers expressed the importance and benefit of the brochures and website to increase apple sales.

District of Columbia

Amount Funded: 100,000.00 Number of Projects: 1

• The University of the District of Columbia evaluated six herb and spice varieties to determine which would be most compatible as intercroppers with four varieties of vegetables in the DC area. Although this approach to vegetable production did not result in increased yields, it did provide protection against some common pests: a 50% reduction in blister beetle, cucumber beetle and flea beetle infestation in field plots that were inter-cropped with vegetables. In addition, the team held field day activities through which 75 percent of participants committed to use composted waste (cow manure or yard waste) as soil amendments and to avoid inorganic pesticide to control pests.

Delaware Department of Agriculture

Amount Funded: 102,403.75 **Number of Projects:** 8

• The Delaware Department of Agriculture partnered with the University of Delaware to develop a quantitative economic analysis of the contributions of the specialty crops industry to Delaware's overall economy. The study found that the economic contribution of all categories of specialty crops production is \$162.2 million in total industry output. However, despite significant increases in the market value of production in all of its three major commodity groups since 2002, the value of specialty crops production as a percentage of total cropland production dropped from 39.5 percent in 2004 to 28.58 percent in 2007. The specialty crops sector will play a significant role in the evolution of U.S. agricultural policy, targeting the growing national concern over health and nutrition and the resulting government programs addressing these issues. It is important that policy makers in Delaware are proactive in seeking market-based policies to promote the growth of the specialty crops industry in the state. The results of the study were shared with 350-400 attendees at AgWeek in January 2011.

- The Delaware Department of Agriculture (DDA) planned to fund Delaware's participation in MarketMaker, a national network of state websites that connect farmers and processors with food retailers, consumers and food supply chain companies. When it learned of an existing virtual marketplace being used by other states, it opted to participate in this marketplace through "Food Trader" and "Ag Trader" websites instead. After developing Delaware's portal, the Department of Agriculture launched a marketing campaign to draw Delaware specialty crop growers and consumers into the marketplace. The marketing campaign was limited due to insufficient funds and farmers were less willing to participate than anticipated. Furthermore, while the Food Trader sites had been an important tool for stimulating the buying, selling, and trading of local food, the local food economy may have expanded to the point that Food Trader is no longer needed and Delaware ceased participation at the end of this project. As a result of the project, DDA learned a lot more about the needs of the specialty crop farmers in the state and is making further efforts to meet those needs.
- The Delaware Department of Agriculture partnered with Delaware State University to identify and evaluate ethnic crops that can be grown successfully in Delaware. The team evaluated a number of new crops for production performance in the state including kabocha squash, snow peas, mei ching choi, mizzen, scotch bonnet hot pepper, aji dulce hot peppers, callaloo spinach, calabaza squash, tomatillo and ethnic eggplant. In addition, the project team reached out to local ethnic populations and farmers through demonstrations, presentations, and marketing materials. As a result, 10 farmers have planted ethnic crops through the Ethnic Crop Expansion Program. An additional 12 farmers were anticipated to begin planting ethnic crops the year after this project ended.
- The Delaware Department of Agriculture (DDA) developed marketing materials designed to connect specialty crop growers with consumers, retailers, and wholesalers. DDA created "The Farm Market Directory and Agritourism Map" to target consumers. The Directory highlights Delaware's on-farm markets, farmers' markets, farms that promote agritourism, Christmas tree growers, retail garden centers and riding stables. By the end of the project, more than 16,000 copies had been distributed. At the same time, DDA reached out to retailers and wholesalers through the Produce Buyer's Guide which showcases 151 product sources. Forty-thousand copies of the Buyer's Guide were distributed to wholesalers, retailers and commercial enterprises. DDA distributed more than 200,000 recipe cards and placards to market Delaware's specialty crops.
- The Delaware Department of Agriculture partnered with other jurisdictions to fund the Cucurbit Downy Mildew Website. The website was designed to forecast and track the spread of Cucurbit Downy Mildew, a significant threat to Delaware's pickling cucumbers, watermelons, cantaloupes, pumpkins, squash, and other cucurbit crops. The Website allowed Delaware farmers and Extension personnel to track the movement of the disease up the East Coast and know when to begin scouting carefully for the disease and when to begin applying fungicides. Although the full dollar value of Delaware's pickle industry is not published due to disclosure issues, the forecasting website has made the difference between having a pickle industry and not having a pickle industry.
- The Delaware Department of Agriculture partnered with the University of Delaware to breed and evaluate new lines of lima beans. These new lines were evaluated in comparison with commercial lines and, in many cases, produced significantly higher yields than standard commercial cultivars. Some also showed promise in resistance to downy mildew although no lines with useful levels of resistance to white mold were identified. The research conducted through this project has built a foundation upon which lima bean breeders can build to ultimately breed beans that have resistance to all known races of lima bean downy mildew and improved yield.

- The Delaware Department of Agriculture partnered with the Mar-Del Watermelon Growers Association to develop the "MarDel-icious" brand of watermelon and to implement a marketing and promotional campaign to increase consumer awareness and sales by targeting the region's major chain grocery stores. To begin with, the partners created and trademarked the brand name and logo and developed in-store promotions at retail stores. They also created several radio ads and television spots to promote the new brand. To top it all off, they held a large promotional event on the Rehoboth Beach Boardwalk in Delaware and the Baltimore Inner Harbor in Maryland. The branding strategy was successful and MarDel-icious watermelons can now be found in Redners, Harris Teeter, Giant Foods, Wal-Mart and Sam's Club, Acme and BJ Price Club.
- The Delaware Department of Agriculture partnered with the University of Delaware to lay the foundation to allow them to provide science-based information outlining a more sustainable approach to processing vegetable production. To launch the study and establish a baseline, the team utilized a variety of cropping systems, including a diversity of tillage intensity, crop residue returned to the soil, and crop rotations. Using these systems, they planted no-tillage peas, kale, tillage peas, tillage lima beans, no-till snap beans, pumpkins, and spinach, interspersed with various grains and other cover crops. They then measured soil health and quality. As anticipated, no differences were detected in the soil health characteristics after only one year. However, this project has established solid baseline data, which will enable the team to achieve its long-term goal of providing opportunities for a more sustainable approach to vegetable production. The systems will be run for an additional 3 to 5 years which will allow these systems to begin to show detectable differences between the treatments.

Florida Department of Agriculture and Consumer Services

Amount Funded: 253,750.10 **Number of Projects:** 5

- The Florida Department of Agriculture and Consumer Services partnered with the Florida Nursery Growers and Landscape
 Association to highlight Florida's nursery and landscape industry and increase awareness and consumer sales. They did so
 by developing and showcasing an interactive educational exhibit on Florida's nursery and landscape industry at the 2008
 Epcot International Flower and Garden Festival. It is estimated that 120,000-150,000 Florida residents visited the exhibit
 and many were undoubtedly inspired to invest in their home landscapes.
- The Florida Department of Agriculture and Consumer Services partnered with the Florida Nursery Growers and Landscape
 Association to develop a real-time online plant locator service to enable growers to update information and inventory
 information. Access to the information is possible through a searchable database designed for landscape and retail
 customers. Although the recent economic difficulties dampened enthusiasm and immediate usage by industry producers,
 there is much hope for future growth as the economy becomes stronger and more stable.
- The Florida Department of Agriculture and Consumer Services partnered with the Florida Nursery Growers and Landscape
 Association to fill a void in perceived consumer knowledge on responsible water usage related to landscape by developing
 and airing statewide public service announcements (PSA). PSAs focused on the promotion of the Buy Local campaign, how
 to use water wisely, promotion of Florida-friendly plants and materials and the benefits of purchasing plants and installing
 new landscapes. The PSAs were run approximately 70,455 times and reached all of Florida's nine dominant cable areas.
- The Florida Department of Agriculture and Consumer Services partnered with the Florida Nursery Growers and Landscape
 Association to cooperate with Walt Disney World and the Epcot International Flower & Garden Festival to create a model
 landscape incorporating Florida-friendly landscape principles. An estimated 100,000 individuals visited the model, many of
 whom were inspired to invest in their own home landscapes.
- The Florida Department of Agriculture and Consumer Services partnered with the Florida Nursery Growers and Landscape
 Association (FNGLA) Certifications Committee, the Florida Department of Education, and various county school district
 supervisors to incorporate FNGLA's Certified Horticulture Professional Certification (FCHP) program into the existing
 horticultural curriculum in Florida High Schools. Twenty-three schools signed up for the program through TeachHort.com
 and 19 schools had a total of 217 who participated. In the 2009-2010 school year, 36 students earned their FCHP
 designation.

Georgia Department of Agriculture

Amount Funded: 129,864.25 Number of Projects: 8

- The Georgia Department of Agriculture partnered with Georgia Organics to support local organic producers and farmers through a grower education, and consumer awareness conference; increase distribution of the Local Food Guide; target restaurants for the "buy local" branding campaign; and conduct a local economic study on Georgia's Sustainable Food System. The conference featured nine farm tours, nine educational tracks of 32 workshops, and six in-depth sessions. A total of 1,100 individuals registered for the conference and the overall evaluation for the conference was 4.78 on a one to five scale (five being the highest). Project staff distributed the 2009-2010 Local Food Guide to help consumers locate sustainable and organically grown local produce to 192 distribution points. The "buy local" branding campaign included 65 member restaurants that are committed to sustainable initiatives. All restaurants were included in the Local Food Guide and received member seals that could be used on menus and other promotions. Of the 65 restaurants, approximately 25 have utilized branding with seals at their restaurant locations, served as a distribution site for Local Food Guides and/or placed the Georgia Organics member logo on their menu. Results from the local economic study conducted on Georgia's sustainable food system showed that of the \$20 billion of food purchased by Georgia consumers each year, an estimated \$16 billion is purchased from out of state [Bureau of Labor Statistics]. Overall, 1,626 farms reported selling food directly to their customers in 2002, for a total of \$8.9 million of sales. This amounts to 0.2 percent of Georgia farm sales. The number of farms selling direct increased 7 percent from 1997 to 2002, while direct sales increased 12 percent [Ag Census 2002] and 32 Georgia farms sold \$671,000 of organic products in 2002 [Ag Census 2002]. The data has been useful in quantifying the potential buying power of local consumers and the opportunities that exist for agriculture if Georgia Organics simply connect the dots locally.
- The Georgia Department of Agriculture partnered with the Georgia Green Industry to introduce two programs to help horticulture growers cope with the lingering drought and water restrictions imposed by state and local government agencies in 2008. The Georgia Certified Professional Program was introduced to educate retail garden center managers, landscape contractors, and nursery growers through increased participation in the Georgia Certified Plant Professional program and the Georgia Certified Landscape Professional program. This additional education and attainment of certification ensured that retail garden center professionals and landscape professionals provided the best plant information to the consumer. More emphasis was placed on "right plant, right place," proper planting and maintenance procedures, and in choosing drought tolerant plants. A water variance web-site (www.urbanagcouncil.com) was also completed in mid-March, 2008. The Georgia Green Industry Association, along with other landscape and turf associations in the state, hired a public relations firm to conduct 150 radio advertising spots that were broadcast on metro-Atlanta area stations having listener demographics that include the middle-aged female population which are primarily the buyers of horticultural goods. Consumers began visiting the site, viewing the water conservation material and taking the on-line water variance exam. Over 24,000 unique IP addresses visited and utilized the water variance website to obtain water smart landscape education. In addition, over 2,000 individuals visited their local county agent to participate in the training program.
- The Georgia Department of Agriculture partnered with the Georgia Blueberry Growers Association to conduct research to determine ways of controlling a new bacterial disease, Xylella fastidosa, that is causing devastating losses in southern Georgia. In 2007, researchers and university specialists planted a two acre blueberry site to screen blueberry varieties for resistance to the Xylella disease and also to conduct dissemination (means of spread) studies. In 2008, University of Georgia extension specialists, researchers, and county agents initiated a survey to determine the prevalence of bacterial leaf scorch (Xylella) in Georgia's major blueberry production region and to assess the geographical area in which the Xylella disease occurs and discover a baseline for the potential spread of the disease. In late August, September, and October, county agents from major blueberry production counties helped to visually identify bacterial leaf scorch based upon symptoms. A total of 45 sites were reviewed and at all sites multiple ratings were conducted for different cultivars and cultivars of different ages, as available. Samples were taken for confirmation through use of ELISA, and an estimate of disease incidence was determined for each cultivar (% symptomatic plants). For each site, GPS coordinates were recorded to develop a map of the epidemic range. Data analysis included descriptive statistics (means of disease incidence by cultivar). Correlation analysis was utilized to determine the relation between different cultivars and years since field establishment. At the end of the grant project, research was still ongoing.

- The Georgia Department of Agriculture partnered with North Georgia Technical College to offer both credit and continuing education options for specialty crop growers. Credit programs lead to a Technical Certificate of Credit, a Professional Diploma, or an Applied Associate Degree; with the aim of making graduates more employable. Continuing education options included workshops and training events that were shorter and focused on one or two concepts such as organics and hydroponics. The College also established an apprenticeship site for Georgia Organics initiatives, and created an outlet for consumers to purchase organic crops. North Georgia Technical College met the regional need for organic production training by providing seven workshops. These workshops featured information on related topics such as conservation, stream bank restoration, water quality, and sustainable agriculture methods.
- The Georgia Department of Agriculture partnered with Emory University to educate the urban Atlanta community and expand awareness of Georgia crops and the benefits of local, seasonal production; teach horticultural skills; increase visibility of the "brand" of Georgia farm producers; and maintain gardens in top condition. An estimate of 12,500 students and 17,000 Emory University employees, plus hospital patients and visitors, many of whom pass by the garden sites were impacted by this project. The entire Sustainable Food Initiative is regularly featured in Emory events, talks and media coverage. The initiative can be viewed at http://sustainability.emory.edu/page/1008/sustainable-food. The Emory Office of Sustainability website received an average of 100 hits a day. In addition, each garden held regular garden workdays, weekly in most seasons. These sessions educated garden team members about local crops, planting decisions, pest management and general issues of local agriculture (an estimate of 50-75 individuals over the course of a year).
- The Georgia Department of Agriculture partnered with the Georgia Pecan Growers Association to undertake a marketing and promotional campaign in China. Georgia Pecan Growers Association participated in the SIAL China Tradeshow in May of 2008 where three grower members of the organization flew to China and promoted Georgia Pecans at the show. The growers distributed samples and exporter directory of growers at the show, showed videos of a pecan farm, and talked about the nutritional value of pecans. The Georgia Pecan Growers Association followed up by visiting three major China cities sponsored by Southern United States Trade Association in September 2008. The Association received over 100 contacts from Chinese buyers interested in pecans that were brought back and distributed to the participants that had displayed products at the show. These marketing efforts have given Georgia pecan producers new venues and means of promoting their products and has resulted in exposure to new buyers and distributors.
- The Georgia Department of Agriculture promoted Georgia's specialty crops by connecting producers and farmers with local restaurants, chefs and caterers throughout the state at the "Georgia Grown Agricultural Fair" to increase awareness and interest in local specialty crops. Around 200 attendees attended the Fair, including chefs and restaurant professionals. Of the 63 booths set up at the fair, Georgia farmers and producers occupied 59 educational materials were provided to attendees at 4 booths. Exhibitors completed a follow up evaluation survey six months after the show and indicated that \$52,499 in sales was generated by 28 of the 59 exhibitors based on contacts and leads made at the Fair.
- The Georgia Department of Agriculture continued its efforts to develop and execute a crisis communication and management plan of Georgia fruits and vegetables. Phase One of the plan was executed in 2006-2007 (funded under the 2006 specialty crop grant) and entailed the establishment of the Georgia Fruits & Vegetable Growers Association crisis communication plan for Georgia's fruit and vegetable industry which included an audit/review of the fruit and vegetable industry, crisis preparedness plan recommendation, and development of crisis preparedness materials. The following activities were conducted in Phase Two of the project and these included: crisis communication training with Georgia Fruit & Vegetable Growers Association grower, packer and allied members, in addition to appropriate government agencies and university faculty; issues team communication and networking to help the industry monitor current challenges and issues facing Georgia fruit and vegetable growers; and printing and distribution of crisis communication information. The Georgia fruit and vegetable industry now has a 'crisis communication plan' that identifies those organizations, media and shareholders that will be critical in consumer confidence and awareness during a food outbreak.

Hawaii Department of Agriculture

Amount Funded: 109,201.37 Number of Projects: 16

• The Hawaii Department of Agriculture provided opportunities for interested Seal of Quality (SOQ) members to feature their fresh produce and products at the Hawaii Ag Conference in order to foster business relationships with potential institutional buyers. Project staff secured six booths to anchor the tradeshow program by featuring the SOQ program and several member producers, which included: Sugarland Farms, Coffees of Hawaii, and Manoa Honey Company. Over 400 people attended this biennium conference to hear from nationally renowned speakers. The tradeshow event also received widespread media attention.

- The Hawaii Department of Agriculture continued to enhance public visibility for specialty crops in the Seal of Quality (SOQ) program through the participation in 2011 Hale 'Aina Awards. As part of the overall marketing, the SOQ logo was prominently displayed on all collateral, which included the event program, invitations, cover tip-on, specific events, and the presentation that was aired throughout the event. Key specialty crops were also incorporated into menus presented by chefs who were contracted to provide tasting portions to the crowd of attendees. The SOQ program was also featured prominently in promotions via honolulumagazine.com, HONOLULU Magazine, and an e-newsletter. A contest also featured an 'opt-in' to receiving more information from SOQ producers. Over the course of the project, the reach of the event related advertisement campaign included a total of over 750,000 impressions and 640,000 print advertisements.
- The Hawaii Department of Agriculture continued to enhance public visibility for specialty crops in the Seal of Quality (SOQ) program through the participation in 2009 Hale 'Aina Awards. The 2009 awards program marked the Silver Jubilee celebration and attracted the participation of more than 130 restaurants statewide. The October 2008 issue of HONOLULU Magazine contained a section that introduced the 2009 theme "Eat, Drink, Mingle, Repeat" in which the SOQ logo was shown as a sponsor. The event attracted 1,500 participants to the Sheraton Waikiki Hawaii Ballroom on November 16, 2008 and was publicized with media coverage via television, radio, and print.
- The Hawaii Department of Agriculture continued to enhance public visibility for specialty crops in the Seal of Quality (SOQ) program through the participation in 2010 Hale 'Aina Awards. The October 2009 issue of HONOLULU Magazine contained a section that invited readers to "Eat, Drink, Mingle, Repeat" in which the SOQ logo was shown as a sponsor. The event attracted 700 participants to the Royal Hawaiian Hotel Ballroom on November 8, 2009 and was publicized with media coverage via television, radio, and print.
- The Hawaii Department of Agriculture continued to enhance public visibility for specialty crops in the Seal of Quality (SOQ) program by participating in the 2008 Chefs du Jour. This event took place on June 21, 2008 at Tamarind Park in Downtown Honolulu. It included a diverse selection of culinary creations that showcased locally-grown produce and products from the SOQ program. Chefs that participated in this event came from the local, national, and international venues. Media coverage included full page advertisements in the Honolulu Advertiser, Honolulu Star-Bulletin, Honolulu Weekly Magazine, Modern Luxury Magazine, articles in the HONOLULU Magazine, and articles and advertisements in local newsletters for a total distribution estimated to be over 500,000. In addition, SOQ producers were present alongside the celebrity chefs to answer any questions relating to the ingredients utilized at the event.
- The Hawaii Department of Agriculture increased the visibility of specialty crops through the provision of shelf-talkers and labels to retail stores that offered specialty crops under the Seal of Quality (SOQ) program. Project staff printed over 1.85 million labels and a total of 20,000 shelf-talkers. Over the course of the grant period over 100 shelf-talkers were distributed to each SOQ member. Many members of SOQ have received positive feedback on the design. In fact, Whole Foods Market in Maui requested the graphic file of the SOQ shelf-talker for further distribution.
- The Hawaii Department of Agriculture provided an appropriate venue at the Made in Hawaii Festival for interested Seal of Quality (SOQ) members to feature their fresh produce and products with leading local chefs directly to consumers on various islands throughout the State. The Made in Hawaii event utilized cooking demonstrations to promote locally produce foods and goods. Project staff cooperated with PacificBasin Communications to promote the SOQ program by featuring various producers and their specialty crop products with some of the attending local celebrity chefs. Hard copies of recipe cards were produced and distributed to attendees. The event lasted three days and attracted 37,889 attendees.

- The Hawaii Department of Agriculture participated in the Ko' Olina Taste of Kapolei to help enhance the visibility of specialty crops and the Seal of Quality (SOQ) program. Specifically, the project staff worked in cooperation with two of the largest truck crop farms on Oahu to host a Farmers' Market at the event. During the event, both fresh and processed food products were featured through the provision of samples and sale of various farm products to event attendees. SOQ banners were placed on all event collaterals, which included paid advertisements in print, radio, and television media; interviews; and provided event spaces to display. Participation in this event exposed over 1,500 individuals to Hawaii specialty crops and the SOQ program.
- The Hawaii Department of Agriculture purchased a pull-up display screen in order to allow Seals of Quality (SOQ) participants and project staff to promote specialty crop producers and products throughout Hawaii. Project staff designed the pull-up display screens in collaboration with a professional designer and procured five units. These screens are convenient to transport and set up as well as to display a great amount of information to potential customers. The pull-up screens were deployed at every SOQ event since delivery to highlight the SOQ program and specialty crops. An estimated 100,000 attendees at various events have seen this panel display. Particularly, the pull-up screens were displayed at the FoodEx Expo in Tokyo, Japan and at various chef events in California and Washington State.
- The Hawaii Department of Agriculture promoted the Hawaii Seals of Quality (SOQ) Market Enhancement Program through supporting celebrity chef events throughout the State. Project staff participated in four celebrity chef events, which included the 2008 Chefs du Jour and the Hale 'Aina Awards for 2009, 2010, and 2011. All four were big multi-media events with extensive media exposure in Hawaii. These events increased the visibility of the SOQ program through coverage and increased participation of SOQ members in the events. Specifically, project staff focused efforts to increase the promotion of specialty crops associated with the SOQ program. Products and producers were also promoted in advertisements, pairings of chefs with producers to feature the specialty crops, procurement of products to be featured, as well as collaterals to provide information and increase awareness.
- The Hawaii Department of Agriculture purchased a graphic panel display and computer kiosk to promote and showcase specialty crops and specialty crop producers through a combination of static prints and dynamic videos used to feature them through the Seals of Quality (SOQ) branding concept. The graphic panel display was designed in collaboration with a professional designer and was procured in April 2008; while the computer kiosk was procured in August 2008. During the project period, the graphic panel display was utilized at many events to showcase SOQ participants and their products to event attendees. An estimated 30,000 attendees at various events viewed this panel display of special events, which included the 2008 Chefs du Jour event, the 2008 Hawaii Agriculture Conference, the 2008 Hawaii Farm Bureau Convention, and the 2010 Made in Hawaii Festival.
- The Hawaii Department of Agriculture worked with Melonie Kosaka to conduct a web-based media program with multiplatform tie-ins to broadcast and print media outlets in order to promote the Hawaii Seals of Quality (SOQ) Market Enhancement Program. An online promotion campaign was established through the provision of links to the Hawaii Department of Agriculture website and video clips on ShareYourTable.com. Project staff also developed a special SOQ recipe database section (online recipe book) in the website that features recipes from SOQ farmers, friends, and chefs. Through this website, Hawaii chefs and noted culinary experts also gave video cooking classes, farm tours, and discussions concerning Hawaii's local foods. This multi-media promotion concept targeted men and women between the ages of 34 and 55. An estimated 130,000 consumers were exposed to these promotional channels.
- The Hawaii Department of Agriculture designed and redeveloped the Hawaii Seals of Quality (SOQ) Market Enhancement Program's website http://hawaii.gov/hdoa/add/soq. Project staff hired a programming consultant to perform the migration and troubleshoot issues encountered with the updated website. Project staff migrated the website to the Plone software infrastructure a free and open-source software. With the assistance of the consultant, project staff improved the Department's understanding of Plone software and their improved ability to troubleshoot common issues will allow for better problem-solving and support for the website users.
- The Hawaii Department of Agriculture designed and developed a Seals of Quality (SOQ) Program Guide with general and specific information on producers and product offerings. Specifically, project staff worked with a graphic artist to design and develop a unique SOQ program brochure in English and Japanese. Approximately 4,000 copies of this brochure were printed for distribution at different marketing venues. The project staff also designed and developed a set of rack cards that featured 18 SOQ producers and their products to distribute throughout the State. The program brochure and rack cards were available at a variety of promotional events and public awareness campaigns.

- The Hawaii Department of Agriculture designed and developed Seals of Quality (SOQ) posters, which include images of
 fresh produce, macadamia nuts, coffee, and taro chips. Specifically, project staff worked with a professional photographer
 to take photos of SOQ producers and products at their worksite. After the project staff established a collection of
 photographs, they designed and developed a set of 18 posters for public display. The SOQ program has received much
 positive feedback on poster displays from featured members at various promotional events.
- The Hawaii Department of Agriculture showcased locally grown specialty crops at two special event venues, which included the Whole Foods Market in Kahala and the Whole Foods Market in Maui. Project staff invited a total of 43 Seals of Quality (SOQ) companies to participate in the events held at the Whole Foods Market in Kahala (18) on May 30, 2009 and the Whole Foods Market in Maui (25) on March 14, 2009. Each event consisted of three parts, which included SOQ products sampling, cooking demonstrations, and media promotion. Project staff also provided point-of-sale materials, displaying the SOQ logo that included tablecloths, banners, brochures, photos, tents, and tote bags. Over 5,000 customers entered both locations during the event hours. In fact, 18 of the SOQ participants at the Whole Foods Market in Kahala reported an increase in sales by 128 percent the day of the event.

Idaho State Department of Agriculture

Amount Funded: 121,388.06 Number of Projects: 1

• The Idaho Department of Agriculture funded a temporary position to expand retail partnerships, nursery product promotions, foodservice restaurant promotions, school programs, and international programs through Idaho Preferred®. As a result of activities conducted, eighteen new retail locations in eastern Idaho and the Magic Valley are now identifying Idaho Preferred® products. In fact, during a one-week Wal-Mart Idaho Preferred® asparagus promotion in 2008, sales increased 249 percent from the previous year, with Meridian Wal-Mart location reporting the 2nd highest total sales for asparagus in the nation. Ten nurseries have or are currently using Idaho Preferred® point of sale materials on their containers/plants. At least forty-five restaurants in Idaho are using and/or identifying local products on their menu through their participation in the foodservice promotion program and past Idaho Preferred® events. Idaho onions, potatoes, apples, green beans, tomatoes, herbs, and peaches were featured throughout the promotion. In 2009, four schools established school gardens as direct result of the Ag in the Classroom teacher training. Through six inbound missions hosted from China, Vietnam, Southeast Asia, and Taiwan, forty-one retail and foodservice buyers met with approximately twenty-five Idaho specialty crop companies to help expand export opportunities.

Illinois Department of Agriculture

Amount Funded: 111,450.21 Number of Projects: 2

• The Illinois State Department of Agriculture provided 54 grants to direct marketers and farmers markets to promote their products or market. Market managers observed many positive results when asked to compare the market season during which the advertising campaign was undertaken to the previous year's market season. The markets receiving a grant reported a 25 percent increase in the number of vendors participating in the farmers markets and a 33 percent increase in farmers' market customers. All projects utilized the "Illinois...Where Fresh Is" logo, where appropriate and possible, in grant related works. Many comments were received by the Illinois Department of Agriculture on the positive benefit of the logo and the increased amount of recognition that was achieved amongst the market customers. The grant benefited the 54 farmers markets and their surrounding communities and assisted approximately 1,000 vendors in 2007 and over 1,200 vendors in 2008.

• The Illinois Department of Agriculture supported the printing and distribution of 40,000 Illinois Farm Activity Guidebooks that included a listing of agritourism businesses. As a direct result of the success of the guide, a statewide website was created, www.agfun.com, that mimics the guide. The website was acknowledged by the Illinois Bureau of Tourism during the Illinois Governors Conference on Tourism as being the best website in the state. Project staff, in coordination with the Illinois Ag in the Classroom, produced a second publication called Ag Mag. The Ag Mag was written at the 4th grade level on various Illinois specialty crops, highlighting the 'Illinois...Where Fresh Is' program promoting locally grown commodities. The program addressed the common misconceptions that 'food comes from the grocery store' common among both students and adults. The publication included interviews and photos of 13 specialty growers across the state of Illinois. Local county Agriculture Literacy Coalitions received a total of 140,000 copies and teachers and students across the state received a lesson plan booklet featuring links to Illinois specialty crops. A survey conducted with teachers at the 2009 Summer Teacher Training indicated that 68 percent of the teachers would utilize the Specialty Crop Ag Mag and companion lesson plans. Over 483,000 Illinois students benefitted from this project.

Indiana State Department of Agriculture

Amount Funded: 109,567.29 **Number of Projects:** 6

- The Indiana State Department of Agriculture (ISDA) produced for the 2nd consecutive year the directory of Indiana's farmers' markets, u-pick and agritourism opportunities. During the fall of 2008, ISDA worked with Purdue Extension and the Indiana Office of Tourism Development to update information for the directory. Distribution of the directory to convention and visitors' bureaus around the state was eagerly received in April of 2009. This directory was of great benefit to Indiana's 70 farmers' markets, 35 wineries, and many other u-pick and agritourism sites. The directory was listed by county and showed consumers where else in the area they could visit, making a day of their trip, instead of stopping at one place. ISDA tracked the number of news articles written about Indiana Farmers Markets in 2009 versus 2008. Through the use of a media tracking service, ISDA was able to count 97 news articles published around the state about this directory and/or individual markets, wineries, u-pick stands in 2009. ISDA hosted a launch party and received a lot of media attention at this event held in downtown Indianapolis at a local winery. This directory was showed off on WISH TV Channel 8 out of Indianapolis as well as being mentioned in many of the agriculture newspapers and magazines. ISDA also evaluated the general public interest and regional interest by monitoring the depletion of these directories around the state. A total of 20,000 directories were printed and have flown off the shelves and many times ISDA was asked for another shipment to replenish a visitor center or local chamber of commerce offices supply.
- The Indiana State Department of Agriculture (ISDA) implemented the Farmers Market Cost-Share Reimbursement Program for the 2nd consecutive year. This program provided grants to Indiana farmers markets by reimbursing 50 percent of the cost of farmers market advertising, displays and promotional materials, up to \$500. During the first few months of 2009, ISDA advertised the details of the reimbursement program. ISDA continued to promote the program at the annual farmers market workshops sponsored by Purdue Extension and the Indiana Cooperative Development Council as well as running news releases, e-mail blasts and utilizing social media sites to ensure the word was getting out about this program. ISDA polled the participating markets on both 2008 attendance and 2009 attendance and found visitation to increase by 11 percent. The cost-share reimbursement program assisted 35 farmers markets around the state allowing them to promote their market. Farmers markets in Indiana provided a source of venue for over 2,000 Hoosier producers.
- The Indiana State Department of Agriculture partnered with the Indiana Wine Grape Council to enhance the marketing efforts through the addition of 30 second TV advertisements on two Indianapolis stations to promote the "Vintage Indiana" Wine & Food Festival. The Festival was attended by just over 9000 guests. The Indiana Wine Grape Council gathered data on the increased interest and attendance at the festival as well as any increases in wine sales, market share, and grape acreage. Despite the country's economic situation, wine sales have maintained a steady level and increased slightly since Indiana added seven new wineries in the state this past year. The economic impact from the Indiana wine industry and the increase in interest in the states three wine trails is significant with over 900,000 visitors each year, 35 percent from outside of Indiana, resulting in more than \$35 million for the Indiana economy. The growth potential for Vintage Indiana is considerable due to the trend toward close-to home travel and the variety of activities offered during the event.

- The Indiana State Department of Agriculture partnered with the Local Growers Guild (LGG) to develop a written survey for growers and buyers asking about their current marketing methods, their interest in expanding production levels, their interest in accessing new markets, and their perceived obstacles. The LGG mailed out approximately 200 copies of the survey to a mailing list comprised of members of the LGG and vendors at the Bloomington Community Farmers Market. The survey was also posted online and published in several newsletters. A total of 54 farms responded to the survey. The survey provided insight that most growers are not yet set up for sales to wholesalers and institutions. They lack facilities for post harvest handling, an understanding of insurance and inspection requirements, sufficient volume to meet large scale demands, and transportation options. At the same time, many retailers, institutions, and wholesalers need help setting up protocols and developing systems for working with local growers. Some common issues include determining insurance requirements; ensuring safe food handling practices; proper washing and packing; managing invoices and payment; and accommodating the seasonality of local produce. In order to help growers work with retailers, institutions, and wholesalers, the LGG needs to focus on helping growers improve their marketing skills, develop basic infrastructure on the farm, and work with retailers, institutions, and wholesalers to help them develop clear protocols and requirements. There are not yet enough growers ready to sell at the wholesale level to justify the creation of a cooperative distribution center. There is clearly a need for storage both on and off the farm and this should be addressed by exploring opportunities to share storage space between farms, share storage space with local retailers, and develop facilities on farms. Based on these insights, the LGG recommended the hiring of a local food broker for at least one year to make connections between growers and buyers. Any approach to increasing local food production needs to take into account the individual circumstances of different growers and different buyers.
- The Indiana State Department of Agriculture partnered with the Indiana Uplands Growers Cooperative to create awareness and build an "Indiana Uplands" brand creating partnerships among member wineries and associated travel partners such as lodging, restaurants and related attractions and visitor bureaus. As a result, eleven new partners joined as associate members to the wine trail and grape growers cooperative and 20 regional members are promoting one another. These members include area visitors' bureaus, hotels, bed and breakfasts and cabins and area attractions. Project staff created awareness about the "Indiana Uplands" brand by developing 50,000 copies of a new Uplands Wine Trail brochure, producing 25 binders of information about the Uplands for visitors to browse at regional visitors' bureau offices and in all the member wineries, updating the wine trail website (http://www.indianauplands.com/) to jointly market the Uplands to agri-tourists, and providing 15 brochure racks and Uplands Wine Trail signs at all member wineries to promote the new associates and the Uplands region. The Indiana Uplands Growers Cooperative created a much broader awareness of what the region has to offer by visitors to the wineries.
- The Indiana State Department of Agriculture partnered with Hancock Harvest Council to implement multi-media direct marketing tools to educate both consumers and producers on the benefits of purchasing local foods and making local foods/specialty crops available to the public. To gain new members, the Hancock Harvest Council used booth presence at regional events and mentoring activities with the Purdue Extension Growing Market Service. Project staff distributed a Buy Fresh Buy Local® Directory listing of all members and what they produce across Hancock County and the six surrounding counties. Existing farmers markets were promoted and two new markets were developed. In 2009, Hancock Harvest Council increased their membership to 32 producer members, six farmers markets, three restaurant/businesses and 20 associate members compared with 25 producer members and two farmers markets in 2007.

Iowa Department of Agriculture and Land Stewardship

Amount Funded: 103,249.43 Number of Projects: 13

• The lowa Department of Agriculture and Land Stewardship staff members attended conferences, workshops, expositions, and trade shows to acquire the most up to date information on specialty crop production and marketing. One staff member attended the Farm to Cafeteria Conference in Portland, Oregon and learned about other states projects regarding Farm to School and other local food systems on both a state and national level. Another staff member attended the 7th Annual International Public Market Conference in San Francisco, California. This conference brought together representatives from 36 US states and 10 countries to learn about marketing of local specialty crops at farmers/public markets; local foodsheds and how other countries and states are promoting the consumption of locally grown specialty crops. By attending conferences, workshops, expositions, and trade shows, IDALS staff was able to relay the most current information on production and marketing of specialty crops to individual growers, consumers, and the media.

- The lowa Department of Agriculture and Land Stewardship staff members provided resources for collecting/reviewing publications and other media formats relevant to the specialty crop industry and making them available to producers. Educational and reference materials were purchased and are available to staff and specialty crops producers and organizations.
- The lowa Department of Agriculture and Land Stewardship hosted an educational conference for producers of specialty crops on January 30, 2009. This one-day event focused on good agricultural practices and post-harvest handling/processing of specialty crops such as fruits and vegetables. To maximize attendance, the educational conference was held in conjunction with the Iowa Fruit & Vegetable Growers and Iowa Farmers Marketing Associations' joint Conference and Trade Show. The keynote speaker was an expert in postharvest quality and safety of horticultural food crops and additional break-out sessions addressed food safety issues from the point of production and handling, through transportation, processing and packaging of fruits and vegetables. USDA provided producers information on Good Agricultural Practices (GAP) and the benefits of implementing GAP on the farm. To end the day, a panel of regional fruit and vegetable producers discussed post harvest handling, packaging and food safety measures that they have implemented or hope to implement on their farms. Resource lists and informational handouts were provided to attendees. There were 165 attendees for this program and all were asked to fill out an evaluation of the presentations. Attendee's knowledge and awareness of GAP generally increased in the 30 percent to 50 percent range. Almost 97 percent of the respondents said they did learn specific production and harvest practices which could be incorporated in their operation.
- The lowa Department of Agriculture and Land Stewardship partnered with the Belmond Area Farmers Market to promote the market through a weekly e-newsletter, recipe-based advertisements, postcard season announcements, local shopper insert, use of billboard space, and a photography contest. The recipe based ads featured seasonally available products that customers could clip and shop at the market for the recipe ingredients. The e-newsletter was sent to approximately 35-40 email addresses and over 5000 shopper inserts were distributed to potential customers. The photography contest resulted in an amazing selection of photos that were featured on the market's new website.
- The lowa Department of Agriculture and Land Stewardship partnered with the North Iowa Farmers Market to promote the market through newspapers, radio, and billboards. A series of cooking classes were also held at the market in cooperation with the North Iowa Area Community College Continuing Education program to promote the use of locally grown and seasonal foods. After the farmers market season was complete, project staff conducted a customer survey to gather information that would help the market with their long range planning and to capture the quantifiable impact and impressions of advertising efforts. More than 150 customers completed the survey and information was gained on frequency of shopping, average perceived dollar value of weekly purchases, product preference, geographic base of customers, opinions on market location, and desired amenities at the market. The producer survey showed that 50 percent of the producers reported an increase in gross sales over the previous year.
- The Iowa Department of Agriculture and Land Stewardship partnered with the Springville Farmers Market to make people
 of aware of the market and guide them to the site by using two billboards along the highway leading to the market. The
 billboards were placed and resulted in a 25 percent increase in patrons at the market site and a 20 percent increase in
 vendors with their specialty produce.
- The lowa Department of Agriculture and Land Stewardship partnered with the Mississippi Valley Growers' Association, Inc. to promote the utilization of floriculture and nursery crops at the Bettendorf Farmers Market. Advertising informed consumers of the events as well as the location and times of the Bettendorf Farmers Market. Consumer educational efforts during six market days included demonstrations by master gardeners of transplanting floriculture and nursery crops into hanging baskets and planters as well as illustrated talks on using perennials and grasses in rain gardens. Handouts of educational materials, pamphlets, and CDs were distributed. Vendors participated in surveys to determine the benefits in sales as a result of the promotions. Over 1600 farmers market customers had the opportunity to watch the transplant demonstration and learn about rain gardens. During the six event days, vendor sales of floriculture and nursery crops increased by an average of 22 percent from the previous year.
- The Iowa Department of Agriculture and Land Stewardship partnered with Mahaska County Agricultural and Rural Development and the Oskaloosa Farmers Market to promote the market though the local newspaper, radio, and signage. A-frame signs and 16 light pole banners were placed around town. Additionally, the Hy-Vee ran ads in their weekly shopper to entice customers to buy at the Farmers Market. The promotions helped marked vendor sales increase by about five percent from the previous year. The community was well aware of the farmers market and became more interested in the market then before the promotional efforts.

- The lowa Department of Agriculture and Land Stewardship partnered with First Christian Church to promote the Drake Neighborhood Farmers Market on the radio, provide transportation to seniors so they could use their Senior Farmers Market Nutrition Program coupons at the farmers market, provide cooking demonstrations using various fruits and vegetables, conduct a sweet corn festival where sweet corn was roasted, provide 50 cents specialty crop coupons to shoppers on two market days, and conduct the Harvest Festival promoting apple pie and cider. Sales by specialty crop vendors increased by 38 percent and attendance increased by 27 percent over the previous year.
- The lowa Department of Agriculture and Land Stewardship partnered with the lowa Christmas Tree Growers Association (ICTGA) to promote real Christmas Trees by enhancing and updating their website, conduct state meetings to help growers, promote real trees at the lowa State Fair, and promote the industry through news releases. A new "Extended Information" section was added to the website allowing customers to search by county making it easier for them to find a Christmas tree farm. At the 2008 fall meeting, ICTGA members brainstormed topics of interest to member and at the 2009 winter meeting; there was an increased effort to cover those topics of interest. Project staff set up a display promoting real Christmas trees at the Iowa State Fair and distributed a new brochure promoting real Christmas trees. The Trees for Troops program, which delivered 16,000 Christmas trees to military families all over the U.S and 29 countries, was featured in a statewide article. The article detailed the program, told how customers can be involved and ended with three testimonials from military families. The website improvements helped increase website hits by 50 percent during the 2008 Christmas season. Overall, growers at the winter meeting reported a good sales year in 2008.
- The Iowa Department of Agriculture and Land Stewardship partnered with the Iowa Organic Association to have a display booth at the 2008 Iowa State Fairgrounds. The display booth was designed to catch the fair visitor's attention and encourage interaction with booth visitors. Surveys were conducted with interested fair participants answering a series of 11 questions designed to identify the preferences and challenges of the consumer in acquiring organic food. Over 780 responses were received and the data assembled from the surveys was used to recommend consumer food product preferences to organic farmers and processors.
- The Iowa Department of Agriculture and Land Stewardship created an Iowa Fruit and Vegetable Harvest Calendar magnet and a poster to promote shop your local farmers market, featuring a fruit and vegetable vendor and consumer. As a result of this marketing, Iowa State University Extension has asked to obtain magnets to give their field workers to use as an educational tool to promote healthy eating when dealing with clients in rural areas across the state. Welcome Centers continue to call to request materials and schools are utilizing the brochures and magnets in lessons with their students.
- The lowa Department of Agriculture and Land Stewardship (IDALS) put up a specialty crops display at the lowa State Fair to expose the maximum number of people possible to lowa specialty crops and production practices. Specialty crops featured in the display were nursery and landscape ornamental plants, apple orchard production, honey production, vegetable production, grape vineyards, Christmas trees, and direct marketing displays of specialty crops. Each day a specialty crop was featured with personnel in specialty crop costumes to talk about that specialty crop, pass out information and promotional items. A local chef was also hired to present two cooking demonstrations using lowa grown fresh fruits and vegetables. On the two days honey was featured, the Honey Producers booth reported selling out of some products at their booth and they increased sales of their honey products from the previous year by 31 percent. With fair attendance in excess of one million people, an estimated 666,666 people were exposed to specialty crop display, demonstrations, and information/promotional materials.

Kansas Department of Agriculture

Amount Funded: 102,197.15 **Number of Projects:** 6

- The Kansas Department of Agriculture partnered with the Kansas Grape Growers and Winemakers Association to provide an incentive to growers to increase wine grape plantings by five percent, from 200 to 210 acres. Kansas has a law that requires 60 percent of the grapes for Kansas wine come from Kansas. To help the wineries comply with that law, Kansas provided a cost share reimbursement program where cost-share recipients had to meet the following requirements. They had to have at least 1 acre of grape plants, however the plants did not have to be all the same variety, but they had to be in sufficient quantity to benefit a winery. The new plants had to be a new or emerging variety for Kansas and they had to be a member of the Kansas Grape Growers and Winemakers Association. In 2008, a tailgate workshop was held and 4,938 grape plants were planted on approximately nine acres. Cost-share funds were awarded to five vineyard owners who applied. The educational workshops attended by 260 student growers and wineries increased their knowledge of growing grapes and wine productions. Grape growers and wine makers were also able to network with national experts and share information about producing higher quality grapes and better wine. In 2009, 7.1 acres were planted with 3,900 vines. One of the vineyard sites has Crimson Cabernet planted on it. That variety is being used as a test site or sample vineyard to gather information for Cornell University. The varieties of plants that have been planted are Noiret, Crimson Cabernet, Traminette, Corot Noir, Aphrodite Cabernet Dore, Zinthiana, Vidal and Marquette. Winery owners are very interested in the varieties being planted and, on several occasions, have tried wines from these grapes grown in other states. A project goal to increase wine grapes acres (of 10 acres) was not only achieved but surpassed because a total of 28 new acres were planted. The first harvest will be Fall 2010, with increased output over the next two years as the grapes mature.
- The Kansas Department of Agriculture partnered with the Kansas State Horticulture Research and Extension Center to train beginning fruit and vegetable producers through Growing Growers which focuses on training and information sharing by offering monthly workshops and farm tours during the growing season. The workshops included both a local farmer and an extension professional as educators and a farm tour that allowed participants to see concepts applied. In 2008, Growing Growers held nine workshops, including a workshop on sustainable fruit production with a focus on tree fruit. This workshop drew a large number of attendees, including established conventional growers. In 2009 Growing Growers held ten workshops, including a workshop on sustainable fruit production focusing on native and other unique fruits. This workshop was also well attended. In 2009, 12 current or prospective growers participated in a six-session business planning course through the FastTrac entrepreneurship training program. Participants used the knowledge gained to apply for loans, form a business partnership, expand their operations, focus their marketing strategies and update their accounting systems. One participant planned a pick-your-own fruit farm, while another who had recently purchased land was considering using it for fruit production for sale through community supported agriculture (CSA) venture and farmers market. In 2010, 13 apprentices enrolled in the apprenticeship program, working or volunteering on six area farms. As of September 2010, nine apprentices were still active in the program. Workshop attendance remained strong during the grant period. Workshop attendees routinely gave positive feedback on evaluations, with the most common complaint being that too much information is offered. There are two 2010 apprentices who plan to continue working their host farms next year, one to help their host farm develop a CSA and another is to develop a community garden in Kansas City, Missouri.

- The Kansas Department of Agriculture partnered with Kansas State University (KSU) to research food safety, cleanliness, and price, perceived barriers to institutional purchases. Horticulture students used the KSU Horticultural student farm as a case study to conduct research projects to overcome those barriers. To research food safety issues, students tested the water sources at the farm, as well as soil extracts, and harvested food items before and after washing. Pricing and marketing issues were addressed by tracking weekly sales through the group's various outlets (farmers' markets, institutional sales, and in 2010 an on-line community supported sgriculture venture, or CSA). In addition, students determined crop yields, labor inputs, and other variable and fixed costs for several of the crops grown at the farm so that break-even budgets could be constructed on a crop by crop basis. A literature review of other vegetable farm budgets was also performed and summarized. The food safety testing showed that E. coli was not present in the harvested vegetables at the student farm, either before or after washing. Interestingly however, the normal soil coliform bacteria, often present on the lower stems of vegetables such as leafy greens were detected on the upper leaves more often after washing than before, indicating some distribution of bacteria during the washing process. Even though no animal manure was brought onto the student farm, and compost came from only vegetable based sources, occasional soil samples indicated low levels of E. coli. This was attributed to birds or wildlife such as rabbits because deer are fenced off the site and no livestock is raised in the vicinity. The well water tested negative for E. coli. It was concluded that food safety issues as a barrier to locally grown foods should not be an issue, unless a grower does not follow common sense rules of hygiene, such as washing hands before picking, only pick and pack into clean containers, etc. The data generated by the project is used in ongoing extension presentations, including the Kansas Greenhouse Growers Association and a division of the Kansas National Guard deploying to Afghanistan in late 2010 to increase production of vegetables and other crops in Lanham province.
- The Kansas Department of Agriculture partnered with the Kansas Rural Center to provide funds and assistance to 15 farmers' markets to promote their markets. All interested markets were also offered the three-part "Marketing the Market" workshop. The workshop included a presentation on such issues as research on consumer preferences and expectations; effectiveness of various forms of advertising; ideas for no- or low-cost promotion; signage; and methods to highlight specialty crops. The group assembled for the workshop also participated in a strategy session, where participants were asked to craft measurable goals by determining what the market needed to achieve and how they would evaluate success. At the conclusion of the workshop, the markets were invited to develop a mini-grant proposal to invest \$950 in market promotion. As a result of the marketing efforts such as improved signage and cooking demonstrations, eight markets reported an increase in sales, with an average increase of 20.8 percent, and an increase in attendance, with an average increase of 21.3 percent. All 11 existing markets expanded specialty crop diversity by introducing new fruits, tree nuts, container plants, varieties of cut flowers, and/or honey products. The 15 farmers markets ranged in size from seven to 81 vendors. Of the 406 vendors who participated in these markets, 302 were Kansas specialty crop producers. About 4,192 Kansans shopped at these markets.
- The Kansas Department of Agriculture partnered with the Kansas Grape Growers and Winemakers Association to print 20,000 four-color, tri-fold brochures to advertise the location of 26 wineries and vineyards across the state. The promotional materials were produced primarily for the Kansas State Fair, where the association maintains a presence promoting Kansas wines each year. The brochure contained a brief history of the association, and included the "Six S's of wine tasting" (see, swirl, sniff, sip, swish, swallow or spit). It also summarized the Kansas wine shipping laws, both for shipping Kansas wine out of the state and laws regarding wine shipped in to the state. According to anecdotal information, wineries reported increased sales after the distribution of the brochure. Traffic to the wineries increased and owners reported customers coming in either with the brochures in hand or mentioning that they had seen the winery on the map and stopped by.

The Kansas Department of Agriculture partnered with Kansas State University in collaboration with the Kansas City Center for Urban Agriculture (KCCUA) to assess the interest of immigrant farmers in ethnic specialty vegetables. An informal survey of growers of a number of Asian vegetables, led to the project evaluating ten sweet potato cultivars for leafy green production and 12 different edible gourds (hairy melon, bitter gourd, luffa and bottle melon) cultivars for yield and taste. The plots were replicated in both an open field environment and inside a high tunnel in order to observe if one growing method had better yields than the other. To determine if the ethnic vegetables were desirable to consumers, project staff distributed a series of taste-testing events and questionnaires to a variety of people including local community supported agriculture (CSA) members. They also publicized recipes on how to prepare the sweet potato greens and hairy melon in an effort to educate the public on the "exotic" food. As a result of these trials, a group of eight refugee farmers in the New Roots for Refugees program in Kansas City, Kansas continue to successfully grow and sell sweet potato greens at market. A new farmers market catering to African and other immigrants is planned, and the New Roots growers who are participating plan to grow and sell sweet potato greens and possibly moqua at that market. The Bad Seed Farm and Market in Kansas City, Missouri produced and sold sweet potato greens in 2009 and 2010. They shared recipes and maintained strong sales. The KCCUA CSA included moqua and sweet potato included in their shares, helping to bring variety to late summer shares. Customers were pleased to receive sweet potato greens at a time when leafy greens are typically rare.

Kentucky Department of Agriculture

Amount Funded: 102,827.56 **Number of Projects:** 6

- The Kentucky Department of Agriculture worked with restaurants and hotels to host chef cook-offs, product demonstrations, and media advertising to promote "Kentucky Proud" produce. An integral part of this project was the compilation of a hospitality kit, which functioned as a press kit for the specialty crop industry. This kit consisted of a folder that held a DVD that featured Kentucky specialty crop producers, two inserts meant for meeting planners and chefs, as well as other materials. Over 5,000 hospitality kits were produced and distributed by project staff and cooperative partners. Another strategy implemented by project staff focused on two events comprised entirely of locally produced ingredients, presentations product usage, and discussion on the elimination of institutional barriers. In fact, one event held at the University of Kentucky horticulture research farm presented a broad mix of 180 participants. These individuals represented hospitals, universities, state government, and private businesses as well as students, farmers, chefs and food distributors. The event included educational programs concerning organic farming practices, community supported agriculture, and the use of Kentucky grown foods in commercial foodservice settings.
- The Kentucky Department of Agriculture attended state and national events to promote the produce industry and purchased a produce-specific tradeshow display to attract potential customers. Specifically, project staff attended several events, which included the 2009 and 2010 Produce Marketing Association (PMA) Fresh Summit, the World Equestrian Games, and the Incredible Food Show. The 2009 and 2010 PMA Fresh Summit tradeshows provided an opportunity promote Kentucky produce as well as learn about company food safety plans, third party audits, the locally grown movement, new technology to promote specialty crops, as well as traceability of produce. The World Equestrian Games also enabled project staff to promote Kentucky's fall specialty crops (gourds, pumpkins, etc.) in the Kentucky Experience Courtyard. Over 500,000 people attended the games, which allowed the visitors' center and agricultural information desk to provide information on local producers. The specialty crops of Kentucky were also promoted at the main entryway of the Incredible Food Show. Project staff provided information to patrons and directed them to specialty crop producers to promote the sale of locally grown specialty crops.
- The Kentucky Department of Agriculture developed audience-specific directories, brochures, and video to inform interested individuals about "Kentucky Proud" produce. The informational video, "A Taste of Kentucky", was developed and distributed to over 100 interested parties, which include foodservice directors, cafeteria managers, extension agents, and wholesale buyers. "A Taste of Kentucky" is a seven-minute video that highlights and promotes the purchase of Kentucky's specialty crops. An availability chart for specialty crops was also developed that incorporates produce availability months and nutritional benefits of Kentucky specialty crops. This chart was distributed to all 120 extension offices, registered farmers' markets, tradeshows, school systems, and food service directors.

- The Kentucky Department of Agriculture developed a comprehensive wellness program that incorporated "Kentucky Proud" produce into schools and other institutions through sponsorship and food demonstrations. Specifically, this project maintained two components, which included an Eat to Win program and the creation and distribution of a specialty crop recipe card. The Eat to Win program utilized a visual medium marketing campaign that featured celebrity endorsements. Particularly, posters were developed and distributed to 120 counties in Kentucky for display at schools. Most counties reported displaying these posters in school lunchrooms or gymnasiums. Project staff also chose three recipes that featured multiple commodities for the recipe cards. Demonstration guides and media scripts were also developed for use by farm and community service agents featuring the three recipes. Approximately 60,000 recipe cards were printed and distributed to local families in order to promote the usage of local specialty crops.
- The Kentucky Department of Agriculture conducted a pilot program that experimented with institutional infrastructure and communication channels to increase the use of locally grown produce in schools and commercial cafeterias, conduct food demonstrations and sampling, and incorporate education for foodservice directors, lunchrooms materials, and promotional giveaways. Project staff facilitated 10 Farm-To-Fork events, from 2008 to 2010, that encouraged residents to buy local produce by fostering relationships among local producers, restaurants, retailers, tourism/hospitality entities, and residents. Through these events, the project staff also partnered with local chefs to showcase the specialty crops, which has led to more local specialty crops being purchased through local restaurants. Over 160 specialty crop growers were directly affected by the events that took place through this project. Additionally, attendance for these 10 events was reported at approximately 13,225, which doesn't account for print, radio and electronic media which also helped to promote buying local specialty crops.
- The Kentucky Department of Agriculture facilitated direct marketing seminars that focused efforts on assisting specialty crop producers find ways to increase their market share, improve product quality, and grow their customer base. These seminars took place at the inaugural Kentucky Agriculture Direct Marketing Conference held in Lexington, Kentucky in November 2009. Over 200 attendees and approximately 15 tradeshow exhibitors participated in this two-day event. The speakers helped producers focus on topics that included merchandise placement, signage, consumer buying trends, and how to set prices. While Kentucky producers learned from keynote speakers, they were also educated through the usage of farm tours. Each farm/business visited during the farm tour made an additional effort to answer questions that were asked during their presentations.

Louisiana Department of Agriculture and Forestry

Amount Funded: 104,950.42 Number of Projects: 7

- The Louisiana Department of Agriculture & Forestry developed and purchased radio, newspaper print and social media advertisements for Louisiana farmers' markets to inform the public as to their locations and hours of operation. The project also assisted farmers' market managers/organizers of small or beginning markets in developing an internet homepage on which to advertise their market locations, hours of operation and weekly availability of produce. A total of 444 advertisements aired to more than 1.1 million households. One station provided added value by matching 30 second spots with online messaging/streaming on their websites. Newspapers were chosen regionally throughout the state and an ad was designed and provided to each paper. Along with the print ad messaging, a new logo was included as well as the new website address to drive visitors to the website to find the listing of Louisiana farmers' market locations and hours of operation. A total of 11 print advertisements ran in newspapers throughout Louisiana to a circulation exposure of over 223,000 households. This project was also included in social media advertising through Facebook. During the approximately three months of run time, the ad was shown more than 4,000 times with an estimated reach of 1.2 million.
- The Louisiana Department of Agriculture & Forestry partnered with the Louisiana Strawberry Promotion Board to develop a focused TV ad campaign to increase strawberry sales. TV advertisements were 30 seconds in length and ran from two to four weeks on seven television stations, reaching approximately 2,778,294 households. To assess the success of the campaign, the team conducted a survey of ten percent of the state's strawberry producers. Fifty-five percent of those who participated in the survey reported an increase in sales during or after the spots aired. The average reported increase in sales was 20 percent.

- The Louisiana Department of Agriculture & Forestry (LDAF) partnered with Southern University to develop and implement a seminar on direct marketing for producers, market managers and organizers. The seminar was held in conjunction with the Louisiana Small Farmer Conference, as this provided an excellent opportunity to reach a large number of producers, especially small and minority farmers. Based on sign-in sheets, more than 63 individuals attended the conference and 55 of those were producers. Of those that attended the direct marketing seminar, 27 producers signed the attendance sheet; 13 other organizers and three farmers' markets were represented.
- The Louisiana Department of Agriculture & Forestry (LDAF) conducted two trade promotion activities to assist producers with costs and staffing associated with participation at local and regional trade shows. At the 2010 Louisiana Restaurant Association (LRA) Expo, LDAF sponsored a triple booth for specialty crop producers to display their products. The LRA Expo drew a crowd of more than 11,000 visitors who shopped at nearly 500 booths. More than 25 growers provided products such as: pecans, chestnuts, several varieties of watermelons and peaches, fresh figs and onions. In addition, the LDAF secured space at the 2011 North Louisiana Agri-Business Council Annual Expo (Ag Expo), at which nine producers were represented. Attendees were provided food samplings of fresh tomato salsa and new recipes featuring strawberries, blueberries, pecans and sweet potatoes. Producer information and recipe cards were disseminated to more than 13,000 attendees. Follow-up telephone surveys yielded a 50 percent response. The cumulative results of those surveyed show a minimum of \$316,000 increase in sales as a direct result of their participation in the trade show project.
- The Louisiana Department of Agriculture & Forestry (LDAF) worked to stimulate increased sales of specialty crops and to improve consumer awareness of local products by providing materials and supplies to growers, wholesalers, and retailers. LDAF contracted with an advertising firm to work directly with retailers and producers to identify the types of point of sale material that would be most beneficial, design the materials, and purchase and distribute the pieces. Five thousand bin signs were purchased and distributed to more than 30 farmers' markets and 300 producers. Twenty-five thousand shelf talkers were developed and provided to producers to distribute to their merchants, to farmers' markets and to Louisiana retailers to display in their stores. Retailers and producers reported that the distributed materials were a valuable tool that created awareness of the local products available. Several retailers expressed their commitment to purchase more local produce due to requests from their customer base.
- The Louisiana Department of Agriculture & Forestry developed and implemented a product demonstration program featuring Louisiana produced specialty crops. The demonstrations featured new and reinforced current uses of specialty crops at the point of sale. Project staff conducted 86 specialty crop product demonstrations at LeBlanc, Whole Foods, Louisiana Breaux Mart and Matherne's Supermarket. Breaux Mart reported an average increase in sales of 116 percent related to the five demonstrations conducted in its stores. Overall, of the 17 locations that hosted product demonstrations, they all reported increased sales. When taking the average percentage of increased sales from each of the four participating retailers, the increased sales for the entire project resulted in an average of 63 percent.
- The Louisiana Department of Agriculture & Forestry developed, produced and distributed recipe cards, nutritional information, brochures and other material promoting Louisiana specialty crops. A total of 50,000 recipe brochures featuring several spring and summer specialty crops that appeal to consumers were purchased. Staff worked to create a branding logo, LOUISIANAGROWN REAL. FRESH. that could be used by all specialty crop producers and would be easily recognized by consumers to help the public better identify local specialty crop products. Twenty-two thousand plastic shopping bags with the newly designed logo and website address were also produced and distributed to farmers' markets and roadside stands to promote the brand and message of buying local to consumers.

Maine Department of Agriculture, Food and Rural Resources

Amount Funded: 105,806.75 **Number of Projects:** 3

• The Maine Department of Agriculture, Food and Rural Resources developed an online promotional website and updated their current database to allow specialty crop producers easy access to post their farm information. The easy to use updated database resulted in over 1058 farms posting their information, an increase of almost 76 percent over the initial database back in 2007. The farm information is available on www.getrealmaine.com where a consumer can search by county, city, zip code, or by a specific specialty crop to find a farm.

- The Maine Department of Agriculture, Food and Rural Resources developed, printed and distributed three newspaper inserts for statewide publications during the growing and harvest season. The inserts provided timely announcements to consumers throughout the state highlighting specialty crops that were "currently" available and where to get them. In the fall of 2007, project staff conducted a scientifically based focus group in which consumers were asked questions concerning how and why they purchase local foods. In addition, they were asked how they would best like to receive information about the availability of local foods. The focus group's overwhelming response was that they would like to see information included in weekly newspaper inserts with the other grocery sale fliers and coupons. Based on this information, the Department entered into an agreement with one of the two largest statewide newspaper organizations in the state to produce inserts with pertinent and timely information concerning the availability of specialty crops at three different times throughout the growing and harvest seasons. The inserts also included suggested uses for the specialty crop that included recipes and nutritional information. The newspapers were distributed to over 600,000 Maine consumers on three different occasions during the season.
- The Maine Department of Agriculture, Food and Rural Resources worked with Harvest New England to assist specialty crop producers with advertising opportunities and promotional materials, including exhibits at regional events. Specifically, the six New England states that are represented in Harvest New England (Maine, Vermont, New Hampshire, Massachusetts, Rhode Island and Connecticut) coordinated the 2009 Direct Marketing Conference. The conference, which was attended by more than 800 producers, was designed to assist producers in marketing their specialty crops direct to consumers and wholesalers. Pamphlets and point-of-sale materials were provided to enhance the visibility of New England products. This conference was positively met by the public as its attendance increased by 20 percent to 800 participants in 2009 over the previous year.

Maryland Department of Agriculture

Amount Funded: 111,602.37 Number of Projects: 3

- The Maryland Department of Agriculture to enhance the Maryland's Best "buy local" program through improving the website (www.marylandsbest.net) and various promotions for retail and wholesale markets to increasingly link local farmers with consumers. The Maryland's Best website was redesigned to create a user-friendly interface that contains more content and can connect with other electronic promotional outlets, such as social media. After the website redesign, the website experienced 85,511 visits June 2008 to August 2010. Project staff also updated several promotional tools, which included the Maryland's Best brochure, point of sales materials, and a "Buy Local" brochure. A buyer-grower meeting was also hosted in 2009 to increase the sales of Maryland producers. Approximately 200 people participated in this event including buyers from grocery store chains, universities, and brokers. These promotional efforts helped increase the market for local products in the state, with more than 78 percent of Marylanders saying they would prefer to buy food grown in Maryland.
- The Maryland Department of Agriculture created a promotional program to increase student awareness and consumption of Maryland-grown fruits and vegetables and promoted partnerships involving local businesses, parents, and other interested citizens. Specifically, project staff held two events: the Homegrown School Lunch Week and the Farm to School Workshop. In 2008, the Homegrown School Lunch Week featured locally-grown products, such as apples and zucchini, in school cafeterias throughout 22 of the 24 school jurisdictions. The Farm to School Workshop, held in 2009, offered Maryland farmers the opportunity to network with school district personnel and share information on how to increase child consumption of healthy, locally-grown food. This workshop served over 140 participants. A website was also created by the project staff for Maryland's Farm to School program (www.marylandfarmtoschool.com). This website serves as a source of information for students, parents, food service providers and farmers.
- The Maryland Department of Agriculture created a Good Handling Practices and Good Agricultural Practices (GHP/GAP) cost-share program to alleviate some of the economic barriers associated with the implementation of the GHP/GAP certification program for Maryland fresh fruit and vegetable producers. As part of the process to receive a cost-share reimbursement, specialty crop producers were required to receive an audit from the Food Quality Assurance Program (FQAP) to provide independent verification and certification of compliance with GHP/GAP for fresh fruit and vegetable production. Producers then applied for a reimbursement after they received their certification. The FQAP program experienced a 30 percent increase in telephone calls and emails from producers interested in cost-share assistance. By the end of this project, eleven Maryland farmers became GHP/GAP certified.

Massachusetts Department of Agricultural Resources

Amount Funded: 107,596.35 **Number of Projects:** 3

- The Massachusetts Department of Agricultural Resources (MDAR) promoted the "Massachusetts Grown and Fresher" logo through a two-pronged effort: a media initiative to reinvigorate the "Massachusetts Grown and Fresher Program" and a grant program for Buy Local and Commodity Groups throughout Massachusetts. As part of the media initiative, MDAR redesigned the "Massachusetts Grown and Fresher" website, produced and distributed new marketing materials, and provided a tent that was used in many events, including a mall tour. Within the first year, the website experienced a 56 percent increase in web traffic. In addition, the featured online map designed to help consumers identify the local providers of specialty crops has experienced a 60 percent increase in traffic. These marketing efforts provided the foundation of a program run by the Massachusetts Bay Transit Authority, which is continuing to drive people the "Massachusetts Grown and Fresher" website. At the same time, the grant program encouraged the use of the "Massachusetts Grown and Fresher" logo by commodity groups. Ten local groups incorporated the brand into their existing or new print and other media campaigns through this project.
- The Massachusetts Department of Agricultural Resources (MDAR) created the Commonwealth Quality Program (CQP),
 designed to identify producers who have met food safety requirements. MDAR developed standards for the program and
 worked with a marketing firm to design the promotional plan including the logo, seal, tagline, and promotional materials.
 Ultimately, the program was launched with the distribution of posters, rack cards, data sheets, and brochures. By the end
 of the project, there were approximately 40 certified CQP operators in the state.
- The Massachusetts Department of Agricultural Resources (MDAR) partnered with other New England Departments of
 Agriculture to support the Harvest New England Agricultural Marketing Conference and Trade Show. More than 800
 individuals attended the three-day conference, where they participated in workshops and sessions focusing on agritourism, farmers' markets, and culinary tourism, among other topics of interest to specialty crop producers.

Michigan Department of Agriculture and Rural Development

Amount Funded: 136,342.33 **Number of Projects:** 5

- The Michigan Department of Agriculture partnered with Select Michigan, Eden Foods and WJR Radio in Detroit to create a new 60 minute radio program; Come to the Table. The over-arching concept of the program was to engage the general public about the importance of good, clean, fair foods. Michigan's specialty crops and/or issues that impact the competiveness of specialty crops were featured in all of the episodes. The radio program aired every Sunday night from 7-8 PM and a total of 34 segments were produced. The podcast can be listened to on the archived section of the WJR website at http://wjr.com/sectional.asp?id=24708. Each segment reached 15,000-20,000 listeners throughout WJR's broadcast region. That resulted in the 34 programs being heard by between 510,000 to 680,000 consumers of Michigan specialty crops.
- The Michigan Department of Agriculture Select Michigan staff organized, promoted, and conducted three Special Farmers Markets during the 2008 growing season. In cooperation with the Michigan Food and Farming Systems, Michigan Farmers Market Association, and/or the Food Bank Council of Michigan, two markets were held on the east lawn of the State Capitol on July 24 and September 24, 2008. A third market was conducted at the Henry Ford Hospital Campus in Detroit on August 22, 2008. This was the second year of these special markets. Forty-four companies participated in the July market of which 40 featured specialty crops. This represented an increase in vendor participation of 110 percent over 2007. Farmers market staff reported total sales of \$26,184.22 for 2008, an 84 percent increase over 2007. Fifty-eight companies participated at the September 2008 market. This represented an increase in participation of 41 percent over the 2007 September market. Farmers market staff reported total sales of \$55,569.00, an average of \$1,208.02 sales per reporting vendor. This was an increase of 128 percent in reported sales and 54 percent in sales per reporting vendor. Nineteen companies participated in the third market. All vendors either sold specialty crop products or included them as ingredients in their products. Farmers market staff reported total sales of \$6,542.00 for 2008, a 71 percent increase over 2007. Vendors reported their sales averaged \$934.57 versus \$381.50 in 2007 or a 145 percent increase.

- The Michigan Department of Agriculture Select Michigan Program hosted a Select Michigan Pavilion of Michigan companies at the Associated Food and Petroleum Dealers Trade Show in April 2008 to highlight the quality and diversity of Michigan's specialty crops. Booth space was discounted for the eight specialty crop companies who participated in the show. The participating companies reported they gained 110 total contacts/leads at the show. The companies were asked to rate the importance of their company's objectives in participating in the show, as well as the show's effectiveness in helping their company meet their objectives. The survey showed that 60 percent of the respondents reported those contacts as very good and 80 percent of the companies indicated that they expected to see an increase in sales resulting from their participation in the event. Additionally, the Michigan Department of Agriculture hosted a "Meet the Buyers" reception held at the Great Lakes Expo in December 2008. The purpose of the reception was to introduce specialty crop growers and businesses to potential retail buyers and work towards getting more Michigan produce onto store shelves and into restaurants. It was organized and promoted by Michigan Food and Farming Systems and Select Michigan. The event attracted almost 50 buyers and 100 growers. The event achieved the goal of creating an opportunity for producers and buyers to meet face to face. Buyers were impressed with the quality of the products and the growers they met.
- The Michigan Department of Agriculture conducted retail marketing campaigns in 2008 for Michigan peaches (August), blueberries (July-August), and apples (September, October, and November). This project was developed to benefit consumers in underserved areas and to prove to retailers there is demand in these areas for locally grown fresh fruits and vegetables. Spartan stores used In-store radio to promote the specialty crops for a total of 14 weeks airing messages each hour (24) every day of the week creating 347,424 consumer impressions. The Made in Michigan show was also used to promote the retail campaign. During the summer, the show is watched by nearly 56,000 viewers and in the fall by an average of 39,000. Peach and blueberries had 112,000 viewers, and apples had a total of 78,000 viewers. The goal of these promotions was to increase product movement over 2007 by 5-10 percent assuming a staple source of product.
- The Michigan Department of Agriculture created a variety of point of sale and other educational materials that could be used at retail and or events to promote the use of Michigan specialty crops. Specifically, project staff created and distributed a Select Michigan program brochure featuring Michigan specialty crops at multiple public venues. The brochure was also made available on the SelectMichigan.org website. Growers and retailers used recipe cards and bag stuffers that were produced and retailers and distributed were provided large two-foot Select Michigan ovals. A major produce distributor purchased these signs to hang in all the stores where they distributed. Also, several stores were provided and used Michigan Asparagus and Apple easel/pedestal signs. This project resulted in the use of Select Michigan signage increasing by 10 percent through the addition of several new sign offerings and distribution of 2000 new brochures and almost 7000 recipe cards/flyers.

Minnesota Department of Agriculture

Amount Funded: 113,274.97 **Number of Projects:** 3

- The Minnesota Department of Agriculture partnered with the Northern Plains Potato Growers Association and the North Dakota Department of Agriculture to maximize profits for the potato growers in North Dakota and Minnesota through an accelerated breeding program, producer education program, marketing and promotional initiatives, and improving the financial position of process growers through improved negotiated agreements. The marketing and promotional initiatives helped grow the potato program and compete with other major potato growing regions. The return to growers has increased \$5.25 per cwt. compared to the previous year which should add \$20 million in local grower value. Project staff held training sessions for process bargaining negotiation teams and as a result 2009 process potato price contracts increased by 30 percent which will yield an additional \$23,000,000. The number of varieties released from the potato breeding program in cooperation with North Dakota State University and University of Minnesota continued to increase. The beneficiaries of the project include 350 potato growers from Minnesota and North Dakota.
- The Minnesota Department of Agriculture partnered with the Northarvest Bean Growers Association and the North Dakota Department of Agriculture to organize efforts leading to scientifically credible health claims on dry beans. A management consultant was commissioned to develop a dry bean health research incentive program to attract top researchers from around the country with incentive awards. An application form was published encouraging researchers to submit dry bean and human health research projects. The process yielded 34 applicants that were reviewed, screened, and ranked by a peer review panel. The panel made recommendations for the support of ten proposals. The outcomes expected of this long term project will include the initiation of research programs and the production of peer-reviewed articles useful to the support of health claims at the level of the Food and Drug Administration.

• The Minnesota Department of Agriculture enhanced the Minnesota Grown Program by developing new and improved point-of-sale materials, new television advertisings scripts, more strategic integration of the program's spokesperson, the program's website and printed Directory. Project staff integrated custom photography of spokesperson Carrie Tollefson into new marketing materials as well as on a television ad to promote the GardenMinnesota.com website during 2008. Custom photos for 11 farm families who market through restaurants and/or grocery stores are available for use by those grocery stores and restaurants. The number of Minnesota Grown Directories printed increased from 175,000 in 2007 to 185,000 in 2008. The online Directory was updated to include new mapping capabilities and the ability for the consumer to select individual farms to print a customized Directory from their own computer. The number of unique visitors using the online Directory was 54,000 in 2007 and doubled in 2008 to 138,000 visitors. The traffic to the www.minnesotagrown.com website through pay-per-click advertising with Google and Yahoo resulted in annual total of unique visitors increasing more than seven-fold from 2006 to 2008. This project provided direct benefit to more than 700 specialty crop producers listed in the Minnesota Grown Directory.

Mississippi Department of Agriculture and Commerce

Amount Funded: 103,626.70 **Number of Projects:** 7

- The Mississippi Department of Agriculture and Commerce (MDAC) developed a certification program that gives brand recognition to Mississippi's farmers markets. Project staff established the Mississippi Farmers Market Certification Program criteria and developed a logo for the program that certified markets can use on promotional materials. In order to be recognized by the MDAC as a Mississippi Certified Farmers Market, the participating markets must meet specific criteria developed by MDAC. In the spring of 2008, 2009, and 2010, MDAC distributed packets with program information, including guidelines and applications, to all known farmers markets across Mississippi. As new markets developed, they were sent information as well. Upon the receipt of applications from markets requesting to be certified, MDAC staff visited each market to verify that it was a true farmers market with farmers selling produce that they grew and not just a flea market or roadside stand. The certified markets received a framed logo to display in their market, stickers with the logo that farmers can use on packaging, pricing cards with the logo showing that the produce being sold is Mississippi grown, and permission to use the logo on their own promotional materials. The certified markets were also recognized and promoted by MDAC through various other means such as radio and newspaper advertising. In 2010, 50 percent of the 58 markets were certified which was up from 2008 when 39% of the 19 markets were certified. Since the program's inception, 33 markets or 57 percent have participated in the program at least one year and 12 markets have participated in the program each of the three years it has been offered.
- The Mississippi Department of Agriculture and Commerce promoted "Mississippi Certified" farmers markets and specialty crops statewide through a live weekly radio broadcast, print advertising, radio advertising, website, the development of a farmers' market cookbook, and promotional materials. Many consumers are uninformed of where these markets are located or that they even exist. As additional markets are established, it is important that consumers know where they can buy fresh, locally-grown produce that they crave. With Mississippi having the highest obesity rate in the nation, it is also imperative that consumers are educated on the benefits of eating fresh fruits and vegetables. Farmers' market managers were surveyed in 2010, with fifteen markets responding. Eighty-six percent of the markets indicated that the number of consumers shopping at the market had increased from 2009 to 2010. The average increase in the number of shoppers per market was 24 percent. In addition, the cookbook "500 Fresh Not Frozen", was a tremendous success and was awarded the 2010 GOLD ADDY Award for Best Design and the Award of Excellence from the Printing Industry Association of the South.
- The Mississippi Department of Agriculture and Commerce (MDAC) promoted the WIC and Senior Farmers Market Nutrition Programs (SFMNP) and the farmers markets participating in the program in order to increase the redemption rate of the vouchers that are distributed to individuals as part of the program. The MDAC, in collaboration with the Area Agency on Aging and the WIC Centers in selected communities distributed materials. Through this activity, recipients of the vouchers were made aware of locations and operating times of local authorized farmers markets where they could redeem their vouchers. Voucher recipients also gained knowledge on what to look for at farmers markets and produce availability through the printed materials that were created. Farmers markets accepting the vouchers also experienced positive impacts from the program. Several growers reported that sales from FMNP vouchers accounted for twenty-five to sixty-five percent of their business. From 2008 to 2010 the WIC redemption rate averaged fifty percent for a dollar value of \$50,116, and SFMNP redemption rate averaged 71 percent for a dollar value of \$76,257.

- The Mississippi Department of Agriculture and Commerce conducted beekeeping field days and workshops for beekeepers in various locations throughout the state. In particular, seven workshops were held with a total attendance of 598. The workshops exposed beekeepers to a broad range of information from the basics of beekeeping to more advanced topics such as integrated pest management. Hands-on field exercises, which gave the beekeepers a more up close look at beehive management, were also included. These were the first workshops to be offered to commercial beekeepers in Mississippi in 30 years.
- The Mississippi Department of Agriculture and Commerce collaborated with the Mississippi State University Extension Service and the Mississippi Fruit and Vegetable Growers Association to develop workshops designed to educate specialty crop producers and farmers' market managers on how to grow crops and successfully sell their produce. The eight workshops were attended by 342 growers and farmers. Seven of the workshops were designed specifically for specialty crop growers, while one was for farmers market managers. In addition, since high tunnel use to expand the growing season is a fairly new production method in Mississippi, a High Tunnel Field Day was added to the agenda. The field day was an opportunity to provide additional assistance to growers in that area. Nearly 300 growers attended the field day. At the conclusion of the workshops, growers' surveys reported that 51 percent said they would increase the variety of crops they grow as a result of the knowledge gained from the workshops. The Farmers Market Manager workshop was attended by representative from 20 markets across the state. There were also a few attendees that stated they were interested in establishing markets in their areas of the state.
- The Mississippi Department of Agriculture and Commerce (MDAC) promoted Mississippi's specialty crops at themed events held at the Mississippi Farmers' Market. Specifically, the Mississippi Farmers' Market hosted a total of 20 events that highlighted specialty crops through a variety of themes including "Celebrate Field Tomatoes", "Farmer Appreciation Day", "Watermelon Bonanza", and "Fall Harvest Fest". These events were advertised through a variety of media outlets that included radio, print, and television. A "Chef's Corner" was also featured where local chefs prepared unique dishes using fresh produce that was currently available at the market. Project staff also implemented a statewide radio campaign that encouraged consumers to shop at local farmers' markets. The radio spots referenced the MDAC website that lists all of the markets in the state. These themed events effectively increased the number of farmers that sold product at the market during the peak of the produce season (June-September) by 80 percent from 2009 (10) to 2010 (18).
- The Mississippi Department of Agriculture and Commerce conducted a cook-off competition at the Mississippi Farmers Market using fresh Mississippi grown fruits and vegetables. The cook-off which was entitled "The Next Great Mississippi Homegrown Recipe Contest", consisted of nine non-professional chefs who made their favorite dishes using specialty crops. In order to expand the event, in size and participation, it was presented in two stages with the winners of a recipe contest competing in a cook-off contest. Prior to the event, a statewide ad was distributed asking for recipes that included at least 25 percent Mississippi-grown fruits and vegetables. The top three recipes from three categories (appetizers, casseroles, and desserts) were selected. The prepared dishes were judged based on originality, taste, the utilization of fruits and vegetables, and presentation by professional chefs. A winner from each category was selected, with an overall grand prize winner. Market shoppers also had an opportunity to taste samples of the winning dish. This event attracted more than 5,000 shoppers. The cooking competition acquainted chefs and consumers with using available fresh produce from the markets, while exposing them to the benefits of cooking locally-grown produce along with the ease of preparation.

Missouri Department of Agriculture

Amount Funded: 104,289.46 Number of Projects: 4

- The Missouri Department of Agriculture partnered with the University of Missouri to help stimulate the development of a chestnut industry in Missouri through the establishment of working orchards linked to extensive grower training for new producers, Missouri University Extension specialists, and Future Farmers of America (FFA) students. Project staff established a demonstration orchard in order to serve as a site for future hands-on workshops in orchard establishment and maintenance for prospective new growers, extension specialists, and FFA chapters. Four hands-on chestnut production workshops were also offered during strategically selected phases of the growing season to optimize demonstration and learning opportunities. Workshop topics included site selection and preparation, planting and grafting efforts, orchard pruning and cultural techniques, maintenance, harvest and post-harvest chestnut efforts, as well as marketing and sales. Over the period of this project, a total of 60 individuals attended the chestnut workshop series. Project staff also hosted a specialty crop field day for 200 FFA students from four schools as well as a specialty crop festival. These field days expanded the awareness of current and potential grape and chestnut growers about essential aspects of successful wine grape and chestnut production.
- The Missouri Department of Agriculture partnered with the University of Missouri to introduce Future Farmers of America (FFA) students to viticulture through educational opportunities such as workshops, in-field experiences, and larger special events that provide the essential aspects of winegrape production. Specifically, project staff conducted seven workshops for students that presented a broad range of topics including site selection and preparation, cultivar selection, pest management, vine training, and the economics of vineyard establishment and operation. A demonstration vineyard was also established and served as the site for in-field discussions and demonstrations. The project staff plans to use this vineyard to provide continuous in-field educational opportunities for interested individuals. The project staff also facilitated three different winegrape/specialty crop events, which included a Multi-State and FFA Viticulture Field Day, an FFA Specialty Crops Field Day, and a Specialty Crops Festival. These events were attended by over 1,000 participants and topics ranged from vineyard planning and development to grape cultivars and rootstocks. They also featured activities that included lectures, hands-on demonstrations, and children's activities.
- The Missouri Department of Agriculture worked with several Future Farmers of America (FFA) chapters to promote the purchase of local specialty crops at Missouri farmers' markets. Specifically, 18 FFA students and eight chapters participated in the purchase of equipment and specialty crop seed to start or continue their supervised agricultural experience project. These students and FFA chapters grew specialty crops throughout the summer and sold them at farmers' markets or roadside stands. Project staff developed and distributed teaching aids to assist students with the marketing of their specialty crop products while eight specialty crop producers actively mentored these students. Project staff also assisted FFA students in the development of a radio advertising campaign to promote buying local specialty crops throughout Missouri. Students learned marketing practices from a marketing specialist via promotional material examples and onsite visits. The students also received assistance in the development of signage, brochures, banners, and promotions of specialty crop events in the region to help promote regional agri-tourism.
- The Missouri Department of Agriculture offered eligible farmers' markets access to electronic benefit transfer (EBT) wireless machines, which enabled lower income families an opportunity to purchase fresh foods and vegetables at their local farmers' markets. Project staff placed wireless EBT machines in 17 markets across the state of Missouri, focusing on counties populated with lower income families. This effort promoted increased access of low-income Supplemental Nutrition Assistance Program (SNAP) recipients' to healthier food and increased sales for Missouri markets. Marketing materials such as posters were also distributed to venues including the State Fair. Consequently, farmers' markets were able to increase the accessibility of locally produced specialty crop to EBT cardholders. In fact, 2008 data reported by participating farmers' markets indicated that sales increased by an average of four percent.

Montana Department of Agriculture

Amount Funded: 102,726.15 Number of Projects: 4

• The Montana Department of Agriculture partnered with the Flathead and Lake Counties Cherry Fruit Fly Advisory Board to identify all the sources of the Western Cherry Fruit Fly in the Pest Management Area (PMA). Control activities focused the evaluation of two specific locations that were a chronic source of infestation. The growers at these locations were provided control measures to follow. Later, project staff trapped the trees at these locations where results indicated there were no fruit flies or were very few sites exceeding the standard for the allowable number of fruit flies per trap. Project funding sustained the program during a critical period so that there was no loss of continuity in the program. The project also improved the credibility and acceptance of the program among growers, substantially reduced the overall occurrence of the Western Cherry Fruit Fly within the PMA, and furthered the knowledge of the wild reservoirs where this pest is found.

- The Montana Department of Agriculture partnered with BVS, Inc. to demonstrate a new technology for honey bee health management and pathogen screening, known as Integrated Virus Detection System (IVDS), which was developed by the Army's Edgewood Chemical and Biological Center. During the first year of the project, BVS, Inc. collected and processed nearly 700 samples from Montana beekeepers and converted the data into reports delivered to 20 different beekeepers. Modifications of the support equipment increased throughput from six to 18 samples per day. In the second year BVS, Inc. processed over 1100 samples. The project team achieved significant results including the discovery for treatment of viral infections in bees (current research project partially funded by Project Apis m) and the use of monitoring over time to evaluate the health of a bee population. The first year results were reported in the form of bar charts and notation of the viral loads carried in the bees sampled. Reports in the second year were modified to reflect the greater detail of a line chart that could overlay the sequential data for the year.
- The Montana Department of Agriculture partnered with the Montana Field Office (MTFO) of the National Agricultural Statistics Service to provide county level estimates for a variety of specialty crops including dry edible peas, lentils, Austrian winter peas, and dry edible beans which includes pinto beans and both large and small chickpeas. These crops are small acreage crops with little or no historical information known about them. The MTFO selected a sample of the growers of these crops and then contacted them, mostly by telephone but also by a personal visit, to ask for acreage and production information. The response rate for the overall survey was about 70 percent. Annually, the MFTO publishes the county estimates by April 30. These detailed county estimates helped the Montana Department of Agriculture in marketing efforts with regard to these crops by knowing where they are located and in what quantities.
- The Montana Department of Agriculture (MDA) facilitated international marketing of specialty crops; developed enhanced forms for organic certification of specialty crop producers; and trained program staff to better understand and serve specialty crop growers. In 2008, the Organic Grower Awareness Campaign was publicized to promote the opportunities available in the organic market and to encourage crop producers to consider organic production. MDA negotiated a cooperative agreement with the Washington State Department of Agriculture (WSDA) to provide Montana organic growers with international certifications. Under this agreement, MDA acts as an inspection body for WSDA. MDA conducts the on-site inspections and provides reports to WSDA, which issues the international certifications. Additionally, MDA contracted with the National Center for Appropriate Technology to develop Organic System Plan forms that better accommodate the needs of specialty crop growers. The new forms are shorter, have more pertinent questions and have fewer questions that are "not applicable" to operators. Funding was also used to support a number of training opportunities for certification program staff in 2008 and 2009. In 2007, MDA certified 88 organic crop producers, including 45 growers of specialty crops. By the end of 2009, there were 105 certified crop producers and 64 specialty crop growers. This represents a 19 percent increase in the number of organic crop producers and a 42 percent increase in specialty crop growers. The percentage of organic growers producing specialty crops increased from 51 percent to 61 percent.

Nebraska State Department of Agriculture

Amount Funded: 104,133.83 **Number of Projects:** 5

- The Nebraska Department of Agriculture (NDA) helped farmers' markets and individual producers market their fruits and vegetables using Nebraska Our Best to You promotional materials, worked with two major Nebraska grocers to include Nebraska Our Best to You signage in their stores, and encouraged the purchase of locally grown produce by working with a major company that will promote locally grown produce to its employees. After conducting an assessment of the fresh produce growers on how to best help farmers' markets and producers, project staff decided that the creation and distribution of fresh produce marketing materials and newspaper advertisements were the most effective method that would encourage a large number of consumers to frequent Nebraska produce stands, increase the consumption of locally grown produce, educate consumers about the health benefits and availability of Nebraska-grown fruits and vegetables, and increase the financial benefits and profits of new and existing markets and farm stands. The efforts of this project resulted in an increase in the number of farmers registered with NDA from 390 in May 2008 to 538 in June 2009. Surveys were sent to all NDA certified producers, 72 of which were returned to NDA. From this amount, 29 producers indicated they experienced an increase in produce sales through the promotion of the Nebraska Our Best to You logo in 2008. On average, surveyed producers experienced a 13.3 percent increase in produce sales. Additionally, NDA formed a collaborative partnership with WorkWell, Inc., that selected two Nebraska companies that agreed to actively promote locally grown products to their employees, Cornhusker Bank and Foundation for Educational Services. Specialty Crop Block Grant Program funds were used to create promotional materials which were available to company employees upon completion of the pre- and post-surveys. A total of 189 employees completed the pre-survey. A total of 102 respondents completed the post-survey. The results of the surveys were compared to determine the potential changes in participant awareness of local produce availability and the purchasing patterns of locally grown fruits and vegetables. NDA anticipated an increase of 10 percent in each measure. Both outcomes far exceeded this goal.
- The Nebraska Department of Agriculture partnered with the University of Nebraska to document the distribution and incidence of a pathogen linked to the disease bacterial wilt naturally occurring in production fields consisting of alternate crops grown in rotation with dry beans. Between early July and mid-September 2008, production fields were scouted for symptoms consistent with bacterial infections. The survey for the entire season consisted of 212 fields and represented 11 counties in western Nebraska. From this survey of fields, 270 symptomatic samples were observed, brought to the Panhandle Plant Pathology Lab, and processed for identification of potential bacterial infections. These total number of samples from each crop or plant type included: alfalfa (2), bromegrass (10), chicory (3), corn (59), dry beans (97), eggplant (1), unknown grass weeds (5), millet – proso and foxtail (15), forage peas (2), soybeans (5), sunflowers (43), sugar beets (6), triticale (2), and wheat (20). Thirty five Gram positive (the bacterial wilt pathogen of dry beans is Gram +) samples were identified from the remaining crop and weed plants (19 percent of non-dry bean samples and 12 percent of all samples). After evaluation, the only isolates that proved to be pathogenic on dry beans included the two alfalfa isolates, and an additional one from wheat. However, at the conclusion of the project, it was determined that to confirm the pathogenicity of all isolates, inoculations would need to repeated a second time. Another factor to consider for 2008, is that the overall incidence of bacterial wilt in dry beans was lower than in the last three to four years. This is presumed to be due at least in part to the cooler and wetter conditions during August that was experienced in the western portion of the state in 2008. Since overall wilt incidence and severity in dry beans was lower in 2008 than previous years, perhaps this could also explain fewer wilt isolates found in association with other crops. These findings could affect eight to ten seed companies and how they screen seed lots for disease presence. Approximately 2,500 Nebraska producers, 80 crop consultants, and field scouts will benefit from this research because new scientific findings such as these would require practical methods for management to be developed.

- The Nebraska Department of Agriculture partnered with the University of Nebraska to evaluate hazelnut genotypes to determine if they showed high nut yields and oil contents. Project staff evaluated 20 hazelnut genotypes grown in Nebraska in 2007 and 2008 to determine the physical-chemical characteristics in terms of nut and kernel quality traits, proximate composition, chemical properties of oil, and amino acid profiles The results suggested that Nebraska hybrid hazelnut's high oil content, unique fatty acid profile, and lower saponification number, iodine value and free fatty acid makes Nebraska hazelnut oil a promising feedstock for food and industrial applications. This supported the initiative to further develop value-added applications. The high arginine levels and low lysine/arginine ratio in Nebraska hazelnut meals could help to relax the blood vessels and reduce atheroslerosis development. These results suggest that Nebraska hybrid hazelnuts are a potential resource for human and animal food. Enterprise budget estimates for the production of hybrid hazelnut oil from top yielding plants and under current national energy policies indicates net returns of \$174 per acre, per year beginning in the sixth year after establishment. It is anticipated that the development and establishment of market opportunities for hazelnuts will lead to substantial adaptation of this oilseed crop by many producers. Currently, Nebraska has well over 100 specialty nut crop producers, many of whom have joined together to form the Nut Growers Cooperative. The University of Nebraska developed a comprehensive report on nut traits and nutritional properties and submitted a manuscript based on the report to the Journal of Industrial Crops and Industries to be published in July. Publication in this international journal will describe the scientific work performed on tree nuts and hazelnuts. This paper will also be posted at www.agproducts.unl.edu.
- The Nebraska Department of Agriculture partnered with the GreatPlants® for the Great Plains program in collaboration between the Nebraska Nursery and Landscape Association and the Nebraska Statewide Arboretum aimed at selecting, introducing, and promoting superior landscape plants for Nebraska and the Great Plains. Project staff promoted horticulture throughout Nebraska by establishing a new consumer newspaper entitled, Natures Companion, which is a quarterly publication. News articles, written by industry professionals, discuss topics that pertain to home gardeners, floral shops, landscapers, and nurseries. The intent of this newspaper was to create specialty markets for native plant material while introducing hardy plants to consumers across the state. As anticipated, 6,000 copies of the first newspaper edition and over 10,000 of their quarterly editions were distributed and made accessible to interested parties. The industry populations responded positively to the newspaper and they look forward to information that focuses on plants, products, equipment, and growing techniques. The newspaper is also used as an educational marketing tool, and will likely gain momentum from botany enthusiasts. Several businesses have shown support for the publication by placing their advertisements in each edition, which makes the newspaper self-supporting and relatively inexpensive. Plant royalties are paying great dividends to the Great Plains region. Wholesale nurseries who sell native plants pay royalties ranging from \$0.10 to \$1.00 per plant. These funds are used in cooperation with the Nebraska Statewide Arboretum to develop educational programs, host workshops, and collect seeds and superior plants found among Nebraska's landscape.
- The Nebraska Department of Agriculture partnered with the Potato Certification Association of Nebraska to assist with the funding of the second year of training of an individual who is the primary resource person in the state for potato phytosanitary issues, is responsible for enforcing all regulations associated with the seed potato program, and coordinates the visual and laboratory testing that is necessary for domestic and international export of Nebraska seed potatoes. The training resulted in the individual being licensed in potato market inspection and will serve as the new manager of the Nebraska's potato certification program. The seed potato industry in Nebraska generates approximately \$3 million annually to the state's agriculture economy. There are nine certified seed growing operations and 16 commercial potato growers in Nebraska. The commercial growers harvested 19,400 acres of potatoes in 2006. Nearly 100 percent of the seed potatoes used to plant these commercial acres originated from Nebraska's nine certified seed potato operations. The growers and certified growing operations will benefit from now that the Nebraska's new program manager has been hired and trained.

Nevada Department of Agriculture

Amount Funded: 101,478.01 **Number of Projects:** 9

The Nevada State Department of Agriculture expanded advertisement and outreach of specialty crops in Nevada by using
printed ad material and a promotional brochure distributed at grower workshops. Three workshops were attended with
over 40 participants who were made aware of the program. An advertisement was placed with a well-known publisher.
 Printed ads were included in bags given to attendees of the Small Farms Conference. It is estimated that 20,000 copies
were printed.

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- The Nevada State Department of Agriculture partnered with Homegrown Nevada, along with the Great Basin Food Cooperative and other cooperating farms in west-central Nevada, to establish "The Great Basin Basket Company" as a limited-liability company, and increase the current product line to include value-added products made from specialty produce grown by member and cooperating farms. A graphic designer was hired to develop a professional logo and related materials. The logo was accepted by the partners in the Company and is now on the company's business cards, delivery vehicles, promotional brochures and website. Five value-added specialty crop products were placed in seven local retail outlets. In 2010, the food editor of the Reno Gazette Journal began a weekly feature in the food section of the paper called "Cooking with the Basket" that listed weekly basket ingredients, recipe ideas and contact information for basket sign-up that allowed CSA's to continue increasing enrollments in time periods not normally good for adding customers. There are approximately 350 memberships for the basket in most recent accounts.
- The Nevada State Department of Agriculture partnered with Nevada Naturals Company and the University of Nevada to expand hydroponic production volume and production timing to year round. Project staff implemented a program with Pyramid Middle School and Montessori School to feed 234 students once a week with the lettuce they grow in their greenhouse. Twenty-six students worked with Nevada Naturals while conducting a UNR nutritional study comparing hydroponics vs. organics. As of 2008, 406 participants attended the free monthly hydroponics seminars offered by Nevada Naturals and 24 of those participants started home hydroponics operations. In order to outreach to local farmers, Nevada Naturals met with five farm families about the benefits of hydroponics, water conservation, year round growing, etc. As a result, two farm families set up hydroponics greenhouses with Nevada Naturals assistance. Also, the Native American tribes of Pyramid, Fallon and Ely implemented hydroponics' programs for the elderly.
- The Nevada State Department of Agriculture partnered with Alfalfa King to test plant lavender and fruit grapes, develop a local market, and educate area growers about new crop production. Esmeralda County is one of the more under-served counties in the State and also suffers from high unemployment. The purpose of this project was to test the sustainability of wine grapes and lavender varieties in the county and report those results to local farmers, students, and the community at large. The test plots were seen as a high-value crop that could benefit the local farmers with increased profitability. Two test plots were established, one with 400 grape vines, the other with 400 lavender plants. While there is no data on the winter survival rate for the lavender plants, only 11 percent of the grape vine plants were destroyed during the particularly cold winter.
- The Nevada State Department of Agriculture partnered with Mackie Farms to market locally grown peaches and also make their farm available for education as to the benefits and techniques needed for local growing and sales. Mackie Farms worked with a local college and is currently scheduled to be included in the students' curriculum in an effort educate students regarding the viability of locally grown produce, as well as market diversification in order to make specialty crop growth sustainable in Nevada. Mackie Farms also become a member of NevadaGrown, which assists local producers market their specialty crops. Through this marketing and networking program they have been able to network with other farmers/orchardists in getting their name known through public food assistant programs. They have also established a website that utilizes social media networks to inform the public about their products. These web sources have proven successful and have resulted in more than 23 inquiries regarding their product and projects. Damaged blossoms resulting from a late freeze prevented Mackie Farms from having a large enough volume of peaches to offer for sale. However, they were able to offer samples through a taste testing to gain public awareness and acceptance of the quality and taste of fresh local produce compared to imported fruit.

- The Nevada State Department of Agriculture partnered with Western Nevada College Specialty Crop Institute to expand specialty crop outreach through printed materials and four training workshops at the Small Farms Conference. Workshop topics addressed issues on viticulture, organic farming and cut flowers. Hoop house growing techniques of specialty crops were also demonstrated at the conference. The organic farming workshop, which focused on the production of specialty crops that local farmers are growing organically and the process that is involved in their production, was followed by a tour of two local organic specialty crop producers. Several farmers benefitted from the three viticulture workshops by conducting additional research and exploring the possibility of establishing vineyards on their farms. More than 275 participants attended the four workshops with attendance ranging from 34 for the cut flower workshop to more than 100 for the organic farming workshop. Project staff also made a fact-finding trip to an Indian reservation to discuss the potential for specialty crop production on the reservation. The meeting and subsequent discussions resulted in a hoop house construction project on the reservation.
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- The Nevada State Department of Agriculture collaborated with Hungry Mother Organics to develop a system for integrating the recycling of local organic waste into the production and marketing of organic vegetable transplants and produce in Nevada. Project staff conducted research and development on the use of recycled organic waste in order to produce certified organic plants and produce. As a result of the success of the research, a waste recycling system was implemented with Trader Joes and Whole Foods. Recycled waste was used to create nutrient rich soil that is optimal for specialty crop production. Thousands of plants per week were seeded in the unique organic vegetable waste and peat moss amendment blend. Plant plugs were then transplanted into larger containers for resale as certified organic vegetable plants or transplanted into Hungry Mother Organics fields for later use of sale. Sustainable Living Renewable Energy Round-up hosted a workshop that was attended by 35 people to highlight the project. The organic waste and production workshop gave many beginning growers the knowledge to implement their own gardens. In 2009 Hungry Mother Organics was able to provide over 10,000 vegetable starts to interested growers. In 2010 they were able to increase vegetable starts to over 50,000 plants.

New Hampshire Department of Agriculture, Markets and Food

Amount Funded: 102,244.91 Number of Projects: 1

• The New Hampshire Department of Agriculture partnered with the NH Division of Travel & Tourism to conduct a Buy Local New Hampshire Agriculture Program. Matching funds were contributed to cover non-specialty crop commodities included in the campaign. The campaign included multi-media advertising using the New Hampshire's Own logo; consumer education component on the benefits of local and how to purchase local; grower education component on the benefits of being part of a Buy Local NH agriculture campaign and promoting under a common theme and logo; and a mini-grant program to provide funds to eligible New Hampshire specialty crop commodity organizations to encourage the organization to tie into the Buy Local New Hampshire Agriculture program and use the logo in their promotion programs. As a result of the consumer campaign, there was a 20 percent increase in website visits to visithn.gov which drove consumers to specific websites for information on NH Christmas trees, apples, farmers markets, and maple products. Additionally, there was a two percent increase in awareness among consumers of the value of agriculture and its impact on their social, physical and economic environment, measured by a before and after survey and a ten percent increase in awareness among producers of the value of participation in the program and use of the common logo, measured by increased membership in NH Made and use of the logo.

New Jersey Department of Agriculture

Amount Funded: 117,036.97 Number of Projects: 2

- The New Jersey Department of Agriculture maximized the effectiveness of Jersey Fresh product branding and advertising by improving the promotion, and market value of locally grown specialty crops through point of purchase advertising. Using the easily recognizable Jersey Fresh brand name, the point of sale advertising materials were all designed to brand products and promote the availability and quality of locally grown fruits and vegetables directly to consumers at the peak our growing season. More than one million Jersey Fresh advertising materials consisting of approximately nine point of purchase methods were funded through this project for distribution to supermarkets, roadside markets, farmers markets and representatives in the produce industry.
- The New Jersey Department of Agriculture used television, radio, and print advertising to promote Jersey Grown horticulture products directly to the consumers. The 2010 Jersey Grown Media Campaign featured a mix of New Jersey based consumer print, television and radio advertising. The campaign generated 460,000 media impressions, which consisted of 5,000 print ads, 275,000 television ads and 180,000 radio ads and reached 3 percent of the adult population throughout the state, which equates to approximately 100,000 households.

New Mexico Department of Agriculture

Amount Funded: 108,507.39 **Number of Projects:** 2

- The New Mexico Department of Agriculture partnered with five New Mexico green chile shippers and 20 retail chains in New Mexico, Texas, California, Arizona, Missouri, Nebraska, Kansas, Wisconsin, Colorado, and North Carolina to provide training workshops, educational materials, roasters, recipes, in-store demos, and support for the numerous events and special promotions concerning fresh New Mexico Green Chiles. Specifically, project staff traveled to seven states to conduct workshops for 293 retail store personnel. These workshops were conducted by a New Mexico food consultant that provided a hands-on discussion concerning green chile preparation, safety issues, and merchandising ideas. Project staff also extended working relations to 95 stores in six different states to conduct in-store sampling and promotion of New Mexico green chiles. These efforts facilitated the establishment of a market presence for the New Mexico green chile in 10 states.
- The New Mexico Department of Agriculture coordinated the development of a New Mexico Taste of Tradition pavilion at the 2007 Produce Marketing Association's Fresh Summit Exposition in Houston, Texas. Project staff sought out the participation of New Mexico companies to showcase New Mexico specialty crop products. This opportunity enabled these companies to identify both domestic and international buyers and increased their presence in the market, which fostered an increase in the sales of specialty crops grown statewide. Eleven companies participated in this exhibition and represented producers of green chiles, onions, melons, pecans, pumpkins, pinto beans, and many other specialty crops. The companies that participated in the New Mexico Taste the Tradition pavilion exceeded the project staff's expectations by completing over \$15 million in specialty crop sales at the Fresh Summit Exposition.

New York State Department of Agriculture and Markets

Amount Funded: 129,212.32 Number of Projects: 2

• The New York State Department of Agriculture & Markets connected specialty crop producers with college campuses by sourcing and marketing local specialty crops to campuses throughout the state. As a result of this project, more than 150 colleges are actively engaged in buy local efforts and approximately 400 specialty crop farms are benefiting from new and increased sales to colleges. Participating colleges were provided with Farm to College banners, white boards to list foods being served, and harvest chart posters that show the harvest times and availability of the state's fruits and vegetables. Pre-program survey data indicated that buy local purchases for 2010 were 18 percent and anecdotal information gathered by the conclusion of the grant indicates an increase in local specialty crop purchases of more than 5 percent. The official post-program survey was still in process at the conclusion of the grant.

• The New York State Department of Agriculture & Markets supported specialty crop marketing efforts by providing a cost-share program that offered the State's eligible specialty crop industry the opportunity to initiate customized advertising and promotion activities, thereby increasing consumer awareness and sales of locally grown specialty crops and specialty crop products. The program provided support and technical assistance to 38 of the 52 applicants to the program. Through this project, approximately four million consumers learned about the availability of local specialty crops and products and where to purchase them. Two thousand six hundred and eighty-four advertisements (radio, television and print) were placed statewide. In addition, a total of 198,962 customized point of sale/promotional materials were created and have been or will be distributed to consumers. Some of the participants in the program indicated increased sales of as much as 15 and 20 percent over the previous year.

North Carolina Department of Agriculture and Consumer Services

Amount Funded: 136,155.66 Number of Projects: 4

- The North Carolina Department of Agriculture and Consumer Services provided a cost-share program for farmers in order to assist in the payment of the costs associated with a good agricultural practices (GAP) audit. The intent of this particular project was to increase the number of North Carolina farmers that follow GAP practices while participating in third party GAP audits. Project staff organized the program to allocate fruit or vegetable farms a maximum payment of \$600 per farm cost-share. This was particularly beneficial because the actual cost of a GAP audit in North Carolina ranges from \$500 to a few thousand dollars per farm. In fact, sixty-five farms completed a GAP audit over the course this cost-share program. Of these 65 farms, approximately 40 were new applicants and 32 were small growers having a first time GAP audit for crops such as blueberries and other crops.
- The North Carolina Department of Agriculture and Consumer Services partnered with North Carolina State University to develop new fruit, vegetable, and herb crops for production under the Specialty Crops Program. Project staff fostered the development of new two positions. Specifically, a marketing assistant was hired to assist growers in marketing their medicinal herbs in western North Carolina. An administrative assistant position was also established to serve as a point of contact for buyers and farmers concerning marketing and production information. Consequently, several new specialty crops were introduced, including medicinal herbs such as Echinacea, different varieties of melons (including cantaloupes, watermelons, and sprite melons), asparagus, tomatoes, and berries.
- The North Carolina Department of Agriculture and Consumer Services partnered with the North Carolina Nursery and Landscape Association to develop an advertising campaign to promote North Carolina plants to in-state and out-of-state consumers. The in-state portion of the campaign contained a comprehensive marketing effort that consisted of print advertisements and development of the Tarheel Gardener website. Advertisements ran in five metro areas of the state, with emphasis on the Triangle, Triad, and Charlotte regions. Through the out-of-state portion of this advertising campaign, project staff targeted buyers in the Mid-Atlantic States. Specifically, a North Carolina exhibit was developed and showcased at the Mid-Atlantic Nursery Trade Show, the Pennsylvania Landscape and Nursery Trade Show, and the Pennsylvania Green Expo. Project staff spoke to approximately 200 buyers and distributed around 400 buyer guides and other nursery related literature to retailers, landscapers, and brokers. Additionally, approximately 1,200 buyers visited the North Carolina tradeshow exhibits and received a North Carolina Nursery Buyers Guide.
- The North Carolina Department of Agriculture and Consumer Services established a co-op to assist in operations and planning of the North Carolina Farm to School program. The North Carolina Farm to School Program provides a purchasing and distribution system that makes it feasible for local schools to buy local produce. The co-op was formed with growers supplying produce to schools and representatives of the North Carolina fruit and vegetable commodity associations. The co-op planned and scheduled deliveries of produce for the school year, supplied educational and promotional opportunities to schools, negotiated prices, established quality and packaging specifications standards, and shipment logistics in coordination with school nutrition personnel. In fact, a new web site was created (http://www.ncfarmtoschool.com/) to promote the Farm to School Program that includes lesson plans related to fruit and vegetable nutrition and art work and photographs for teachers and school nutritionists to use in the classroom. In addition, the coop introduced two new items to schools, sweet potato chunks and apple wedge slices.

North Dakota Department of Agriculture

Amount Funded: 109,135.59 **Number of Projects:** 5

• The North Dakota Department of Agriculture provided technical assistance to local communities to assess introduction of a local foods initiative. Through this endeavor, the Department determined the viability of a mobile commercial kitchen/processing center and its value to local communities interested in a local foods initiative. Project staff started the local foods initiative with four meetings at Valley City, Mandan, Minot, and Devils Lake to determine interest and connect concerned stakeholders. Through these meetings and other activities, the project staff was able to provide technical assistance to leaders in 17 communities. Each community was positioned to move forward with a detailed plan based on the obtained data. Also, a mobile commercial kitchen/processing unit was studied in order to determine the feasibility and desirability to process fruits and vegetables at reasonable costs. As a result of these efforts, the project staff concluded that it was both feasible and desirable by each community.

- The North Dakota Department of Agriculture provided an opportunity for students in North Dakota schools to learn about the production and marketing of vegetables through a school garden grant program. Project staff conducted a competitive process to award up to \$1,000 to eligible schools to start a garden at or near their facility. The funding cycle resulted in five schools receiving funding that included North Dakota State University, Wishek Public Schools, McClusky Public Schools, Fessenden-Bowdon Public Schools, and Academy for Children-Fargo. Over 220 students participated in these school garden projects, which helped increase their interest in vegetable production and nutritional benefits and provided a hands-on opportunity to learn about food origins and plant development.
- The North Dakota Department of Agriculture partnered with the Northern Plains Potato Growers Association and the Minnesota Department of Agriculture to maximize profits for the potato growers in North Dakota and Minnesota through an accelerated breeding program, producer education program, marketing and promotional initiatives, and improving the financial position of process growers through improved negotiated agreements. The marketing and promotional initiatives helped grow the potato program and compete with other major potato growing regions. The return to growers has increased \$5.25 per cwt. compared to the previous year which should add \$20 million in local grower value. Project staff held training sessions for process bargaining negotiation teams and as a result 2009 process potato price contracts increased by 30 percent which will yield an additional \$23,000,000. The number of varieties released from the potato breeding program in cooperation with North Dakota State University and University of Minnesota continued to increase. The beneficiaries of the project include 350 potato growers from Minnesota and North Dakota.
- The North Dakota Department of Agriculture partnered with the Northarvest Bean Growers Association and the Minnesota Department of Agriculture to organize efforts leading to scientifically credible health claims on dry beans. A management consultant was commissioned to develop a dry bean health research incentive program to attract top researchers from around the country with incentive awards. An application form was published encouraging researchers to submit dry bean and human health research projects. The process yielded 34 applicants that were reviewed, screened, and ranked by a peer review panel. The panel made recommendations for the support of ten proposals. The outcomes expected of this long term project will include the initiation of research programs and the production of peer-reviewed articles useful to the support of health claims at the level of the Food and Drug Administration.
- The North Dakota Department of Agriculture conducted an economic impact study of farmers markets to examine the
 impact these markets had on local communities in North Dakota. Project staff utilized the Rapid Market Assessment
 method in order to meet the needs of a variety of farmers markets, which vary in size throughout North Dakota.
 Specifically, the assessment was conducted at 32 of the 48 North Dakota farmers markets operating across. Through the
 completion of this survey, the North Dakota Department of Agriculture can solidify support to create an awareness of the
 economic and health benefits associated with the locally grown foods movement.

Ohio Department of Agriculture

Amount Funded: 122,689.29 **Number of Projects:** 6

• The Ohio Department of Agriculture purchased a mobile kitchen unit that began travelling around the state in July 2009 promoting Ohio made and grown products through cooking demonstrations featuring Ohio's specialty crops. The mobile kitchen unit attended 31 events for 57 days during 2010 and reached 978,579 consumers. One of the major events was the 12 day Ohio State Fair. As more people became aware of the kitchen, the requests for the unit to attend events increased from 14 in 2009 to 31 in 2010. Through the use of the mobile kitchen, the Department learned that consumers purchased certain produce if they knew how to prepare it in different ways.

- The Ohio Department of Agriculture contracted with the "In Ohio Country Today" television program to produce and develop 14 video vignettes highlighting various Ohio specialty crop operations. The 14 specialty crop operations were located across the state and highlighted specific products such as nursery and garden centers, farmers' markets, wineries and vineyards, Christmas trees, pumpkins, hydroponics, orchards, as well as small and large-scale produce growers. The videos aired on the "In Ohio Country Today" television program and were edited down to 3-5 minute vignettes and shared with 66 television media outlets across the state via DVDs. The videos were placed on the Ohio Proud web site www.ohioproud.org and media advisories were sent to all print media outlets promoting the availability of these videos on the Ohio Proud web site. Several media outlets will continue to utilize the footage of various specialty crop operations throughout the specific growing seasons, such as the Devine Farms video being highlighted during the fall pumpkin harvest season and the Kaleidoscope Farms video being highlighted during the winter holiday season.
- The Ohio Department of Agriculture (ODA) re-launched the Ohio Proud program with a brand new logo and interactive website. Consumer intercepts were conducted at 22 sites across the state of Ohio 13 grocery stores and nine farmers' and farm markets to determine consumer preference for an appealing logo. ODA staff also participated in store promotions at the retail level by building a large tossed salad with all Ohio produce topped with Ohio salad dressing which was served to the public. Project staff produced point-of-sale items such as stickers, window decals, price cards, and banners. A new interactive website (www.ohioproud.org) was developed, allowing Ohio Proud partners to do everything online from registering for events to editing their information and downloading the logo and special signage or order promotional items. The site also allows consumers to search for products/companies/farmers' markets through an online directory. An administration tool was developed allowing ODA staff to showcase an Ohio Proud partner of the month, add feature stories, and recruit for programs. As a part of the re-launch, ODA focused on recruiting farm and farmers' markets by reducing the membership fee and offering banners and signs to showcase Ohio's specialty crops. As a result of these efforts, 32 farmers' markets are now members of Ohio Proud. At the conclusion of the project, 435 companies were partners in the Ohio Proud program. The majority of the new partners are small specialty food companies with 32 of them being farmers' markets. This is an overall increase in membership of 133 percent since April 2008.
- The Ohio Department of Agriculture (ODA) offered a passport program during the 2009 Summer/Fall tourism season to increase awareness and visits to Ohio's agritourism sites in conjunction with The Ohio Magazine. The Ohio Magazine developed, designed and printed materials for this project beginning April/May 2009. In addition to the passport, The Ohio Magazine also issued a special Farm and Farmers' Market section in their July 2009 issue which promoted Ohio's specialty crops in conjunction with the program. The Passport Program along with the Markets was also featured on Ohio Proud and the magazine's websites. Consumers began visiting and using their passports at Ohio farm/farmers' markets at the end of June which is when they received the July issue of the magazine. ODA provided signage and stickers to the participating markets. Participating consumers had the opportunity to forward their completed passport to ODA for a gift of Ohio products made from specialty crops. Items such as popcorn, jam, fruit butter, honey, maple syrup, candy and nuts were purchased from Ohio Proud partners along with a reusable grocery bag. This allowed ODA to promote the fall crops and agritourism sites who rely on Fall visits. The Passport Program was promoted in the Ohio Magazine with a circulation of 378,000 readers ages 35 54 with an annual household income of \$100,000. As of December 31, 2009, the ODA received 184 completed passports.

- The Ohio Department of Agriculture helped Ohio's specialty crop producers sell their locally made and grown products by hosting the Ohio Food Summit featuring "Local Food Trade Talks." Ohio producers had the opportunity to spend one-on-one time in one location with specific buyers. These local food trade talks allowed the producer to introduce their products as well as offer time for the buyer to explain their expectations. In addition to the table top displays, buyers and producers had the opportunity to meet and network during the lunch hour which featured local foods. The Ohio Food Summit included 39 buyers representing 20 companies and 42 Ohio producers. The producers (20) represented products from the specialty crop industry such as jam, hot pepper relish, pasta sauce, wine, potatoes, cabbage, green beans, fruit butter, greens, radishes, cucumbers, zucchini, squash and tomatoes. Each company had prescheduled meetings with at least three different buyers. Many of the buyers scheduled additional meetings with companies once they saw the products. As a result of the Summit, the Statehouse Museum Shop (Columbus) developed three new business contacts at the event and began purchasing products made from specialty crops such as popcorn, homemade jams and fruit dips, and spicy nuts. Bon Appétit, an Ohio foodservice company, is considering a private label wine from Wyandotte Winery (Columbus). This wine will be served at special events and banquets catered by the foodservice company.
- The Ohio Department of Agriculture conducted interviews with school procurement personnel and background research to determine the level of local procurement currently being done in Ohio. Project staff documented these findings and made policy recommendations for the Ohio Food Policy Council at http://www.agri.ohio.gov/divs/FoodCouncil/FarmToSchool/docs/F2S_Final_Primer.pdf. Stakeholders for school procurement were also identified and placed on the websites of the Ohio Departments of Agriculture and Education. Ohio schools participating in the national Fruit and Vegetable program were contacted regarding local procurement possibilities. The report concluded that farmers can benefit from increased sales opportunities offered by school lunch programs. Once a relationship is established, schools offer steady and reliable demand for their product. Farm to school programs are also more likely to expand local food purchasing in the household, as students bring home lessons to their parents.

Oklahoma Department of Agriculture, Food, and Forestry

Amount Funded: 107,188.11 Number of Projects: 4

- The Oklahoma Department of Agriculture, Food and Forestry continued a statewide billboard campaign to increase awareness of Oklahoma farmers markets and specialty crops. Specifically, these billboards reminded current and potential consumers that the farmers markets were open and had high quality fresh produce for sale. Project staff selected 12 billboard sites across Oklahoma based on cost, location of markets, and availability. The specific farmers markets that were selected represented 73 percent of the sales at Oklahoma Grown Farmers Markets and maintained at least ten vendors. The 12 Oklahoma Grown Farmers Markets that received billboards saw an average increase of sales of 16 percent.
- Farmers Markets in order to increase demand for Oklahoma's fresh fruits and vegetables by building and expanding farmers markets. These grants were specifically directed to increase efforts to advertise, display, promote, and improve Oklahoma farmers markets. The project staff awarded 31 grants for up to \$2,300 to assist market managers in these endeavors. Through the efforts of these grantees there was an increase in the sales and production of specialty crops at these markets. In fact, the markets that received grants illustrated a cumulative 30 percent (to \$2,064,157) increase in sales as well as a 55 percent (to 586) increase in number of farmers market vendors.
- The Oklahoma Department of Agriculture, Food and Forestry partnered with Oklahoma State University and Downtown Oklahoma City to promote and develop the Oklahoma City Downtown Farmers Market through various forms of advertisement such as signage, newspaper, and radio. Project staff specifically intended to foster the demand of a premiere marketplace to sell locally grown fruits and vegetables to urban residents and downtown business professionals during the workweek. The downtown market exceeded gross sales and vendor participation expectations during this project. Specifically, the Oklahoma City Downtown Farmers Market gross sales were estimated to be over \$63,000, which is a 159 percent increase from the previous year. Project staff also noted that the number of vendors increased from 18 in 2007 to 21 in 2008.

• The Oklahoma Department of Agriculture, Food and Forestry designed and printed informational handouts and booklets showcasing all the plants that have been evaluated and marketed under the "Oklahoma Proven" program over the last 10 years. The project staff printed 5,000 booklets and 20,000 handouts for this program. The booklets were distributed to many different entities and individuals involved in the production and purchase of plant materials including retail nurseries, wholesale nurseries, garden writers, extension educators, and other educators throughout the State. In fact, in some instances these materials were utilized for Master Gardener Training sessions, employee training, nursery crop sales, and educational seminars. It is estimated the production and circulation of these booklets and handouts have reached 75,000 people.

Oregon Department of Agriculture

Amount Funded: 148,320.35 Number of Projects: 7

- The Oregon Department of Agriculture educated and prepared Oregon's specialty crop producers to control food safety risk through systems-based approaches. Specifically, project staff conducted seminars on the implementation of a Good Agricultural Practices (GAP) Farm Safety Program. The grower manual was also updated to reflect changes to the scope and requirements of U.S. Department of Agriculture GAP standards. Project staff continued outreach to grower groups to ensure they understood new requirements and were prepared to meet those requirements. In fact, over 1,500 copies of the grower manual were printed and distributed at outreach meetings across Oregon, with three versions to reflect changes in the standards. It is estimated that over 200 growers were trained to receive GAP certification.
- The Oregon Department of Agriculture trained rural field inspectors to meet the certification needs of organic specialty crop producers throughout the state of Oregon. The Oregon's Organic Certification Program staff attended two Accredited Certifiers Association and National Association of State Organic Programs joint certifier trainings. These trainings provided insight into the certification practices and interpretations of other certifiers as well as the National Organic Program staff. The attendance at these trainings also resulted in the facilitation of two state organic training sessions held in Portland and Eugene. Over ten inspectors attended these training sessions, which covered all aspects of the organic program. Shadow audits were also conducted throughout 2010 for training to continue to bring these new field staff up to speed with the National Organic Program requirements, which gave new field staff sufficient experience to begin auditing in the organic program for the 2011 season. Consequently, Oregon's Organic Certification Program expanded its geographic reach by training organic inspectors in five of the seven state districts.
- The Oregon Department of Agriculture quantified the extent of potential economic loss to the Oregon ornamental nursery and other specialty crops should the efforts to control sudden oak death (SOD), Phytophthora ramorum, be considered for reduction or suspension. An economic analysis was conducted to discern the effect of SOD on the nursery and forest industries by Entrix Environmental Consultants, which generated cost benefit data that will be useful to plant disease control officials, state departments of agriculture, and policymakers in determining control versus non-control strategies for SOD. This analysis clearly outlined the situation and risk of SOD outbreaks in Oregon, the possible economic costs if SOD were to spread further in Oregon, and a cost-benefit analysis of each treatment option proposed in the state. Specifically, three treatment options were provided in their analysis: no control, maintaining the current program, and eradicating the disease. The resulting study, "Economic Analysis for the Impact of Phytophthora Ramorum on the Oregon Nursery Industry", indicated that maintaining or augmenting an aggressive control program for SOD in Oregon provides a great benefit to the nursery and forest industries.
- The Oregon Department of Agriculture investigated different post-harvest strategies and technologies that Oregon specialty crop growers' could use to optimize or enhance the shelf-life of fresh specialty crop products. Specifically, a scientific literature review of existing sources was conducted by project personnel. These individuals also organized interviews and visited produce companies in Salinas, California to see the post-harvest processes large produce operations extend shelf-life and address field heat. The research indicated that there are a number of mechanisms to extend shelf-life of fresh fruits and vegetables. However, in the attempt to secure grower participation, it was noted that these growers had either become big enough to sell directly into retail chains and had already implemented post-harvest strategies or too small to sell directly to retailers and thus distribution was a larger problem than post-harvest cooling. Therefore, project staff developed three projects to meet the specialty crop industry needs, which were implemented by the Oregon Department of Agriculture ("Specialty Crop Food Safety Outreach and Education", "National Organic Program Expansion", and "Food Safety Control Points for Flexible Packaging of Processed Specialty Fruit Products").

- The Oregon Department of Agriculture partnered with Ecotrust to identify a range of suitable specialty crop producers and packers and develop a web-based platform (FoodHUB http://food-hub.org) where the availability of their fresh fruit and vegetables is published. This information was posted on FoodHUB where buyers could ascertain the availability of specialty crop products by product and region in Oregon. The development of the software for FoodHUB began in March 2009 and tier 1 service was launched in fall 2009. After the program was launched, project staff conducted six focus groups with the industry to show a test version and receive feedback on usability, advantages, and disadvantages. Direct outreach to Oregon-based retailers, distributors, and school purchasing program managers was pursued by project staff to provide advice on the usage of FoodHUB. In fact, Ecotrust collected detailed feedback during one-on-one discussions with over 25 individual producers and buyers. Over the course of one month, FoodHUB registered 207 members, which included 96 buyers and 120 sellers. In fact, the vast majority of sellers listed themselves as farmers. As of June 2010 FoodHUB maintained 580 registered members, the vast majority of which are specialty crop producers or specialty crop buyers.
- The Oregon Department of Agriculture (ODA) conducted research on export trade obstacles for the specialty crop industry to generate a listing of listing of non-tariff barriers assists growers, packers, and specialty crop organizations. This information is utilized by these groups to prioritize specific areas where they can work with other regional states, the U.S. Department of Agriculture, and other national trade negotiators to expand the reach of Oregon's specialty crop export markets. Project staff conducted research by investigating the markets targeted by the specialty crop industry. Valuable relationships were developed and solidified with international market contacts and decision makers during this time. These relationships helped ensure Oregon specialty crops gain and maintain a voice of influence as trade issues are negotiated in the designated targeted markets. Ultimately, a comprehensive report was developed and posted on ODA's website to share with industry stakeholders (http://www.oregon.gov/ODA/ADMD/mktg_international.shtml).
- The Oregon Department of Agriculture performed pre-award and post-award activities to administer Specialty Crop Block Grant Program funding and ensure that the State Agency and sub-awardees abided by Federal and State requirements and regulations.

Pennsylvania Department of Agriculture

Amount Funded: 128,893.21 Number of Projects: 5

- The Pennsylvania State Department of Agriculture partnered with the American Mushroom Institute to determine dosage and exposure levels of ultraviolet light necessary to increase the Vitamin D content in mushrooms. White and brown button mushrooms (sliced and whole) were treated for one second with ultraviolet light. White mushrooms produced slightly more Vitamin D than their brown counterparts. The results indicate that with increasing exposure to pulsed ultraviolet light, the Vitamin D content increased dramatically, but after four seconds of exposure the Vitamin D produced leveled off. The shelf life and quality attributes of the treated mushrooms were not adversely affected by this treatment. Researchers presented their findings to the mushroom industry at the Penn State Mushroom Industry Conference meeting in 2009 where over 200 attendees learned about the research as well as eight other meetings in which this research was described to an additional 210 interested parties.
- The Pennsylvania State Department of Agriculture developed and maintained an industry wide good agricultural practices (GAP) and good handling practices (GHP) cost-share program. The cost-share program was designed to provide \$400 to any business that successfully completed a GAP or GHP audit. Forty specialty crop producers participated in the first year of the program and 81 participated in year two for a total of 121 cost-share participants. Applications for the cost-share program were made available at trade events specific to specialty crop producers such as the Mid-Atlantic Fruit and Vegetable Growers annual meeting. Nearly 4,000 producers/growers received GAP cost-share program information through educational meetings. The program was successful in reaching producers and providing reimbursements that averaged 84 percent of costs in 2008 and 70 percent of costs in 2009.

- The Pennsylvania State Department of Agriculture partnered with Pennsylvania State University to support an Integrated Pest Management (IPM) demonstration project that showed local vegetable growers, specifically Amish and Mennonite farmers, the benefits of an IPM program. Approximately 95 growers gained knowledge of the project and the benefits from an IPM program at four grower's meetings and workshops. Project staff also held weekly on-farm personal field training sessions with an IPM/sustainable agriculture specialist and educational workshops, where eight growers learned pest identification, pest life cycles, and techniques of a biologically-based IPM approach. Growers were kept up-to-date on local pest trapping results that were performed on participating farms. These producers also learned about the detrimental effects of high-risk pesticides on beneficial organisms and how beneficial organisms can contribute to pest control. Growers that participated eliminated one to two pesticide applications per crop and eliminated all restricted-use pesticides. All eight of the participating growers are now regularly scouting for pests.
- The Pennsylvania State Department of Agriculture developed an auction price reporting system to provide timely information pertaining to the sale prices occurring at state produce auctions. This auction price reporting system consisted of two components including a web based system and a telephone hotline. These two resources provided produce prices for interested parties, which was important for produce sellers and buyers that needed to make decisions that affected their stance in the market. Auction managers submitted weekly sales numbers on the provided sales tracking and reporting sheet. The Department's information technology division tracked 177,000 hits to the market summary page between March, 2009 and January, 2010.
- The Pennsylvania State Department of Agriculture partnered with Pennsylvania State University to develop and implement the Mushroom Good Agricultural Practices (MGAP) Program in order to ensure that mushrooms continue to be a safe food product. Project staff prepared handbooks that outlined each of the MGAP standards, guidelines on how to put the standards into practice, and necessary paperwork required for documentation. In April 2009, three training sessions were held for growers and others involved in the industry outlining how to implement a MGAP program on a mushroom farm. Approximately 135 individuals attended these training sessions, which represented 76 farms and mushroom-related businesses. As a result, over 40 Pennsylvania farms have received an MGAP audit and successfully passed. Project staff also developed a database of growers and employees responsible for their farms' MGAP programs which has grown to over 180 contacts in Pennsylvania.

Department of Agriculture of the Commonwealth of Puerto Rico

Amount Funded: 106,053.13 **Number of Projects:** 1

• The Puerto Rico Department of Agriculture continued marketing support for branded specialty crops, with a focus on coffee. To complete this goal, project staff emphasized participation in tradeshow exhibitions and utilized television advertising, point of purchase displays, and print materials. The tradeshow exhibitions significantly assisted Puerto Rican specialty crop producers and companies by connecting over 20 international and local distribution agents at 13 different tradeshows. Project staff also developed export potential for coffee to selected niche markets by training producers for technology transfer of improved practices during farm production and processing activities to develop and establish quality considerations. Two topics were emphasized through this process, which included upgrading food safety and the quality of food production as well as the business aspects of agriculture. In fact, over 230 farmers completed a series of courses that highlighted the necessity of up-to-date food safety measures and technology in addition to managerial issues related to the specialty crop industry.

Rhode Island Division of Agriculture

Amount Funded: 101,417.97 **Number of Projects:** 3

- The Rhode Island Division of Agriculture partnered with the Rhode Island Agriculture Council, the Rhode Island Farmers Market Association, and the University of Rhode Island Extension Service to develop a promotional campaign to expand the awareness of their "buy local" program. A contract with North Star Marketing Corp was drawn to establish the "Get Fresh. Buy Local" brand. Media coverage during the campaign included news of the kick off and stories and photo placements about farms and events across the State. Letters, newsletters, and email were written throughout the campaign in order to alert target audiences about the effort. The email correspondence was an important component for the campaign because it increased farmer and farmer market manager awareness of the program. Social media websites, including Facebook and Twitter, were utilized to capitalize on the ever-increasing relevance of social media, and the opportunity it provides to quickly and effectively reach consumers. In fact, project staff secured a fan base of over 500 individuals over the course of the first year.
- The Rhode Island Division of Agriculture partnered with the University of Rhode Island to incorporate a Good Agricultural Program (GAP) into their "buy local" program. This program includes training and on-site evaluations for certification in food safety. Project staff conducted three, five-hour grower training sessions, which were attended by 45 growers, school foodservice operators, and wholesalers. Specifically, these sessions covered topics that included an introduction to the Rhode Island GAP program, guidelines, food safety procedures, foodborne illnesses, and mechanisms to ensure a safe food/water supply. The project staff also conducted 32 on-farm consultations for farmer certification as well as recertification. Growers that sought an initial certification were visited one to three times, which depended on the farm environment. These additional on-farm consultations enabled 8 additional specialty crop producers to participate in the certification program, which increased the total number by 30 percent (31 participants).
- The Rhode Island Division of Agriculture partnered with Harvest New England Association to support the marketing efforts of New England specialty crop producers and processors through the development, promotion, and facilitation of an annual conference. The 2009 New England Agricultural Marketing Conference was held February 24 26, 2009 in Sturbridge, Massachusetts. Project staff contacted nearly 28,000 farms in order to promote the activities and details concerning the conference. Ultimately, over 800 producers attended the 2009 Harvest New England Association's conference, which was an increase of in excess of 100 participants from the 2007 event.

South Carolina Department of Agriculture

Amount Funded: 110,424.99 Number of Projects: 6

- The South Carolina Department of Agriculture provided incentives to encourage firms in the fruit and vegetable industry to engage in food safety audits that encourage good agricultural practices (GAP) and good handling practices (GHP) from the field to wholesale. The Department provided GAP/GHP audits for 30 firms, providing cost share assistance to cover \$400 of the cost for these audits. The 30 firms and their employees now have a better understanding of food safety and food safety certification issues. Firms are beginning to understand that food safety requirements and concerns will continue to advance. Each of these firms has customers who also benefit from a safer product.
- The South Carolina Department of Agriculture partnered with Clemson University and the University of Illinois to enhance the Department's website to receive and handle the MarketMaker internet marketing tool to highlight locally grown specialty crop information and availability. The South Carolina MarketMaker site went online in February 2009 and has 338 producers and 84 farmers markets. The site has received more than 1.25 million hits and more than 40,000 users since going live. This was accompanied by an upgrade of the Certified SC Grown website which went online in April 2009 and received more than 3.9 million hits. The Certified SC Grown program has more than 600 members that are listed on the site in directory form. Any customer with Internet access now has an effective way to locate products of interest.

- The South Carolina Department of Agriculture partnered with the University of South Carolina (USC) to develop and operate a farmers market at the University using students to run the market with assistance from the Department. The "Healthy Carolina Farmers Market" was launched in September 2008 and ran through November 2008 and picked back up in the spring of 2009 with dates that ran through spring and summer into fall all the way to November 2009. The Department assisted with promoting the farmers market along with coverage from the State Newspaper, WIS-TV and Free Times. Project staff also placed posters around campus for each market date. Each market had 15-26 vendors selling locally produced fruits and vegetables. Total sales per market, as reported by vendors, ranged from \$3,635 to \$13,490. The market manager conducted an opinion survey to gather thoughts from participating vendors and comments were overwhelmingly positive.
- The South Carolina Department of Agriculture partnered with Clemson University to develop and operate a farmers market at the University using students to run the market with assistance from the Department. The market was inspired by the "Healthy Carolina Farmers Market" at the University of South Carolina (USC). Organizers from Clemson visited the USC market and developed a plan for the Clemson market. The market began operating at the beginning of the new session in August and set the third Tuesday of the month as the standard date for operation. The Department provided assistance with market management until a student manager was selected in September and helped recruit farmers to participate. The Department assisted with promoting the market and had a great opening event that included the Dean of the College of Agriculture, Forestry and Life Sciences and the South Carolina Commissioner of Agriculture. The market had 19 vendors participating.
- The South Carolina Department of Agriculture provided promotional funds to support three state farmer's markets in Columbia, Greenville and Florence. All three markets sponsored spring plant and flower shows in April. Columbia and Greenville sponsored fall shows. All of these events were a great success with over 200 participating vendors. The events lasted four days and highlighted the greenhouse/nursery industry. The promotion supported the local vendors and provided opportunity for other vendors from across the state to participate. Estimates from staff and the use of traffic counters indicated that more than 150,000 people attended the spring shows. This represents an 11 percent increase in traffic from the year before. A survey of vendors indicated that sales also increased by more than a 10 percent increase from the year before. Participating vendors indicated that they were very pleased with the results of this year's show. The Florence market had an additional benefit with the grand opening of a new building. A dedication ceremony was held at the Plant and Flower Show that brought a great deal of coverage from local media. The two fall shows held in October in Columbia and Greenville were also a success with more than 60,000 people in attendance. The promotional funds provided a great opportunity to reach the general public about these special events. The Department provided banners and signs that included the new logo related to SC locally grown. All available vendor spaces were taken for all the shows.
- The South Carolina Department of Agriculture worked with selected restaurants to place locally grown specialty crops on their menus and use the certified South Carolina emblems to identify locally grown products. The "Fresh on the Menu" program exceeded all expectations. Since beginning in Charleston with 60 local restaurants initially participating, it has grown quickly into a statewide program with more than 225 restaurants participating. The Department is assisting these restaurants in finding and sourcing locally grown products. Chefs have embraced this program and regularly develop menu items with local products. The Department conducted workshops with major food service companies and farmers to help them understand and overcome logistical problems in sourcing locally produced fruits and vegetables. The Department provided the "Fresh on the Menu" materials to participating restaurants to use in promotions and to designate their status in the program. The "Fresh on the Menu" program is highlighted on the Department's website at http://agriculture.sc.gov/.

South Dakota Department of Agriculture

Amount Funded: 100,850.02 Number of Projects: 10

- The South Dakota Department of Agriculture partnered with South Dakota State University (SDSU) to evaluate and select Juneberry cultivars that will thrive in the climate of South Dakota. SDSU established four test plots on the N. E. Hansen Research Farm in Brookings, SD, and planted five cultivars (Park Hill, Honeywood, Smokey, Thiessen and Northline) and one wild plant cutting in each. At the end of the first year, SDSU evaluated the survival and establishment of the cultivars. Plant mortality rates were varied in the first year, with Honeywood showing the greatest mortality. In general, the Park Hill plants that survived tended to grow more rapidly and were more robust than the other plants. By the end of the project, one year of data had been collected, with plans to continue the collection of data in subsequent growing seasons. Ultimately, data from the study will be included on the South Dakota Department of Biology and Microbiology Native Plant Research website.
- The South Dakota Department of Agriculture partnered with Valiant Vineyards to create and conduct demonstrations on the proper harvesting of various crops including black currants, choke cherries, buffalo berries and wild grapes and to involve high school students in the harvest. Some of the participants were also trained in the use of a mobile crushing, destemming, and pressing unit. In 2008, Valiant Vineyards trained two trainers who, in turn, trained 38 others, including high school students on how to harvest and preserve these crops. In 2010, the team trained an additional 12 individuals. During 2008, \$1,850 of native fruit was sold to wineries and 1,250 pounds of fruit were harvested.
- The South Dakota Department of Agriculture partnered with Lawrence Diggs to study the potential for local specialty crop producers to successfully market their produce to state-funded or –operated institutions and to determine what steps would be necessary to begin such an endeavor. Initially, Mr. Diggs conducted a survey of institutions within the state that serve 100-9000 clients. The survey results indicated a significant interest among participating institutions to purchase local foods. In addition, the survey revealed that a number of these organizations already believe they are purchasing locally grown foods and expect that their suppliers are providing them primarily with locally grown foods. To expand this market, specialty crop producers will need to act collectively to be viable competitors to food service companies. They will need to develop a uniform purchasing system that will allow potential consumers to identify what products are available at any given time. In addition, the producers will have to streamline their processes so purchasing will be easy for consumers. Next, producers need to establish strict safety guidelines that match those of larger suppliers. And finally, producers must establish a reliable delivery service. As of the end of this project, seven schools had indicated that they were already buying local and seven additional schools indicated they were willing to buy local if the required conditions were met by producers.
- The South Dakota Department of Agriculture partnered with the Twin Brooks Farmers' Market (TBFM) to expand the market through outreach and marketing on radio and television. The market had started with just four vendors in 2008 and 2009, but marketing strategies seemed to pay off in 2010 when the market boasted six to eight regular vendors and an additional five vendors that came to the market intermittently. At the same time, customer attendance grew from 25 to 125-150 per open market.
- The South Dakota Department of Agriculture partnered with Steve Polley to determine the feasibility of growing hops in South Dakota. The team established a test plot in Spearfish, SD in 2008 in which they planted 140 hop rhizomes including 12 varieties. Despite high plant mortality in the first year due to weather issues, the team was able to produce enough hop cones for the Chemistry Department at Black Hills State University to begin testing. In the second year, weather damage was much less and 60 pounds of cones were harvested from 35 two-year-old plants. Plants were tested for winter hardiness, crop yield, insect/disease resistance, and acid levels. All rhizomes planted survived the winter despite temperatures reaching -20 F. Of the rhizomes tested for crop yield, only the Cascade variety had enough plants for a possible yield comparison. By the end of the project, the team had generated data on acidity that is vital to brewers as they contemplate purchasing hops. In addition, at least one brewery had already utilized the project's hops.
- The South Dakota Department of Agriculture partnered with Dakota Rural Action (DRA) to print and distribute the South Dakota Local Foods directory. DRA distributed the food directories at the Watertown Winter Farm Show, the Lemmon Farm and Home Show, The Toronto Home Show, the DakotaFest, and the Downtown Brookings Harvest Festival. DRA also provided radio advertising for local producers as well as space for producers at its DakotaFest booth. Through this project, 7,500 copies of the SD Local Foods Directory were distributed and one additional store began distributing the directory. In addition, three daily newspapers and four weekly newspapers covered the release of the directory.

- The South Dakota Department of Agriculture partnered with Tuckers Walk to increase the visibility of the South Dakota Winegrowers Association and the South Dakota Specialty Producers Association by creating and updating the websites for both associations. Although both websites had been established by the end of the project, much of the content was still under development.
- The South Dakota Department of Agriculture partnered with South Dakota State University to evaluate and demonstrate the commercial potential of native fruit for wineries and other interested growers, either as windbreaks for the vineyards or as a diversification option for the grower operation. Test plots were established at four locations and Juneberry, Elderberry, Bush Cherry, Buffaloberry and Nanking Cherry were planted. Due to some delays associated with data collection, the data collection was not completed within the grant period. However, it was continued after the close of the grant.
- The South Dakota Department of Agriculture partnered with the South Dakota Wine Growers Association (SDWG) to develop a plan to expand the wine industry in South Dakota. SDWG directly marketed its members' wines to consumers at a number of events including Automania, Downtown Sioux Falls, and Taste of South Dakota. SDWG also hosted several Tannenbaum Trail Winery Tours designed to give wine lovers the opportunity to see four different wine operations. Additional tours provided an opportunity for wine and garden enthusiasts to visit greenhouse nurseries and wineries. At the same time, SDWG placed ads in various visitors' guides and provided banners to wineries throughout the state. More than 2,200 people participated in the various events supported by this project. In addition, more than 25,000 brochures were distributed through this project. At the same time, webpage visits to the SDWG site increased to 320 per month and the executive director of Southeast South Dakota Tourism reported that winery information is the number one request from visitors.
- The South Dakota Department of Agriculture (SDDA) offered a cost share program to farmers' markets in South Dakota to allow them to promote their market, establish new markets, or expand their existing market. SDDA received 19 proposals in their first round of competition. Of these, 12 applications were accepted into the program. Cost share recipients spent their funds primarily on advertising through newspapers, radio, and signage. A smaller portion of funds were used for supplies and other start-up costs. Although the goal of the project was to increase vendor participation in the selected farmers' markets by 10 percent, this project actually resulted in a 33 percent increase in vendor participation. In addition, with help from this project, five new farmers' markets were established.

Tennessee Department of Agriculture

Amount Funded: 111,629.63 **Number of Projects:** 4

- The Tennessee State Department of Agriculture developed a statewide buy local brand, entitled Tennessee Farm Fresh, to promote conventional, natural, and organic products. Approximately 100 producers participated in the Tennessee Farm Fresh program. Farmers were encouraged to become actively involved in the promotion through press releases as well as through field days and other producer meetings. The project staff also utilized the Tennessee Farm Fresh website and brochure to list participating producers. These producers also participated in a series of workshops that focused on customer service, product display, tips for direct marketing, experienced advice from direct marketers, regulatory considerations for direct marketers, liability, pricing, marketing ideas, and success stories.
- The Tennessee State Department of Agriculture developed and distributed a resource guide, the "Tennessee Farm Fresh Directory", to provide consumers a map and list of outlets across Tennessee where locally grown/produced products can be purchased as well as an interactive website directory of producers/members that included maps and directions to member farm markets and farmers markets. This directory, a guide for consumers to find and purchase specialty crops from Tennessee producers, was distributed to about 25,000 consumers. Four new features were added to the website in order to serve the needs of producers and consumers, which included: a "Producer of the Month" story, recipes, a frame scrolling pictures of actual Tennessee Farm Fresh members, and a link for consumers to sign-up for seasonal newsletters. Through the addition of these new and interactive components, more than 19,700 people visited the Tennessee Farm Fresh website and stayed an average of two minutes and fifty-five seconds.

- The Tennessee State Department of Agriculture developed a promotional program that included kick-off presentations to appropriate venues to implement the buy local program. The project staff determined the advertising efforts through input gathered from local producers and the Tennessee Farm Fresh Steering Committee. Throughout the advertising campaign, project staff utilized mediums, which included radio, television, mobile billboards, newsprint, and magazines. Special emphasis was given to television advertisements because the project staff found it to be the most influential promotional vehicle for the Tennessee Farm Fresh program. It is estimated that over 3.2 million people were exposed to the Tennessee Farm Fresh program through this advertisement campaign. In fact, farmers accredited their sales increase of \$5,000 directly to the efforts made by the Tennessee Farm Fresh program.
- The Tennessee State Department of Agriculture partnered with the University of Tennessee Center for Profitable Agriculture to conduct statewide workshops aimed at promoting the value-added concepts of a strong buy local promotion program. A total of eight workshops were held at four different locations in Tennessee that discussed a variety of topics to help specialty crop producers. These topics included customer service, product displaying, direct marketing, regulatory considerations, liability, pricing, marketing ideas, and success stories. Over 300 producers and interested individuals participated in these workshops. The majority of the participants considered the workshops to be effective; in fact, over half of the participants (64 percent) indicated they had gained new skills in order to increase the success of their business.

Texas Department of Agriculture

Amount Funded: 156,488.66 **Number of Projects:** 7

- The Texas Department of Agriculture developed a contest that encouraged students to eat more fruits and vegetables in order to help specialty crop producers who sell to schools increase their shipments across the state. The project staff for this project developed an April Fruit and Vegetable Month coloring contest packet and distributed it to 2.4 million students throughout Texas. In fact, approximately 17,000 students participated in the coloring contest. This contest also established criteria that encouraged students to eat fruits and vegetables. Specifically, each day that a student consumed a fruit or vegetable, a sticker was placed on the corresponding date on the calendar. The school with the highest percentage of participations received a watermelon party provided by the Texas Watermelon Association. Ultimately, schools produce sales increased by \$1.5 million (to \$2.04 million) from 2007 to 2008.
- The Texas Department of Agriculture worked with the horticulture and produce industries to update several production manuals in order to keep producers up-to-date on the latest production methods. Specifically, project staff updated the GO TEXAN Organic Manual, the GO TEXAN Cut Flower Manual, the Texas Native and Southwest Desert Production Manual, the Olive Production Manual, the Texas Superstar Brochure, the Earth-Kind Roses Brochure, and the Farmers Market and Pick-Your-Own Farm Guide. These manuals were distributed to producers that were interested in the diversification or expansion of their operations. In fact, over 100 individuals requested the updated industry manuals.
- The Texas Department of Agriculture partnered with the Texas Organic Farmers and Growers Association to develop an educational seminar at its annual conference that incorporated lessons concerning marketing opportunities for organic produce and organic production techniques. More than 400 producers and gardeners learned about marketing opportunities and organic production techniques. Project staff also conducted a chef cooking demonstration with organic produce at the Texas Restaurant Association show where over 1,000 samples of organic produce was served to participants.
- The Texas Department of Agriculture partnered with the Texas Produce Association to develop an insert for "The Packer" and "Produce News" to increase the visibility of Texas producers that exhibited at the 2008 Produce Marketing Association show. This was particularly important because local produce companies previously had not been able to afford the cost for advertisements in industry-wide produce publications, which resulted in missed opportunities with potential buyers. Through the usage of these advertisements some exhibitors in the "Texas Town" area at the 2008 Produce Marketing Association show saw an increase of 10 percent in attendance.

- The Texas Department of Agriculture worked with the Texas Christmas Tree Growers Association to promote the Texas Christmas tree industry through the development of marketing campaign that informs consumers about the industry. Project staff initiated the campaign by producing and distributing 99 personalized Christmas tree banners to Christmas tree farms around the State. Also a demonstration took place at the 2008 State Fair of Texas in order to enhance consumer recognition of the banners and Texas Christmas tree farms. The campaign also began the holiday season by launching a radio announcement, which encouraged consumers to buy Texas Christmas trees. Overall, choose-and-cut farms affirmed that traffic at Christmas tree farms increased as a result of the display of Christmas tree banners. In fact, Christmas tree farms estimated that the average increase in sales was approximately 5 percent, with some farms reporting an increase in sales of up to 20 percent.
- The Texas Department of Agriculture partnered with the Texas Nursery and Landscape Association and the Texas State Florist Association to increase consumer knowledge about fall landscaping through the development and distribution of an informative magazine that offers tips for fall landscaping as well as a training session for retail nursery staff. The project staff developed a four part "Fall in Love with Texas Gardening" e-magazine, which was distributed to more than 9,000 readers during the month of October. Hard copies of this magazine were also provided to interested individuals at consumer events throughout Texas. In collaboration with the Texas Nursery and Landscape Association, project staff trained retail nursery staff to properly provide consumers with guidance for fall planting. Thirty retail garden center owners and managers participated in this training in order to educate employees. Consequently, one retail outlet (HEB) reported that 8,000 Texas-grown garden plants were sold to consumers as a direct result of this promotion.
- The Texas Department of Agriculture conducted an organic produce advertising campaign at retail outlets that offer Texas-grown produce. Specifically, project staff developed pull-up screens, placed advertisements in newspapers, and conducted organic promotional demonstrations at retail outlets across Texas. As part of the advertising campaign, the retailers agreed to supply the Texas Department of Agriculture with sales information for organic produce sold during the direct sales activities. Consequently, retailers confirmed that the average sales of organic products increased by 45 percent as a direct result of the in-store demonstrations and advertisements.

Utah Department of Agriculture and Food

Amount Funded: 103,135.47 **Number of Projects:** 9

• The Utah Department of Agriculture partnered with the Utah State Horticulture Association to evaluate three types of lures for capture of codling moth adults in apple orchards treated with pheromone mating disruption under northern Utah conditions; and develop trap thresholds based on predictions of fruit injury to determine when supplemental insecticide treatments are needed. Evaluators followed statistically rigorous experimental designs to complete valid comparison of codling moth pheromone lures. A conclusion of the project was a recommendation that Combo or DA lures are recommended for monitoring codling moth populations in mating disrupted orchards. Based on predictive models derived from three years of study in 26 orchard sites including seven apple cultivars in Utah County of northern Utah, trap thresholds for total cumulative moth capture per trap were developed. The DA-lure-model appeared to align well with fruit injury data across all study orchards, whereas, the Combo-lure-model predicted less injury at higher moth densities than observed in some orchards. Further model validation and refinement is needed based on data from more orchards, years, and locations in northern Utah. At the conclusion of this project, plans were underway to validate and demonstrate thresholds for codling moth lures in apple orchards in 2009 and disseminate to growers and others for use via an Extension fact sheet and a research publication planned for completion in 2009 and 2010, respectively. The fact sheet is posted on the Utah State University Utah Pests web page at http://www.utahpests.usu.edu/.

- The Utah Department of Agriculture partnered with the Utah State Horticulture Association to document the benefits and/or tradeoffs between different management scenarios and demonstrate the feasibility of organic and reduced input peach production in Utah. In 2008, the Horticultural Research Station in Kaysville Utah established ten different combinations of organic and inorganic fertilizer and living and non-living mulches. An orchard was established using five fertilizer treatments and baseline soil nutrient data was taken. Weed control was achieved in 2008 with either paper mulch or herbicide applications. A trial began in 2009 to determine the most effective alternative herbicide and mulch combinations to use. Each plot was equipped with micro sprinklers on individually controlled irrigation systems. Capacitance probes were installed to track the moisture requirements based on the treatment. Establishing the orchard, applying all treatments and collecting baseline data were the first activities towards meeting the long-term goals of testing and developing organic and reduced-input management strategies for tree fruit production in arid climates with cold winters, and in developing an outreach program for the project. Approximately 90 people attended a field day held at the Kaysville experiment station in June to showcase the results of the project. Data will be collected over the following two seasons and results will be published in at least two initial publications on options for organic and reduced input weed control and on the effect of mulches, soil quality and water use on tree growth.
- The Utah Department of Agriculture partnered with the Utah State Horticulture Association to survey Utah fruit orchards for incidence of streptomycin resistance among populations of Erwinia amylovora (EA) causing fire blight; evaluate Kasugamycin for management of fire blight in experiments at the Kaysville research farm; and use molecular data to quantitatively measure the epidemiological characteristics of EA. In the summer of 2008, project staff conducted a survey throughout Utah County and a few orchards in Cache Valley for comparison. Apple orchards showing symptoms of fire blight were sampled and isolates of EA bacteria were isolated and tested for reaction to streptomycin, oxytetracycline, and kasugamycin in vitro. A field experiment was conducted at the Kaysville Research Farm, in the IPM apple orchard, to evaluate the efficacy of kasugamycin relative to commercial formulations of streptomycin and oxytetracylcine. Biological agents were also evaluated for comparison. Finally, a real-time polymerase chain reaction thermal cycler was purchased to begin molecular assays of apple blossoms to better determine the presence or activity of the fire blight pathogen relative to prediction models used to determine timing and ultimately the number of management applications of agricultural antibiotics. The project confirmed that over 70 percent of isolates of EA from the orchards in Utah demonstrated resistance to streptomycin. None of the streptomycin resistant isolates were resistant to oxytetracycline confirming that it remains an effective deterrent of fire blight in Utah apple orchards to date. None of the streptomycin resistant isolates of EA were resistant to kasugamycin. Therefore, kasugamycin could serve as a rotational choice in combination with ovytetracycline to control fire blight if approved for commercial use in Utah. By determining that fire blight has developed resistance to streptomycin, but not to oxytetracycline and kasugamycin, use of the ineffective product can be eliminated. Managing fire blight with the right product and better timing for application will improve as a result of this project.
- The Utah Department of Agriculture partnered with Cornaby Farms to establish a mid-scale trial plot of raspberries using progressive agricultural techniques and several recently developed cultivars. Project expense and time and vigor and yield were tracked by variety. Problems and issues were also recorded. Results from the project showed that it is expensive to establish raspberry production in Central Utah factoring in costs for parts and installation of the subsurface irrigation, bare root raspberry plants and planting labor, and parts and installation for the trellis system. In addition there were costs for water, weeding, picking, cooling, and packaging. Production was approximately 2500 pounds of marketable fruit. Polka was the favorite variety because of its firmness, color, and flavor. Caroline was softer and lighter, but gave the highest yield. Joan J produced well, but the flavor and color was rated slightly lower than Caroline. Additionally, Joan J would be difficult to pick with a mechanical harvester due to its tight adhesion to the core. About one-fourth of the fruit was not marketable. Loss was due to sunburn and juice-sucking insects, such as stinkbugs, tarnished plant bug, and wasps. Cost to harvest and package the berries is the biggest potential impediment to financial success. Harvest and packaging costs are about one-third of the crate selling price. Data was provided to members of the steering committee of the Utah Berry Growers Association (UBGA), who have encouraged Cornaby Farms to keep records for a second year, at which time the report will be presented to the UBGA. Based on the project results, the Utah market for fresh raspberries seems robust.

- The Utah Department of Agriculture partnered with the Utah Apple Marketing Board to further educate the consumer of the advantages of supporting Utah apple growers. This goal was accomplished through numerous ways. The Utah Apple Marketing Board website (www.utahfruit.com) was updated and staff met with Utah School Nutrition Association officials during their annual conference to discuss the availability and benefits of using "Utah" grown fresh apples in Utah Schools. The Board set up a display booth at this conference to showcase Utah apples and provide handouts with information that is helpful for school lunch managers throughout the state. Finally, meetings were conducted with produce wholesalers and distributors who sell to schools within the state of Utah to encourage them to use "Utah" grown fruit in their sales programs. The Board has experienced growth in their foodservice business with companies in the state using Utah grown apples for schools and retail. As a result of the project activities, the Board saw greater interest from schools and consumers and look forward to continued growth in these areas.
- The Utah Department of Agriculture established and maintained a Utah Grower Directory to identify Utah growers that may have an interest in or the ability to raise high value crops of fruits and vegetables. Project staff researched and accumulated grower contact data to identify the operators of the current 15,000 Utah farmers that grow or are interested in producing high value fruits and vegetables for the Utah food industry. The Department was able to secure the names of 41 roadside stand operator/growers of which four have joined Utah's Own program.
- The Utah Department of Agriculture partnered with Improving Perennial Plants for Food and Bio-Energy, Inc. (IPPFBE) to create research based recommendations of locally adapted nut trees which can lead to commercial nut production in Utah and increased nut tree use in home landscape. IPPFBE combined the funds provided by the Utah specialty crop grant with its internal endowment fund to support the planting of 9,512 trees in 2008 in five different field test locations in Northern Utah and one test location in Southeastern Idaho. The trees planted in 2008 comprised 14 different species and 368 different varieties and accessions. The trees were obtained from 16 different sources.

 The results of the cultivar trial showed a number of very promising achievements and opportunities in the apricot improvement and evaluation program such as selections with improved cold tolerance during flowering and early fruit development. Considerable effort was expended on black walnuts to obtain the best available germplasm and on Persian walnuts from breeding programs to find high levels of stable genetic resistance in both species and in other cross-compatible walnuts. Hazelnut shows high potential for substantial achievement through evaluation, research and breeding. Project staff identified many germplasm sources with high levels of both qualitative and quantitative resistance to the devastating and economically important Eastern Filbert blight disease. IPPFBE also obtained genetic material for very attractive ornamental types with attractive colorful leaves, adequate cold tolerance, tasty nutritious nuts, a bushtype growth habit, and tolerances of multiple soil types and climatic conditions.
- The Utah Department of Agriculture partnered with Utah State University's Department of Plants, Soils and Climate to investigate the southern Utah native shrub, Eriogonum corymbosum (EC), for development of potentially economically valuable cultivars, quantify its degree of drought tolerance, as well as its tolerance for wet soils during nursery production and in irrigated landscapes. In 2007, project staff planted 15 accessions; five plants per accession, representing a range of E. corymbosum habitats collected in 2005 and 2006 in a common garden and began to collect data in 2008. Morphological data was collected on all surviving accessions. Several flowers on each surviving accession were bagged to exclude all pollinators. Collection of water relations data started in late July with midday stomatal conductance measurements and predawn leaf water potential on a weekly basis. Results showed that several accessions were tentative candidates for development into cultivars.
- The Utah Department of Agriculture partnered with Payson Fruit Growers to provide six Utah-based companies, two Washington-based companies, and representatives from Michigan-based companies a two-day continuing-education seminar taught by AIB International. Day One was an overview of the GMA-SAFE Audit program and HACCP, with focus placed on areas in which many of the attending companies wanted to improve. Day Two was a demonstration of a physical inspection, focusing on areas determined to be of special importance as identified by a standard HACCP program. A subject matter expert from Cherry Central Cooperative, Inc. also conducted a week-long GMA-SAFE Audit seminar. Feedback from those companies that participated in the seminars indicated improvement in understanding and performance in both day-to-day operations and third-party audits.

Vermont Agency of Agriculture

Amount Funded: 101,397.90 **Number of Projects:** 6

- The Vermont Agency of Agriculture provided print and broadcast marketing for specialty crops through the publication of two seasonal brochures. Project staff designed and published two four color, sixteen page brochures that featured seasonal Vermont products during the fall and holidays. These issues included specialty crops such as cranberries, Christmas trees, maple syrup, apples, pumpkins, and honey. The primary distribution mechanism for these brochures was through insertion into seven print newspapers, which were distributed to approximately 160,000 households. It was noted that specialty crop websites within the area experienced an approximate increase in traffic of 25 percent within 30 days of distribution of the publications and broadcasting of advertisements. Project staff also participated in a wintertime specialty crop promotion through an activity with the Vermont Ski Areas Association with a new Ski Vermont Farmhouse Chowder. This specific endeavor focused efforts to market Vermont potatoes to local skiers at over 30 ski lodges in Vermont.
- The Vermont Agency of Agriculture worked the U.S. Apple Association, the U.S. Apple Export Council and the New England Apple Association, to enhance industry public relations, marketing, research and educational support for the state's apple growers. Specifically, project staff facilitated conferences and workshops and coordinated marketing efforts with these associations to increase public and producer awareness of important issues that affect the Vermont apple industry. In fact, during the Vermont Fruit Growers Association's annual meeting, project staff invited speakers from the University of Massachusetts, Cornell University, and the University of Vermont to discuss apple orchard topic to approximately 80 people that covered orchard management, integrated pest management, as well as agribusiness and marketing. Ultimately, this project positively affected an estimated 500 individuals and family and commercial operations.
- The Vermont Agency of Agriculture partnered with the vegetable and berry industry and the University of Vermont extension leaders to organize a series of industry education and training programs incorporated into existing events as well as new regional or specific-topic events. In fact, project staff recruited educational speakers to present six sessions to a group of 110 participants at the Vegetable and Berry Growers' Association's (VBGA) annual meeting. The VBGA also facilitated on-farm workshops that provided training opportunities to approximately 100 growers concerning greenhouse tomatoes, vegetable soil fertility, and skills for beginning farmers. It was noted by project staff that the participation of produce industry members in educational activities and conferences increased 15 percent. The project staff also conducted a processing needs survey, which focused efforts to understand the range of local specialty food producer needs and demands. The survey was distributed to farmers through Agriview, the VBGA, the Vermont Fresh Network, Rutland Area Food and Farm Link, the Northeast Organic Farming Association Vermont, and other means including the Vermont Agency of Agriculture's website. A total of 377 completed surveys were returned for analysis.
- The Vermont Agency of Agriculture worked with the Vermont Grape and Wine Council to identify and participate in marketing and educational opportunities to benefit the Vermont grape growers and wine producers. Specifically, project staff worked with the University of Vermont in order to prepare an electronically distributed newsletter for grape growers that concerned pest management. Educational presentations were also offered to wine producers that provided information concerning acidity management in cold hardy grape cultivars and marketing strategies for Vermont wines. Approximately 80 people attended these presentations. Additionally, project staff marketed events such as the inaugural Vermont Life Wine and Harvest Festival for the Vermont Grape and Wine Council during the late summer and early fall of 2008.
- The Vermont Agency of Agriculture worked with the Christmas tree industry organizations to improve the overall quality of marketing efforts for Christmas trees in Vermont. In order to improve marketing efforts and the user interface for both retail and wholesale Christmas tree growers, project staff updated the Vermont Christmas Tree Association's website (www.vermontchristmastrees.org). In particular, the changes included the improvement of the site's layout, which comprised of the addition of appropriate sections for Christmas tree growers (i.e., Wholesale, Mail Order, and Choose and Cut). The project staff publicized the "Trees for Troops" campaign, which highlighted the charitable spirit of the industry through the insertion of an article in Agriview. This outreach to consumers and the media led to an article in a local paper and a television segment concerning this charitable endeavor.

• The Vermont Agency of Agriculture partnered with the American Brewers Guild, the Vermont Brewer's Association, and individual brewers and farmers to research hop harvesting and processing equipment scaled to the northeastern United States. Research included onsite visits to hops farms in the Czech Republic, Germany, and Belgium to investigate hop harvesting and processing. Specifically, the mission's team visited ten farms to learn how growers in this European region, with a climate similar to Vermont's, manage diseases that destroyed the Vermont hops industry and produce some of the world's highest quality hops. The study followed every step of the production process from soil conditions to harvesting and bagging. This mission allowed project staff to observe the harvesting equipment first hand and connect with manufacturers to solicit input on model design, which enabled significant progress to be made to identify the appropriate processing equipment for small-scale hop-yards in Vermont.

Virginia Department of Agriculture and Consumer Services

Amount Funded: 111,797.84 Number of Projects: 8

- The Virginia Department of Agriculture and Consumer Services assisted growers and producers in meeting requirements of the Good Agriculture Practices/Good Handling Practices (GAP/GHP) Program to include educational meetings, development of a workbook and a cost sharing program to help disperse the expense of the certification. Staff developed a power point presentation to be used at industry meetings, developed a workbook entitled "Developing an Operational Plan To Comply with Good Agricultural and Handling Practices, and established procedures for reimbursement of the cost of certification. An announcement of the Cost Share Program was distributed to about 25 fruit and vegetable shipping point clients; and a news release informing the public of a cost share program to reimburse GAP/GHP clients fifty percent of the total cost of certification was published. Four hundred copies of the handbook were originally printed and distributed with an additional 500 copies resulting from requests by industry and educational entities. At the conclusion of the project, approximately 850 copies had been distributed. Fifteen industry meetings with approximately 25 to 100 attendees had been held. Finally, staff performed a total of fifteen new GAP/GHP certifications throughout Virginia, with a total reimbursement of more than \$11,000 to 19 cost share applicants.
- The Virginia Department of Agriculture and Consumer Services partnered with the Southwest Virginia Farmers Market to purchase a hydro-cooler, a forced air cooler, ice machines, a tow motor, a refrigerated truck, processing tables, and packing supplies to cool specialty crops for farmers throughout Southwest Virginia. Famers in Southwest Virginia were able to expand their market from cabbage and apples into high value fruits and vegetables, such as broccoli, blueberries, cauliflower, corn, cilantro, collards, kale, mustard, turnips, and snap beans as a result of this project. By cooling these crops, there was a means to add value which significantly enhances freshness and results in a longer shelf life. This allowed many new opportunities to market fruits and vegetables. The net effect was increased returns for the grower, the ability to ship the cooled produce and the diversification of crops. From zero specialty crops grown and exported in 2006 before this cooling project began, the program now allows farmers to grow, cool and export \$3.5 million annually in specialty crops.
- The Virginia Department of Agriculture and Consumer Services partnered with Agriberry to establish berry crop sites/farms and provided work opportunities for youth while introducing them to the farming of berry crops. During the project, two sites were acquired and 14 and 15 year olds involved in the farm employment program increased from three in 2009 to 12 in 2010. The project has increased individuals' knowledge of specialty crops, and has paved the way for creating systems that effectively transferring knowledge from older generations to younger generations.
- The Virginia Department of Agriculture and Consumer Services established the Virginia Nursery and Landscape Association Beautiful Gardens plant introduction program to train farmers to initiate or expand liner production. To help broaden the instructional potential and provide greater support to the Beautiful Gardens program, a greenhouse was selected for upgrade. Changes were made to the facility to allow its use for vegetative propagation and grow out of tissue culture material to liner size. A grower/liner workshop was held in May 2010, which was attended by 21 people. Three presenters discussed the various methods of plant propagation and several plant species they are currently breeding. The greenhouse facility was used for hands on demonstrations of Stage IV tissue culture plants and the requirements of the greenhouse during the transitional stage to a liner. At the conclusion of the project, there were currently 16 Virginia growers participating in the plants of distinction program and ten growers signed on for liner production and/or the finishing of new plant selections.

- The Virginia Department of Agriculture and Consumer Services (VDACS) developed an interactive website to promote the benefits of honey bee pollination and provided contact information to beekeepers who were interested in expanding honey bee related services. Initial research was conducted by VDACS staff in reviewing available information and internet resources for insect pollination related to the use of honey bee pollination of agricultural plants. Additional research was conducted on crop pollination requirements, impact of pesticides on pollinators, and beekeeper/farmer relationship and contract development. A counter is being developed to measure the number of website visits. The number of producing colonies has remained steady over the past four years. However, honey production has declined approximately 10 percent. This is mainly due to introduction of new pests and diseases of the honey bee, poor weather patterns and several years of drought conditions. Consequently, winter losses continue to be high in Virginia and regionally. The number of beekeepers is increasing as demonstrated by a 125 percent increase in the number of local beekeeper groups. Continued training and educational programs are anticipated to provide resources for these individuals to venture into commercial use of their honey bees in pollination and honey production.
- The Virginia Department of Agriculture and Consumer Services collaborated with the Eastern Shore AREC staff to monitor black-light and pheromone traps located in Accomack and Northampton counties. This program resulted in the reduction of at least one chemical insect spray to the Eastern Shore's 4000 acres of string beans and lima beans. The number of calls to the Eastern Shore Crop Pest hot-line increased throughout the program period and as a direct result, farmers were able to apply chemicals more efficiently and effectively, reducing the amount of damage due to insect or disease by ten percent (gathered via informal survey of producers). Weekly updates were provided electronically to 150 producers and agribusiness personnel on the information gathered from ten monitored locations throughout Accomack and Northampton Counties, accounting for a participation of at least 80 percent of the Shore's vegetable producers. In addition, weekly on-farm visits were conducted throughout the project period to visually scout crops for insect outbreaks.
- The Virginia Department of Agriculture and Consumer Services partnered with Lois' Produce to convert their overhead irrigation system to drip irrigation to better meet current environmental requirements, conserve water, reduce energy costs, increase productivity, reduce disease pressures, and reduce labor costs. Thirty-five new acres were put under drip irrigation during the two production years of the project. Efficiencies were improved for valuable farm resources. Water was better utilized on more acres because more water got into more product estimated at a 50-60 percent increase in water use efficiency. There was a reduction in fuel use due to lower power demands for the drip system resulting in a decrease in fuel cost of 78 percent. Labor cost differences saw smaller savings at around \$500 for the season, but once the drip system is in place, it is in place for the season and can affect more acres for the entire season and labor that was used for moving overhead irrigation equipment now can be used for other projects. An overall reduction in fertilizer use of around 30 percent produced more crop and greatly reduced potential to lose nutrients to the environment.
- The Virginia Department of Agriculture and Consumer Services established a cost share program to support on-farm projects and promote the commercial adoption of select specialty crops production systems in Virginia. During the project, Scott Farm installed sixty 120 foot long rows of annual strawberries in compost Socks. The two strawberry varieties used in these trials were Chandler, which had an average yield per plant of 1.8 pounds of fruit and Camerosa, which had an average yield per plant of 1.2 pounds of fruit. The project was demonstrated during a Field Day that was advertised to producers and the public. Approximately 40 participants learned about compost sock production including, irrigation and fertilization systems, disease, damage caused by insect and wildlife and cost and maintenance of growing strawberry crops in compost socks. In addition, extension specialists installed seven rows of strawberries in compost sock at Virginia State University's Randolph Farm in Petersburg, VA. These compost sock rows were established in both a field site and also within a greenhouse. There were also six demonstration sites established for fresh cut flower production. A conclusion of the project was that the compost sock system is going to be very useful to growers in urban areas who have limited access to arable farm land.

Washington State Department of Agriculture

Amount Funded: 182,441.82 **Number of Projects:** 5

- The Washington State Department of Agriculture partnered with the Washington Apple Commission to provide training to six supermarket chains in produce department layout design and produce handling in four key regions in China. Specifically, the project staff worked with the Produce Marketing Association and local grocery chains to design a model produce section for grocery chains and conducting promotions. To complete these tasks, project staff performed preworkshop visits, workshops, and post-workshop visits. Approximately 240 participants attended workshops, with each workshop ranging in size from 30 to 50 participants. Participation in one workshop in Beijing involving multiple retailers was assisted by using end-of-unit and end-of-workshop quizzes. During this project, a Washington apple representative made 145 store visits to participating stores. It was observed that a larger space was allocated for Washington apples, the display was more aesthetically pleasing, the fresh produce is properly stored, and promotions organization became easier at these retail chains. In fact, retail chains reported that shrinkage was reduced by an average of 5 percent and the shelf space for Washington apple has increased by 10 percent.
- The Washington State Department of Agriculture partnered with the Hop Growers of America to help fund industry's participation in the Brau Trade Fair in Nuremburg, Germany to promote Washington hops. Specifically, the Hop Growers of America hosted a booth in the ingredients hall and facilitated a seminar on American hops and craft brewing at Brau. Brewery representatives were able to do sensory analysis with the whole hops at the booth and take the vacuum-packed pellet samples with them for pilot-brew experimentation at their brewery. Through the booth at the tradeshow, project staff performed an evaluation that surveyed European breweries and major hop merchant companies. Consequently, the project staff was able to determine that the Austrian, Dutch, Belgian, and Italian breweries surveyed already used some American hops and are interested in trying new varieties.
- The Washington State Department of Agriculture partnered with the Organic Seed Alliance to develop a premium national market for specialty grown organic vegetable seed and launch a Growers Organic Seed Cooperative as a producer-owned business. In order to complete this goal, the project staff held two producer informational meetings in which a total of 41 interested individuals attended to learn about marketing and economic opportunities for organic seed, production considerations, as well as cooperatives. They also facilitated two organizational/planning meetings with 28 attendees in which members were educated on a number of different topics that included an introduction to cooperatives, review of business plan and financial model, appointment of Board of Directors, and formation of sub-committees.
- The Washington State Department of Agriculture partnered with the Northwest Agriculture Business Center to conduct a market assessment on a sparkling apple-berry juice and a packaged loose-leaf tea from Washington as pilots followed by test marketing and preliminary market positioning in preparation for retail and direct sales. The analysis included data on potential sales volume, consumer acceptance of the product, identification of successful sales strategies, and evaluation of return of margin to the farmer. Test marketing of these products occurred over a two year period (2008 and 2009) in which project staff exposed them at over 70 stores including the metropolitan market, local stores, and commercial grocery chains. Over the course of the grant over 3,000 cases were sold, which represented over \$60,000 in sales. Consequently, project staff successfully implemented the test market analysis that reflected in product sales, identification of optimal promotional strategies, and positive consumer acceptance. The test will also yield sufficient data for information-based projections of juice needed for future production runs and establish the product as yielding a higher return per bin for apples than has been the historical experience.
- The Washington State Department of Agriculture partnered with the Washington State Potato Commission to create a training program for safe, effective operation of chemigation systems. Specifically, the project staff developed and facilitated a comprehensive training program that integrated classroom instruction and field practicum experiences. The course curriculum was used to support a chemigation certificate, chemigation endorsement, and in the development of a generic chemigation management plan. The curriculum also incorporated fundamental principles of chemigation and fertigation efficiency. In fact, an experiential-based program that included the U.S. Department of Agriculture's Natural Resources and Conservation Service, Washington State University Extension, agrochemical companies, and growers conducted four trainings comprising 58 people in the Columbia Basin (Quincy, Othello, and Pasco) and in the Yakima River Basin. The project staff also provided an extensive presentation on chemigation rules, antipollution devices, handler and bystander safety, and label interpretation at the Hispanic Worker/Handler Safety Training during the 2009 Washington-Oregon Potato Conference. Components of the presentation were translated into Spanish in order to reach all attendees. The training was attended by 55 Hispanic workers.

West Virginia Department of Agriculture

Amount Funded: 100,286.87 Number of Projects: 31

• The West Virginia Department of Agriculture worked with The Media Center to provide multimedia coverage of Specialty Crop Block Grant Program projects at the State Fair of West Virginia. Each award winner had an opportunity to explain their project and role in the specialty crop industry at the fair. The pre-conference materials were sent out state-wide and highlighted regional recipients that may not have been able to participate in the activity. Fairgoers were able to witness grant recipients during their media presentations and learn about the grant program and the specialty crops it promotes.

- The West Virginia Department of Agriculture partnered with the Collaborative for the 21st Century Appalachia to market and expand participation and support for their statewide marketing website (wvfarm2u.org) that features chef to farmer and farmer to consumer connections and buying opportunities. Project staff utilized exhibit booths, presentations, and other forms of outreach in order to alert farmers to this direct marketing tool. The booth at the West Virginia University Extension Office's Small Farm Conference exposed approximately 250 people to this website. Consequently, the number of chefs that were registered to this website increased from 11 in 2008 to 32 by the end of the grant period.
- The West Virginia Department of Agriculture partnered with the Amma community in Roane County to establish and market a farmers' market designed to meet the needs of consumers and seniors involved in the Senior Farmers' Market coupon program. A media campaign was initiated by placing advertisements the Country Times, Traders Guide, Spencer Newspapers, and the Clendenin Herald. Project staff also broadcast a commercial on WVRC Radio. The total circulation of this advertising campaign is estimated at over 81,000 people. In addition to advertising, the market held a grand opening celebration and provided signage material for the market.
- The West Virginia Department of Agriculture partnered with Bloomin' Bear Farm to erect three high tunnels to create a market for specialty crops that can be grown in reduced spaces, encourages a reevaluation of food choices, and effectively raises the average growing temperature to facilitate off season production. Project staff constructed a 20' by 40' high tunnel with three raised beds. They also initially planted with 22 varieties of vegetable salad crops and herbs. The high tunnels were used by the West Virginia University's Extension Office as a model for both production and varietal examples. Growers and producers that attended the Fayette County Farmers Market learned about the benefits of season extension through this high tunnel.
- The West Virginia Department of Agriculture partnered with the Calhoun County Farmers' Market to provide outreach activities in order to increase public awareness of the inaugural "Calhoun County Farmers' Market FRESH!tival". The FRESH!tival was designed to occur during the slow season for the farmers' market to increase interest and refresh community participation. Specifically, the event offered children's activities and a Giant Zucchini Contest, which supported an increase in consumer traffic. To facilitate this increase, project staff designed and distributed posters and fliers to area businesses, post offices, and churches. Larger and brighter road signage was also developed in order to effectively increase traffic at the farmers' market. A "New Vendor Welcome" media advertising campaign was used throughout the market season to inform potential vendors of space availability. The demonstrations, displays, classes, and two Mushroom Forays presented at the FRESH!tival were attended by participants. The sales during this 10 week slowdown period indicated that there was nearly a 30 percent increase in 2008 over the same period in 2007. In fact, the total sales for the 2008 market season (approximately \$10,000) indicated an increase of 50 percent from 2007 (approximately \$4,900).
- The West Virginia Department of Agriculture partnered with the Clay County Beekeepers to educate beekeepers on proper hive management and the skills necessary to expand the enterprises in West Virginia. Project staff utilized a promotional booth in order to develop public awareness of the value of honey as a natural sweetener. In fact, several relationships between consumers and Clay County beekeepers were established and over 1,200 recipes using honey and 500 informational brochures were distributed through the use of this booth. Additionally, project staff facilitated consultations with experienced beekeepers and state apiary staff and offered informational and management publications were provided to over 15 local beekeepers.

- The West Virginia Department of Agriculture partnered with Cummin's Farm to expand their pick-your-own operations by designing a growing system for strawberries that allows consumers to pick at a standing height. A trellis system and strawberry bed boxes were installed by project staff. Through the development of a trellis system, residents that previously were unable to participate in pick-your-own strawberry operations could now actively enjoy these activities. This was particularly helpful for local seniors, who could use Senior Farmers Market Coupons for this endeavor. In addition to outreach to the seniors, all youth visitors to the market were given an activity book surrounding the health benefits and use of strawberries. Approximately 50 booklets were distributed.
- The West Virginia Department of Agriculture partnered with Daniel Vineyards to research varietal grapes that thrive in southern West Virginia and promote their annual wine festival as an outlet to share the research results. Fifteen cold climate cultivars of grapes were planted and recorded. These grape varieties included six red grape varieties (Frontenac, Marquette, Sabrevois, Saint Vincent, Norton, Saint Croix) and nine white grape varieties (Cayuga White, Chardonel, Esprit, Seyval, Vignoles, Traminette, Vidal Blanc, Brianna, and La Crescent). Project staff also worked with the West Virginia University Extension Service to document results from an analysis sheet that described the pedigree, berry characteristics, viticulture characteristics, disease/pests impact, wine quality, season, cold hardiness, costs and future plans for each variety. In fact, the West Virginia University Extension Service planned to utilize this information to produce a statewide collection of information and regional grape growing guide. An overview of the 15 grapes and the wines that they produced were presented over the course of this Specialty Crop Block Grant period to thousands of people both in the USA and abroad.
- The West Virginia Department of Agriculture partnered with the West Virginia Farmers' Market Association to build membership through the development of consumer education materials, the facilitation of educational workshops, and the establishment of a website for resource and promotional efforts (www.wvfarmers.org). Specifically, project staff developed a chapter logo and farmers market banners, which were distributed at the annual WV Farmers Market Association meeting. As a result, membership grew from 21 members in 2008 to 30 in 2009. Members included restaurants, farmers markets, farm stands, and farmer partners from West Virginia.
- The West Virginia Department of Agriculture partnered with the Fayette County Farmers' Market to encourage children to garden specialty crops, promote their products, and promote participation at the local market as a revenue generator through the Young Farmers Program. Two Young Farmers Program education days and numerous gardening sessions provided local youth between the ages of 7 to 16 an opportunity to learn about local food, gardening, marketing, and entrepreneurship. Workshops offered at the Young Farmers Program education days included basic farming/business recordkeeping, an introduction to marketing, and the sale of produce. In fact, marketing workshops encouraged kids to develop slogans, signs, and posters advertising the Fayette County Farmers Market and farmers' market produce.
- The West Virginia Department of Agriculture partnered with Fresh Feast on the Farm to initiate and promote a catering business that focuses on the use of locally grown specialty crop products. A model was developed that specialized in serving only local and fresh food in a fine dining, natural environment. This concept relied on collaboration with area specialty crop producers. Individual menus were provided, which listed the farm source of all ingredients. Seventy-eight people enjoyed the first two Fresh Feasts. The interest and uniqueness of these culinary experiences have led to catering opportunities at four other events. Consequently, specialty crop producers also gained an opportunity to network with consumers. A website (http://freshfeastonthefarm.com) was also developed to promote the menu components that facilitated the purchase of local specialty crops and assisted in the promotion of future Fresh Feasts. To promote and generate public awareness of Fresh Feast, project staff targeted local media such as the website, newsprint articles, and radio advertisements. In fact, the event also garnered publicity in the form of print articles including the State Journal.
- The West Virginia Department of Agriculture partnered with Gilmer County Economic Development Authority to open and promote their farmers' market at a county accessible location. Project staff developed and distributed newsprint advertising, signage, special events, and other promotional items for the county center market location. Special events included a rain barrel workshop to assist producers with low cost alternatives to irrigation programs for their specialty crops, a seminar, and demonstration that illustrated the pressing of apples, sale of potted mums, a lemonade stand, and a Christmas tree sale. Consequently, the number of vendors increased from three in 2007 to 30 in 2008.

- The West Virginia Department of Agriculture partnered with the Clay County Golden Delicious Festival to promote the annual event billed as "An Apple A Day Keeps the Doctor Away'" at the festival that focused on the history and nutritional importance of the Golden Delicious Apple. The project staff visited 3rd grade classrooms throughout Clay County, West Virginia in order to hand out brochures and educational coloring booklets. This effort was made to educate children about the great taste, nutritional value, and the heritage of the golden delicious apple. Project staff also operated an information booth at the festival in order to display an exhibit concerning the nutritional and medical benefits of consuming golden delicious apples as well as to hand out informative brochures to the thousands of festival attendees.
- The West Virginia Department of Agriculture partnered with Greater Kanawha Resource Conservation and Development to conduct a demonstration project that focused efforts to establish the commercial production of cut flowers. The project emphasized the development of participant skills and knowledge through the supply of pertinent industry information and known business management practices. In order to promote this program, a news article was submitted to 23 local newspapers. Information was also posted on the organization's website. A workshop that provided hands-on training concerning the installation of irrigation and planting techniques was advertised in local newspapers. The workshop was attended by 25 interested individuals. Five growers (two from Mason County, one from each Logan, Cabel, and Mingo Counties) were selected to receive special assistance through this project. During the first year, producers were provided a variety of plant materials, which included bulbs, perennials, annuals, and shrubs. Project staff spent time with these producers in order to discuss plant provided, soil testing, ground cover, and irrigation.
- The West Virginia Department of Agriculture partnered with the Greenville Garden to promote healthy eating and lifestyle choices by featuring West Virginia Grown© specialty crop products in a series of recipes and fact sheets aimed at youth audiences. Project staff distributed fact sheets and recipe cards at farmers' market. The recipe cards offered a suggested use of the produce promoted through the vegetable sale; particularly, Asian greens and summer squash. The distribution of fact sheets and recipe cards demonstrated an 80 percent increase in sales. In addition, verbal feedback and reporting showed interest in the Asian greens and summer squash by youth. The project staff also facilitated a "Farm Market Direct To You" (http://greenvillegarden.com), which provided the local marketplace the ability to pre-order fruit and produce online. Fifteen individuals signed up for to participate and throughout September illustrated that an average of six orders per week.
- The West Virginia Department of Agriculture partnered with Human-Animal Bond, Inc. to develop a school and farm based nutrition and agricultural education program with the intent of extending to a web-based program that can be instituted throughout the State. The curriculum developed taught nutritional principles associated with locally grown foods, provided plots and growing assistance at a 35-acre donated farm, and established a weekly farmers' market to complete the entire nutrition-growing-consumption cycle of specialty crops. The project staff integrated key curriculum components into an after-school program that correlated with West Virginia learning goals. This curriculum also included resources available from U.S. Department of Agriculture and general health sciences to address topics such as the Food Pyramid and the role of fruits and vegetables. Twenty-five students participated in this after-school program. Project staff also established a farmers' market that had between six and eight consistent vendors that provided locally grown specialty crops.
- The West Virginia Department of Agriculture provided the Jackson County Beekeepers with beekeeping educational materials and packages of bees to encourage expanded honey production and sales. Specifically, "ABC and XYZ of Beekeeping", an apiary oriented publication, was purchased and distributed to 40 beekeepers in order to provide them with the most up-to-date information concerning beekeeping. Project staff also developed and implemented a beginner beekeeping curriculum, which was presented to 40 participants. The provision of this information yielded a significant increase in the number of hives and beekeepers in Jackson County, West Virginia. In fact, reports indicated that at the completion of the beginner workshops, the number of hives increased by 1,000 and the number of beekeeper increased by approximately 190.

- The West Virginia Department of Agriculture partnered with West Virginia State University-Rural Business Services to promote and market the 3rd Annual Recipe Challenge, which is held at the West Virginia State Fair. The recipes within this contest are designed to use locally grown specialty crops. Project staff recruited contestants, promoted the event, and facilitated the contest. Twenty-one contestants submitted their recipe and were interviewed by a judging team to explore additional details about their entry. The judges consisted of individuals with expertise in the fields of culinary science, business development, technical assistance, and marketing. The winner of the contest was offered the opportunity to develop their recipe into a marketable product, which included packaging, productions, marketing assistance, and strategic business planning. Through this process each contestant was exposed to the specialty crop industry and had the chance to explore the business and industry sides of food manufacturing.
- The West Virginia Department of Agriculture partnered with the Lewisburg Farmers' Market to facilitate special events to generate interest and participation by children at the local market. Over the course of the grant, project staff organized a monthly "Just for Kids" event that included hands-on experiences associated with specialty crop production, identification of vegetables, and nutritional education activities that included coloring books, stickers and games. "The Great Zucchini Race" was also promoted through the usage of signage and other printed and electronic materials to increase awareness of the hours of operation and location of the farmers' market. In fact, a survey count illustrated that over 200 customers came to the market during sales hours. Through the facilitation and promotion of these events, the number of customers to the Lewisburg Farmers Market increased to over 200 on average during the market season. In fact, vendors indicated that sales increased by \$30,000 from 2007 to 2008.
- The West Virginia Department of Agriculture partnered with Mock's Greenhouse to research the use of geothermal energy in the greenhouse industry to determine the feasibility and application of this less expensive energy source and provide the research data with area greenhouses for feasibility. The analysis found potential for geothermal energy usage; however, it also cautioned that the average temperature low during the cold months would not allow geothermal to be the sole source of heat in the greenhouse in terms of air handling. It was recommended that a mixed system, which included radiant floor utilizing the geothermal energy in combination with a gas air handling system, would be the most cost-efficient and provide long-term energy cost-savings for low temperature periods. Project staff shared these results with other interested parties through presentations at events that included the West Virginia Agritourism Conference and West Virginia Small Farms Conference. More than 200 people attended the presentations about geothermal heat sources in a greenhouse environment. In fact, at least 10 operators have considered the utilization of supplemental heat use through the technology.
- The West Virginia Department of Agriculture partnered with Morgantown Farmers' Market Growers to develop two "special market days" to attract new customers to the market, encourage families to attend the market, and expose more people to food and farming issues. Specifically, project staff facilitated the Farm Celebration Day and Kids' Day at the Morgantown Farmers Market. Both these events promoted specialty crops to children through the development of family activities. The farmers' market's sales receipts increased from \$1,210 to \$2,091 (73 percent) as a result of the Farm Celebration Day; while sales receipts increased to \$6,165 as a result of the Kids' Day.
- The West Virginia Department of Agriculture partnered with Mountain Top Farm to erect a high tunnel as an alternative growing method to replenish the local farmers' market with fresh strawberries. Project staff built a high tunnel, laid plastic mulch in the planting area, and installed a drip irrigation system. Project staff also planted 2,000 strawberry plants, which consisted of the Sweet Charlie and Chandler varieties. The pilot project yielded sufficient quantities of fruits to provide product for the market benefitting the market and community. In April 2010 a group of County Extension Agents toured the farm in order to observe the high tunnel project as a field day event. This field day showcased the controlled environment offered by high tunnels.
- The West Virginia Department of Agriculture partnered with the Spencer Farmers' Market to promote the market through advertising and technical support to expand its producer base and increase the amount of sales thereby increasing consumption of specialty crops. Project staff initiated this promotion campaign with a live radio broadcast, a special promotion, and the placement of new signage. The market was also promoted through a Roane County tourism brochure that was distributed throughout West Virginia. As a result, it was estimated that the number of customers increased from 200 to 250 (25 percent) over the course of the grant period. The sales during the special promotion increased to over \$1,000, which doubled the normal daily sales.

- The West Virginia Department of Agriculture partnered with Roane Vineyards to examine solutions to the deer population issues and their effect on specialty crop production through demonstration of an innovation fencing system. Project staff selected a fencing style (tall/retractable) and constructed the fence. The fencing proved to be successful in keeping the deer population from damaging the ripen grapes and new growth of vines. Preliminary loss assessment indicated that loss from deer consumption dropped from 90 percent of the crop to 0 percent in one growing season. Over the course of the grant period, more than 50 people examined the deer solution for incorporation into their educational programming or operational consideration.
- The West Virginia Department of Agriculture partnered with Spangler's Greenhouse & Organic Farm to use a high tunnel equipped with both a shade cloth and spraying system that conserves water by recirculation and conduct outreach to share the model with other producers. The shade house was constructed with an active, water-fed cooling system that allowed for controlled environment growing conditions. Through the use of this system the project staff successfully lowered the ground and air temperature so that crops that require cooler temperatures could yield more during the hottest parts of summer. The shade house crops produced cool weather crops at a ratio of 10 to 1 ratio to similar crops grown in an outdoor, uncontrolled environment.
- The West Virginia Department of Agriculture partnered with Wayne County Beekeepers to create small nucleus boxes of bees with queens and establish good production practices in order to increase yields of honey and reduce bee mortality. Specifically, project staff created an informative video that described management processes for wintering of bees. Approximately 100 queens were also established and prepared for overwintering. These bees were monitored and received routine hive evaluations. Results from this evaluation were presented to over 200 people at an annual regional beekeepers meeting in West Virginia.
- The West Virginia Department of Agriculture partnered with the West Virginia Beekeepers Association to provide
 matching funds for honeybee queens and granulated sugar for late summer, fall, and winter for bee colonies that required
 re-queening. Approximately 400 bee queens were ordered during the summer and distributed in order to re-queen
 colonies during the fall and winter. Project staff supplemented this effort through the promotion of the project and
 educational opportunity for local beekeepers.
- The West Virginia Department of Agriculture partnered with the Weston Tailgate Market to create consumer awareness of the market location and availability through the construction and placement of a market sign. Project staff designed, constructed, and erected a sign that included the West Virginia Grown logo and market days and hours of operation. The sign was placed in order to increase visibility for potential and existing customers. Since the sign was erected, the number of vendors and buyers at the market has increased from an average of three producers per day to five producers per day in 2008.
- The West Virginia Department of Agriculture partnered with a member of the Williamsburg 4-H Club to conduct a research project in cooperation with local restaurants and the assistance of his 4-H leader to determine varieties of potatoes most suitable for menu placement. Blue and red potatoes were grown on a ¼ acre plot. After growing the crops, the 4-H member harvested the product and became a vendor at the Lewisburg Farmers Market. This member also attempted to market his product to local restaurants to capitalize on the food service trade. The participant produced a leaflet that explained the antioxidant properties and the health benefits of the potatoes and presented a realistic summary of the costs and difficulties/successes in marketing this unique project for future consideration.
- The West Virginia Department of Agriculture partnered with the Wirt County Extension Service to establish and market a Farmers' Market for locally grown specialty crop products. Specifically, signage, scales, and canopies were purchased for the farmer's market. The signs advertised the market and vendors in order to increase the sale of locally grown produce. The project staff also placed advertisements in newspapers. These efforts led to an increase in the number of vendors from two in 2008 to five in 2009.
- The West Virginia Department of Agriculture partnered with West Virginia University to research blueberry production and determined varieties most suitable for growth in the State. Blueberry varieties were established on farms in five regions of West Virginia. Twelve of the newest cultivars were selected. Growers for the project were selected based on interest in blueberries and how this crop could complement their existing farm. Participating producers obtained skills related to cultivar selection, fertilization, irrigation, pest management, harvesting, postharvest handling and marketing of blueberries. In fact, fifteen interested growers attended a planting workshop conducted at one site location (Mineral County, WV) that discussed variety selection, soil acidification, irrigation, and mulching.

Wisconsin Department of Agriculture, Trade and Consumer Protection

Amount Funded: 120,305.36 **Number of Projects:** 9

• The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Ginseng Board of Wisconsin to revise a promotional marketing video in both English and Mandarin in order to target United States and Chinese consumers, distributors, wholesalers, and retailers. The project staff finalized this promotional marketing DVD, which highlighted the quality of Wisconsin ginseng, as well as the care taken to grow Wisconsin ginseng. Upon completion of the DVD, project staff distributed 500 copies of the DVD throughout the United States and Asia and posted it to the Internet in order to garner awareness for this product. It was also shown during tradeshows in both Japan and China.

- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Apple Growers Association to develop an "Autumn Harvest" trail that helped guide consumers and tourists to apple-related destinations in Wisconsin. The project staff also developed a partnership with the Wisconsin Agricultural Tourism Association and the Wisconsin Fresh Market Vegetable Growers Association to diversify the food and culture trail. Ultimately, the Autumn Harvest Trail Southern Gateways segment was launched during the fall with 18 trail destinations. This effort increased consumer traffic at agricultural related tourism destinations and activities, with 1,246 adult consumers indicating that they visited one of these apple-related destinations for the first time. The project staff also promoted this trail with an innovative set of web pages that attracted over 2,400 visits in which over 1,300 were unique viewers.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Cranberry Board to produce an educational video concerning Wisconsin's cranberry industry, print media concerning cranberries and weed management, and to enhance the displays in the exhibit hall at the Wisconsin Cranberry Discovery Center. Specifically, project staff developed an educational video, "Wisconsin Cranberries Growing Strong", that concerned the State's cranberry industry and targeted members of the general public, tour groups, and attendees at public events. The video was distributed to approximately 500 producers, processors, and educators throughout Wisconsin. Over the course of this project thousands of visitors watched the video at the Cranberry Discovery Center or on the WI Cranberry Growers Association website. A cranberry brochure was also developed and distributed in order to educate the public regarding cranberries and the cranberry industry. Its main focus was the utilization of 20 recipes that incorporate cranberry preparation techniques and quick food ideas. Project staff distributed more than 15,000 Cranberry recipe brochures.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Christmas Tree Producers Association to develop a promotional brochure on the environmental benefits of real trees, promote Christmas trees, distribute educational and promotional materials, as well as educate growers on a variety of marketing mechanisms and how to communicate the environmental message to the media and the public. Project staff developed a children's activity booklet, an educational display unit, educational posters, an environmental benefits brochure, and an educational curriculum concerning the environmental benefits of real Christmas trees. Over 1,000 activity books were distributed to children and 100 poster sets and curriculum resources to parents and teachers since their completion. This school curriculum was created and marketed to elementary schools in the state and given to teachers directly. Project staff also held two different workshops that were utilized to circulate information concerning effective strategies to reach Generation Y as well as various mechanisms to disseminate positive stories to the media about real Christmas trees.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Commercial Flower Growers Association to determine the most popular cut flowers that grow well in Wisconsin and to develop a website for dissemination of this information. Project staff conducted field trials to determine the most popular cut flowers (annuals and perennials) that grow well in Wisconsin. Two student interns were hired to implement the planned programs and developed the new cut flower program at the Agriculture Research Station as well as the bedding plant trials. The popularity of numerous species of plants for cut flowers was determined by holding two field days open to the public in which over 1,456 people attended. The results of these trials were also posted to a website developed to disseminate information concerning the popularity of cut flowers that grow well in Wisconsin. Over the course of the grant period over 2,300 individuals visited this website.

- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Commercial Flower Growers Association to develop and distribute six issues of a newsletter that help greenhouse enterprises become competitive in the marketplace. Project staff developed and disseminated seven newsletters that addressed pertinent information to keep flower growers and sellers competitive in current times to more than 500 growers throughout Wisconsin. The articles covered such topics as the different types of fuels to heat greenhouses, the profitability of growing Poinsettias in Wisconsin, using plant growth regulators, ways to cut greenhouse energy costs, etc. Recipients of the newsletter indicated that the information provided was both timely and pertinent to the needs of their business. In fact, eight individual growers that received this information positively affirmed that newsletter's recommended design upgrades to their sales websites benefitted their enterprises.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Potato and Vegetable Growers Association to build a potato and vegetable storage facility in which researchers conducted investigations concerning various storage methods to extend vegetable shelf-life. Eight independent potato researchers received funding to perform projects through the University of Wisconsin Madison that included improving the quality of the seed; increasing the quality and consistency of potatoes grown, stored, marketed and processed; reducing losses of stored potatoes; elongating the storage season; and increasing the energy efficiency in storage facilities. Some of this research improved the consistency of physiological age of planted seed, improved storage management to lengthen the storage season, as well as quantified the efficiencies in storage facilities in order to compare with existing storage facilities to measure possible energy savings. The results of these investigations were presented at three different meetings (the Wisconsin Potato Grower Education Conference, the Processing Crops Conference of the Midwest Food Processors Association, and the Annual Meeting of the Wisconsin Muck Crop Growers) with a total of over 550 participants.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Nursery Growers to conduct educational programs for nursery professionals and horticulture students in order to improve their knowledge of business and marketing. The Wisconsin Nursery Association produced five educational events over the course of a three year period, which included three winter workshops and two nursery summer field days. Over 220 green industry professionals, students, as well as university and extension representatives, attended the three winter workshops. Educational seminars at these workshops included topics concerning pest and plant growth regulations, herbicide information, and other information pertinent to the green industry. The two nursery summer field days were attended by a total of 751 industry professionals with a total of 186 (87 in 2008 and 99 in 2009) exhibitors displaying their products and services.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection enhanced the SavorWisconsin.com website, which is a marketing tool for local producers, to promote Wisconsin agricultural products to consumers and wholesale food buyers. Project staff implemented an updated and expanded listing, which resulted in a 60 percent increase in Wisconsin farmers' market listings on the website. A more robust list of key search words was also created to enhance specialty crop and producer search capabilities. Additionally, the project staff developed articles that focused on key specialty crop industries featured on the homepage between the months of October 2007 and September 2008. Key specialty crop industries and focus areas included: apples, cranberries, squash, sweet corn, maple syrup, fresh market vegetables, strawberries, berries, cherries, and carrots. Over the course of this project, visitation to the website increased by 54 percent from November 2007 to September 2008.

Wyoming Department of Agriculture

Amount Funded: 100,695.09 Number of Projects: 11

• The Wyoming Department of Agriculture partnered with the University of Wyoming to conduct variety trials of fruits and vegetables in order to ascertain their vigor, cold, and drought tolerance as well as study native plants for suitability of domestic cultivation. Project staff evaluated varieties of tomatoes, peppers, eggplants, zucchini, beets, cabbage, carrots, radishes, dates, and lettuce in 2008 and 2009. The data collected for both years included yields and nutritional content of each cultivar and an analysis of produce for total phenols, total flavonoids, and oxygen radical absorbance capacity (ORAC, a measure of antioxidants) was completed in December 2009 and October 2010 at the University of Nebraska – Lincoln Small Molecule Analysis Lab. A trial report (http://wyagric.state.wy.us/images/stories/news/specialtycrop/scg-vegetabletrials.pdf) was forwarded to 74 Wyoming producers and Agricultural professionals who attended the Small Farm Conference or Farmers Market Conference in 2010.

- The Wyoming Department of Agriculture awarded 13 grants to small farmer growers to develop methods for season extension and increased crop productivity. These grants were important because due to Wyoming's short season and high altitudes, many growers have a limited production cycle restricting their ability to market products during prime farmer market season. One grant was to the Robinson Family Farm and Ranch that constructed a high tunnel providing fresh local vegetables for 40 community supported agriculture (CSA) members, the Jackson Hole Grocers Farm to Market Program, and the Thayne and Jackson Farmers Markets which averages 54 frost free days. Vegetables were also supplied to local school districts to support their healthy snack program. The farm also participated in an agricultural education program for six kindergarten classes.
- The Wyoming Department of Agriculture worked with Master Gardeners, Wyoming Cooperative Extension, and Wyoming Business Council to support the education of specialty crop farmers concerning soil fertility maximization at the Kinsey Soil Conference. Specifically, project staff focused its efforts on providing speakers during this conference. In March 2008, a soil conference was held in Torrington, Wyoming with approximately 110 people attending. Sessions included soil fertility and micro nutrient balancing. The seminar was a condensed version of a five-day introductory course based on the Albrecht model of soil fertility balancing. The objectives of the conference were to introduce participants to soil testing and soil fertility using the Albrecht model. The evaluations of the course were very high and rated the speaker as the best in this field.
- The Wyoming Department of Agriculture worked with the Farmers Market Association to develop a Wyoming Farmers Market Manual that addresses rules, regulations, and food safety issues to provide the instructional basis for the Wyoming Farmers Market Certification course. Project staff awarded a contract to an individual to develop a manual and offer a course to managers. A manual was completed and reviewed by numerous entities in order to receive feedback from a variety of sources. The contractor also offered a daylong farmers market certification seminar for 10 market managers in Casper, Wyoming in September 2009. All the market managers that attended this course passed the exam for certification. A subsequent seminar was held at the March 2010 Farmers Market Conference in which an additional 24 managers were trained to be certified market managers. The manual and seminars were posted to the Wyoming Farmers Market Association's website (www.wyomingfarmersmarkets.org) for interested parties to learn how to start or run a farmers market.
- The Wyoming Department of Agriculture partnered with Sheridan College to provide adolescents from the local school system an opportunity to learn about the nutritional value of fresh produce, marketing, and basic business skills. Specifically, the project staff developed a community garden in order to facilitate educational, hands-on activities for children between the ages of 2 to 15. High tunnels were also added to enhance the production capacity of the garden and provide an additional production method for the participants to observe. Activities in the garden included planting, harvesting, sampling, and wedding. Children and families learned about specialty crop production through activities that included constructing fruit and vegetable mobiles, greenhouse planting, plant identification, and water conservation. Over 90 children and adolescents participated during each year of this community garden and its educational activities.
- The Wyoming Department of Agriculture supported the facilitation of a regional seed genetics educational workshop to help develop local farmer knowledge of seed saving and specialty crops. This workshop was coordinated with the 2009 Wyoming Farmers Market Conference in order to target local specialty crop producers. Specifically, project staff targeted farmers in Wyoming who had expressed an interest in increasing their knowledge of seed production and selection. Approximately 20 people attended this event with an additional 65 interested conference participants provided binders of the presentation. Project staff also worked with the Organic Seed Alliance to compile an Organic Seed Production manual for Wyoming specialty crop producers. Information in this manual included organic seed saving, farm variety trails, the principles and practices of bean seed, beet seed, carrot seed, radish seed, lettuce seed and spinach seed production, seed harvesting and handling, seed crop records, trail evaluations, variety trail planning and weather risks as well as ethical development and stewardship of seeds. The Organic Seed Production and Saving Guides were provided to all 23 county extension offices for reference material and for master gardeners. It can also be located at www.seedalliance.org/Publications.

- The Wyoming Department of Agriculture supported the facilitation of an annual farmers' market conference in Wyoming that focused on increasing the number of markets and the level of expertise of market managers and vendors through the provision of food safety education and support for the network of farmers markets within the State. Each year the conference offered specialty crop producers an opportunity to network with other producers and farmers' market managers in order to share ideas. Topics of presentations included market safety, season extension, companion planting, and farmers' market certification. In fact, a high tunnel workshop followed the 2009 conference in which 35 participants learned to assemble high tunnels. Over the course of a two year period (2008 and 2009), over 125 people participated in the Wyoming Farmers' Market Conference.
- The Wyoming Department of Agriculture worked with local restaurants and hotels to offer consumers and retail buyers ideas for cooking with Wyoming specialty produce at farmers' markets. Specifically, chef demonstrations were facilitated at selected farmers' markets across Wyoming (Casper, 7; Sheridan, 4; Gillette, 1; Cody, 3; Saratoga, 1; and Douglas, 1) to expose people to new ideas for preparing produce found at farmers' markets. Interested visitors were able to take recipes to prepare at home. Project staff also developed recipe cards and other promotional materials to continue the promotion of specialty crop usage for farmers' market consumers. In fact, six recipes were selected in order to print to approximately 10,000 cards. These cards were then sent to Farmers Markets around Wyoming to distribute to vendors and consumers. Additionally the project staff printed and distributed over 2,000 sets of Canners Corner to the 23 County Extension offices for circulation among the general public.
- The Wyoming Department of Agriculture partnered with the University of Wyoming and the Wyoming Grape and Wine Association (WGWA) to enhance marketing and educational materials regarding the production of grapes and to conduct tours of Wyoming grape orchards. Specifically, project staff updated the WGWA website, which is meant to direct interested growers to production and marketing information and serves as a source of information for new members and growers. Project staff also held several meetings, which included the annual spring pruning clinic. Topics during these events included introductory resources, lectures, and hands-on clinics to educate growers and members about a variety of production techniques. Members also visited a variety of local vineyards in order to meet and discuss upcoming events, production techniques, as well as to network. Over 110 people attended the meetings facilitated by the WGWA.
- The Wyoming Department of Agriculture developed a database of nursery stock producers to facilitate the formation of the Wyoming Nursery Stock Association and host a Nursery Association conference. Concurrently, the Colorado Nursery and Greenhouse Association (CNGA) was exploring the idea of expanding its association into Wyoming. Project staff facilitated several exploratory meetings that included 20 Wyoming from eight greenhouse and nursery companies. These individuals voted to pursue a Wyoming Chapter of the CNGA. Consequently, the CNGA and the Wyoming Growers and Groundskeepers (WGGA) agreed to partner and support each other's programs thereby facilitating the sharing of resources. In response, the WGGA expanded its 2009 conference program to include topics that were relevant to specialty crop producers. The CNGA presently lists seven members from Wyoming and the WGGA lists 19 members as nursery/tree/sod. In fact, it the WGGA provided educational opportunities to some of the 100 plus nurseries and greenhouse companies.
- The Wyoming Department of Agriculture partnered with Wyoming Consumer Health Services to develop a curriculum and materials in order to facilitate a "train-the-trainer" session concerning food safety issues associated with the preparation and sale of fresh produce at farmers' markets for the cottage industry. This session was specifically oriented toward instructors of seminars that provide information to farmers' market managers and vendors. Project staff also updated and distributed the Farmers' Market Food Safety Training booklet. Eleven Farmers Market Food Safety Seminars were offered to provide information to farmers' market managers and vendors concerning up-to-date food safety issues and policy. These training sessions were attended by 85 farmers' market managers and vendors. In addition, over 160 Farmers' Market Food Safety Training booklets were distributed to vendors and other interested in selling food at farmers' markets.