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Project Title:

Nevada Department of Agriculture Marketing Projects

Project reported in Accordance to Approved Revision 7/11/11

Project Summary:

Reallocated funding was utilized for Nevada SCBGP staff to perform outreach, prepare timely reports, review project expenditures, and assure that project activities were in accordance with program requirements. Prior to having project staff, timely reports were not received, sub-recipients had little guidance, and site visits were not performed. This project enabled program staff to address these issues and resulted in the successful completion of awarded projects.

Project Approach:

Since the start of the project, annual site visits have been performed to determine sub-grant timeline status, appropriate use of funding, and outreach activities. Site visit reports were documented and filed accordingly. Approximately 12 site visits were performed over the project period. Sub-recipients were required to submit expenditures and back-up documentation quarterly.

Maintaining correspondence with sub-recipients was crucial to the success of this project. Through effective and regular correspondence program staff was able to accomplish timely reports, determine project delays, and monitor program outreach. This approach was utilized throughout the project and created more involvement from sub-grantees in program outreach in addition to stakeholder initiatives.

To promote the SCBGP, two sub-recipients spoke during the Nevada SCBGP Project Development Workshop to discuss their projects and program experience. The remaining projects were presented by the SCBG Program Coordinator. The Nevada Previously Funded Project newsletter was created and disseminated to the NDA's contact list. The newsletter provided an overview of successful projects from this award. Awarded projects were also discussed during Western Nevada College, Specialty Crop Institute (WNC, SCI) workshops, What's in Your World workshop, and during the 2012 Landscape Conference. Site visit photos and project details were posted on the Nevada SCBGP facebook page as an additional resource for program outreach. Through outreach and efficient management, program needs were identified and emphasized in the 2012 Request for Proposal (RFP) document.

The Nevada SCBGP website http://agri.nv.gov/PLANT_SCBGP.htm was updated regularly with program deadlines, reporting criteria documents, and promotional materials. The webpage counter was recorded monthly to determine web-site success and program interest. A webpage was later created specifically for sub-recipients. Webpage content including the following: the Nevada SCBGP Policies and Procedures document, sub-award compliancy checklist, reporting checklist, and quarterly expenditures timeline. http://agri.nv.gov/PLANT_SCBGP_SubRecipient.htm.

The technical assistance provided by program staff has benefited sub-recipients, interested applicants, and additional stakeholders. These groups have become more informed regarding the program and specialty crop industry needs.

Goals and Outcomes Achieved:

Program staff determined that it would be beneficial to workshop participants to merge the SCBGP technical assistance workshop with the previously awarded project workshop. This provided potential applicants the opportunity to learn from previous sub-recipients before preparing their 2012 proposals. The workshop was held January 17, 2012 with 20 participants in attendance and 30 initial registrations. The workshop was advertised via e-mail to the NDA contact list of approximately 200 individuals, through the Reno Tahoe-Edible Magazine, on the Nevada SCBGP website, and SCBGP Facebook page.

The majority of Nevada SCBGP workshop participants were informed about the program through WNC, SCI workshops, word-of-mouth, and direct contact by Nevada SCBGP staff. The goal of notifying at least 5 people through the website was not achieved. However, participants expressed that the SCBGP webpage was useful for obtaining program information. Sub-recipients also expressed appreciation for the web-page when searching for reporting criteria. The website received 926 visits during the project period.

Twelve site visits were performed and documented during the project.

- Four WNC, SCI workshops were attended. SCBGP staff presented program information and provided promotional materials.
- Two Doubletree Ranch site visits were performed. One visit included the Lovelock farmers market, which provided produce from 5 separate farmers. The second visit was to the hoop house production site.
- The Smith Valley Specialty Crop Laboratory Production Garden was visited twice. The first visit was specific to the garden site for timeline status. The second visit allowed for students to discuss what they had learned and their role during the project.
- The NanaDew Herb Farm Strawberry Intern Project was inspected twice to verify expenditures and to determine project accomplishments.
- Two site visits were performed to determine the status of the Great Basin Community Food Cooperative Specialty food Development project.

Beneficiaries:

Project beneficiaries included specialty crop industry stakeholders, SCBGP sub-recipients, interested sub-recipients, and specialty crop consumers. Stakeholder meetings were attended to identify industry needs and to gear upcoming SCBGP request for proposals towards these areas. Sub-recipients received hands-on assistance needed to successfully comply with program requirements and to fulfill project objectives. Consumers became more informed regarding specialty crops, programs available, and Nevada specialty crop producers. Approximately 200 NDA contacts were obtained during WNC, SCI workshops, SCBGP advertisements, and from the SCBGP website. These individuals were regularly informed about upcoming specialty crop trainings, SCBGP projects, and program details. Approximately 200 people from WNC, SCI workshops were informed about the program through a presentation and promotional materials.

Lessons Learned:

SCBGP staff has learned that project oversight is crucial to program success. Sub-recipients need assistance in completing thorough reports and thrive when they receive guidance. Being involved in projects and encouraging outreach allows more program beneficiaries. Adapting promotional materials to industry and sub-recipient needs has proven successful in obtaining projects that fulfill program objectives.

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Project Title:

Food Production/Farmers Market

Project Summary:

The SCBGP grant provided funding to initiate a farmers market program in underserved areas of Northern Nevada including Lovelock, Imlay, Winnemucca, Battle Mountain, and Hawthorne. This project has established collaboration between farmers through the NevadaGrown network in order to provide farm-fresh produce from various producers.

The project was initially aimed at providing naturally grown specialty crops to the Lovelock area but eventually grew to impact four additional food deserts. This project came at a time where no specialty crop producers were present in the Lovelock area and when the desire for local specialty crops was high. Specialty crop producers in outlying areas couldn't afford the travel costs to provide their produce at a market in Lovelock. This project established collaboration among farmers interested in selling to this area. The project lead obtained, stored, and sold produce for 5-12 Nevada specialty crop farmers.

This project was also created to encourage specialty crop production in the Lovelock area, a predominately alfalfa farming community. Doubletree Ranch served as a resource for interested producers to visit and learn about specialty crop growth utilizing a hoop house production model. This model was used to demonstrate water conservation benefits of specialty crop production as opposed to alfalfa production.

Project Approach:

In 2009 the Lovelock Farmers Market was established. The Project Lead met with Nevada producers to determine farmers that would be interested in selling at the Lovelock market and cost/time effective options for getting the produce to Lovelock. This was achieved by networking with growers through NevadaGrown workshops. Through farmer collaboration, Doubletree Ranch picked up produce from other farmers and served as a drop-off location when farmers were passing through the area. The Project leads would later set-up the market and sell the produce at the market. Excess produce was donated to the local Food Bank or utilized in the senior voucher program.

Two hoop houses were purchased to research specialty crop production. Hoop houses proved successful at extending the growing season and protecting produce from extreme

weather. The Lovelock elementary school was able to tour the hoop houses and received knowledge on how specialty crops are grown. Locals and interested growers were welcome to tour the Ranch and to participate in the markets. During 2011 Double Tree ranch assisted two growers in constructing hoop houses for season extension growing.

Lovelock Farmers Market promotion tools included a Facebook page, website, local newspapers and flyers. As market demands increased, advertisements were placed for the Winnemucca farmers market using the same resources. All producers participating in the Farmers Market benefited from the advertisements placed.

The Project Leads attended three WNC, SCI workshops and discussed their production methods, marketing, and the Farmers Market. They also networked with participants during workshop breaks.

Goals and Outcomes Achieved:

The initial goal of obtaining produce from various Northern Nevada Farmers was a success. Specialty crops sold at the market included produce from 7 farms in Fallon, 4 in Lovelock, and 1 from Winnemucca. Market advertisements promoted the 12 producers that provided produce for the markets. These activities provided an increase in awareness of Northern Nevada farmers and the specialty crops that are available in Nevada.

The goal of increasing the number of specialty crop producers in this region was also achieved. The project leads provided assistance to interested growers and by the end of the project a new grower in Imlay was established using a similar production model.

The goal of increasing public awareness of eating locally grown produce and providing education opportunities to students was also achieved. Through field trips 128 students were informed about specialty crop production, plant physiology, and harvesting produce. Farm tours were provided to 360 individuals. Farmers Markets increased from six markets in 2009 to 70 markets by 2012. Markets included: 7 Hawthorne markets, 13 Sparks Rail City Garden Center Markets, 12 Winnemucca markets, 14 Lovelock markets, 2 Battle Mountain Markets, and 22 on the Farm markets. Market participants increased their awareness of local specialty crop producers and value-added products made available by Northern Nevada growers.

The 4-H outreach component was not accomplished. The Project Lead attended the 4-H Leadership conference and was trained on 4-H Leadership. However, the Project Lead was pressed for time so prioritized youth outreach on school field trips and farm tours. Providing education training to 4-H groups remains a future goal for DoubleTree Ranch.

Beneficiaries:

Pershing County residences, local youth, potential growers, and Northern Nevada growers benefited from this project. Twelve growers participated in the newly established markets and received promotion for their farm produce. Lovelock school students received farm training on specialty crop production and hoop house season extension. The Project Leads networked with interested growers and provided information to help establish new growers in Pershing County. WNC, SCI workshop participants benefited from the information provided regarding production techniques, marketing resources, and establishing a new

farmers market. Local specialty crops were made available to five underserved areas and 4,600 people in Pershing County.

Lessons Learned:

Effective forms of marketing were determined through utilizing newspaper, magazine, and on-line media resources. Participating in NevadaGrown networking meetings was beneficial in obtaining farmer participation in new markets.

The Project Leads became more experienced in hoop house production which allowed them to provide knowledge gained to other interested growers. Season extension lessons learned included how to propagate plants from seed and transplant, how to extend the growing season, and how to promote the Farmers market. Another key lesson learned was the importance of developing long-lasting and mutually beneficial relationships with other growers in Lovelock, Winnemucca, Fallon, and Imlay.

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Project Title:

Great Basin Co-operative Specialty Foods Development

Project Summary:

This project was awarded to educate consumers regarding the value of buying Nevada grown and locally produced foods through the Great Basin Food Cooperative (GBFC). This was achieved through education events hosted by GBFC, outreach during city of Reno sponsored events, and by performing specialty crop farmer workshops and tours. To encourage consumption of Nevada grown specialty crops, proper food display items and promotional materials were needed that would attract customers and adequately demonstrate the variety of specialty crop products available.

This project was important and timely because it began at a time of rising fuel prices and when a distribution center was crucial to the success of local farmers. The rising fuel prices made it difficult for farmers to reach heavier populated areas. The cooperative allowed for

reduced travel costs for farmers, a larger supply of local produce, and increased the sustainability of local farmers.

Farmer collaboration was also an important component of this project. Farmers needed to work together in planning their growing season in order to provide an array of produce to the GBFC. Prior to this project producers were growing the same crop varieties at the same time of the growing season. This resulted in an overabundance of one crop far exceeding the consumer demand.

Project Approach:

To bring more specialty crops to market via GBFC moveable racks, shelving, refrigeration, and cool storage were purchased for food storage and display. These items allowed more specialty crops to be visible to customers and more produce was able to be housed at the GBFC location. Produce remained more esthetically pleasing due to refrigeration and cool storage. The demand for locally grown produce grew substantially and GBFC eventually expanded from a 500 square foot building to a 7,000 square foot building.

To establish networking between Nevada farmers a “Love Your Farmer” networking dinner was coordinated. This meeting allowed producers to discuss their growing techniques and seasonal crops. The project lead was able to discuss the importance of season planning so that customers were receiving a variety of produce prompting an increase in sales for participating producers.

Various Nevada specialty crops marketing campaigns were also initiated during the project. Signage and educational materials were purchased promoting the “Buy Local” campaign in order to draw customers into the cooperative. A website was established providing a list of Nevada farmers and a newsletter was issued annually to members. GBFC provided a site for the farmer seedling sale so that customers were able to meet growers from Northern Nevada <http://www.greatbasinfood.coop/>.

Goals and Outcomes Achieved:

Beginning in 2009, the GBFC set out to expand its producer and customer base by 10% each year. At the beginning of the project there were 1300 members of the GBFC. In 2010 there were 2,100 members and by the end of the project there were 5,000 active members. As of 2009, 17 local producers of specialty crops were participating in GBFC. By the end of the award over 40 specialty crop producers were involved. The GBFC annual newsletter provided consumer education and was disseminated to the members list.

As a result of the GBFC expansion and purchase of cold storage, an increase in volume/variety of produce was displayed. Produce spoilage was also reduced down to an estimated 10-25%.

Beneficiaries:

The primary beneficiaries are Nevada specialty crop producers and the consumers who seek out these products. Due to increased space and shelving the GBFC has been able to store and support goods from local Community Supported Agriculture (CSA) including Great Basin Basket.

Lessons Learned:

Initially the Project Leads severely underestimated the increase in producer and consumer participation. Due to the growth more space and storage were needed to store produce from growers and to meet the consumer demand. Fortunately they were able to find a facility that accommodated the cooperative's needs. Many timing delays were experienced because of the expansion which delayed the start of the project. However, this allowed the funding to be used for storage that was more accommodating to the new facility which was a long term solution to storage needs.

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Project Title:

Smith Valley Specialty Crop Laboratory Production Garden

Project Summary:

The establishment of the Smith Valley School Laboratory Production Garden was based on school-to-table and garden-to-market programs. The purpose of the project was to introduce students to biodynamic growing methodologies and to create an organic demonstration garden in a conventional agricultural community new to organic production methods. Smith Valley's Garden was created to provide a context for learning about eco-literacy to connect students to sustainable and renewable specialty crop production practices. The garden provided a living laboratory for teachers and students to gain experience in hands-on production that fulfills State Education Requirements. The garden was also utilized as a nutrition education resource in an area where hunger and malnutrition is prevalent.

Model garden programs utilized during the planning of the project included the following: Alice Water's Edible Schoolyard, Weaver's Way Cooperative Farms in Philadelphia, Uniondale High School in Long Island, Seneca High School in Illinois, and a rooftop horticultural laboratory garden near Times Square. These schools were chosen as project models due to their lucrative specialty crop production gardens and gardening education programs.

This project came at a time where specialty crop production was minimal in the Smith Valley area and where the Future Farmers of America program is thriving. The interest for farming is abundant within the school walls and this project gave students a foundation for becoming specialty crop producers upon graduation.

The project leads recognized the need for healthy foods in the Lyon County area. They also recognized the potential that an organic specialty crop garden could have on demonstrating the vitality of organic production in a community that primarily produces alfalfa. As educators, the project leads understood the importance of having students directly involved in the garden project in order to provide a better understanding of how their food is produced. This project was a great opportunity for integrating problem-solving, engineering, science, language, and the arts through a school garden curriculum.

Project Approach:

During April of 2009, two students and the project lead attended the WNC, SCI Soils workshop in Fallon, Nevada. Various Nevada soil specialists were present and used as a resource for garden soil preparation. In May of 2009, a meeting was arranged with several Nevada agriculture specialists that were interested in assisting with the school garden. Participants included Craig DeWitt from Full Circle Compost and Steve and Marcia Litsinger from Churchill Organics. The meeting was held during the last week of school so K-6th grade students could hear an enthusiastic explanation of vermicomposting, soil science, and organic gardening. Instructors had students create large-scale drawings of their desired garden plots. Students collaborated in creating plans for features they wanted the garden to exhibit and crops they were interested in growing.

As the garden began to form, a vermicompost worm bin was established at the school and students were informed on the use of worm bins for specialty crop production. Seedlings were planted in a pre-existing greenhouse and fencing was established to control pests. Larry LaFleur from Nevada Landworks, a landscape designer and Smith Valley parent, presented an overview of landscape design and drip irrigation installation to 4th-6th grade students in addition to the High School Horticulture students. Larry distributed templates for three different viable designs for the garden. This allowed students to work collaboratively within the perimeters suggested to create a garden for each grade level. A final garden design was drawn up and presented to agriculture specialists, Marcia and Steve Litsinger for further suggestions.

Students were also taught about specialty crop purchasing. They had to brainstorm what specialty crops they wanted to plant and which vegetables were perennial. Students were then given a budget that they had to fall within when purchasing necessary supplies from Nevada suppliers. This was a realistic approach to what specialty crop producers would do when planning their season.

Students hand-dug paths and garden plots throughout the spring of 2010. In May of 2010 Larry LaFleur brought a volunteer crew to the site from Nevada Landworks to install the drip irrigation system in the garden. Approximately 8 ports were installed that could be programmed to mimic different ecosystems.

Students began to plant the crops during the spring and were thrilled to see plants thriving when they returned in the fall. Students developed ownership for their garden and were eager to dive back into the garden. Volunteers logged garden maintenance hours over the summer months. Produce was harvested by the students in the fall and used for open house, in the school cafeteria, and in art class.

For the art program gourds were used to create patterned paintings for bird houses. Students used fruit and vegetable dye paints to decorate their Garden Literacy Journals. The 5th and 6th grade students wrote essays on the importance of organic production in their garden. Essays were later presented at Capital City Farm Days. The 4th-6th grade students created garden diaries on activities they performed and lessons they learned from the garden.

Students harvested and packaged Echinacea seeds with 19th century toy Thaumautropes. The Thaumautropes were used as a marketing lesson for specialty crops and were later sold

by students at the GBFC. All income was reinvested into the garden by purchasing garden supplies.

Smith Valley FFA students worked with K-6th grade students in planting and harvesting produce. Community support resulted in garden donations and volunteer time. This enabled the garden to survive throughout the summer months. The GBFC and local restaurants collaborated with the students and sold their Thaumautropes toys in order to provide marketing lessons. The Litsingers, Craig DeWitt, and Larry LaFleur assisted with educating students on how to construct a workable garden and how specialty crops are grown. These activities were all performed by community volunteers.

Goals and Outcomes Achieved:

The goal of having at least three organic growers and/or scientists visit Smith Valley school was achieved. Two organic growers, a soil/compost expert, and landscape designer all toured the garden and assisted in its creation. These individuals helped instruct students on environmentally sound best practices for their laboratory garden. They remained mentors throughout the project and provided helpful garden advice.

The goal of reaching 70 high school students was not achieved, however 30 high school students were reached. This goal was not achieved due to more participation from elementary school teachers. Over 125 elementary school students participated and learned from the garden project. The project lead collaborated with K-6th grade teachers and anticipates that more high school teachers will see the relevance of the garden from a curriculum standpoint in the near future. A 32 page curriculum guide is being finalized and forwarded to USDA for printing.

One Harvest potluck was held in the fall of 2009. The Cultural Activities Club hosted the event. Specialty Crop Funds were not used for the event though produce from the garden was featured at the potluck. Approximately 15 people were in attendance. Two Harvest Fairs were held during October of 2010 and 2011. More than 100 people were in attendance at both events. In 2011 a harvest dinner was held and hosted by the school children and staff. A tour of the garden was provided to School Board members, NDA staff, and budget members. Produce from the garden was served to 20 students (8 high school, 12 grade-school) and 6 adult visitors. An estimated 200 people have toured, worked in, or consumed the produce harvested from the school garden. Specialty Crop Funds were not used for the events above, the event showcased the success of the garden and its progress.

The first students to come out of the organic gardening program will be entering high school during the fall of 2012. The students may choose to continue working with the organic program by mentoring K-8th grade students. During the 2012 school year 7th and 8th grade students became involved in the garden curriculum.

Beneficiaries:

Project beneficiaries include students involved in the organic gardening effort, local producers, educators, and community members. Approximately six students developed gardens at their own home as a result of their introduction to specialty crop production at school. The community interest for specialty crop production increased throughout the project. High School FFA students demonstrated a strong interest in pursuing specialty

crop farming as a career and played an integral role in educating younger students. School instructors learned about healthy soils, garden best-practices, and organizing volunteers and student workers. Instructors learned how to adapt their teaching styles in order to incorporate the garden and meet State Education Requirements.

Lessons Learned:

Having strong community support made this project thrive. Volunteers for clearing weeds, watering, and instructing were regularly present and allowed the garden to flourish.

One of the most successful parts of the garden was watching students enjoy their food. When youth grow a specialty crop they typically want to taste their achievement and are more likely to consume healthy foods.

Alternative methods for utilizing and marketing specialty crops were also successful components of the curriculum. This project demonstrated that a school garden can be easily incorporated into the State Education Requirements when it comes to any school subject.

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(Smith Valley School Garden)

Project Title:

Chickie Baby Blooms Expansion

Project Summary

Chickie Baby Blooms set out to enhance specialty crop awareness and improve specialty crop growth, by increasing public awareness through a web-site and other forms of outreach. Through season extension, water conservation, and sustainable farming projects Chickie Baby Blooms would demonstrate farming techniques to share their success with other farmers in the community. Northern Nevada faces colder unpredictable weather changes and longer more profitable seasons are not obtainable without assistance. With this goal in mind Chickie Baby Blooms would be able to further the much needed season extension principles and be an example to other farmers wishing to adopt these same practices. Marketing their CSA model and products Chickie Baby Blooms project set out to accomplish objectives which would promote these concepts in order to reach Nevada

residents, improve marketability of farm products, and promote Locally Grown specialty crops.

Project Approach

The purchases of two hoop houses were made. The houses were constructed at the Testolin property. In 2010, the operation was able to get a Loan from FAS and USDA and bought 20 acres on Testolin Road in Fallon. The entire growing operation moved out there.

Advertising and marketing was done on a local Northern Nevada television show and in a magazine. Erica and another local farmer from Fallon went on Reno Style to promote local food and specialty crops. There were also ads placed in two of the Reno Style Magazines, local publication. The TV spot aired a minimum of 24 times in the month and was used for a spot filler after football games and such. The show broadcasts on Charter TV, CC Comm, ATT and many other local carriers. Many people saw the program and the response to the outreach was well acclaimed.

Produce grown from the operation was also sold to Barbara Mills at Back of the House Cooking School. She is an avid supporter of our program. Due to the response of the TV, Magazine and Back of the House, a CSA basket was created. We served over 20 clients with baskets for 16-20 weeks. It was very successful and well responded to. Rave reviews were received for the produce and customer service. The baskets were taken to Fallon and Reno.

Funding left was identified for publications and marketing merchandise, like clothing and other advertisements.

Goals and Outcomes Achieved

A You Tube video was created by a Reno PR firm, Abbi PR. The advertisements and media spots reached many Nevada Residents educating them about sustainable farm practices. The hoop houses were constructed and used for production. Chickie Baby Blooms had success in creating more food and local products for Northern Nevada.

Beneficiaries

Residents of Nevada, Farmers, and the Fallon Community were affected by this projects outreach. These beneficiaries obtained useful items of the projects accomplishments which can be applied to their own farming practices.

Lessons Learned

As a result of personal circumstances the projects remaining funds were turned back over to the states authority. A lesson possibly learned that a continuation of contact and due diligence is required in every project. As a result of the changes in project leads and loss of communication by project management with the State Program Coordinator, funds were reallocated to ensure a continuation of program goals. A revision was submitted July of 2011 and approved by the USDA, AMS office. The final reporting of this award will include a final report on the new goals and success of that project for management and oversight of the grant.

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Project Title:

NanaDew Herb Farm Strawberry Intern Project

Project Summary:

Churchill County youth who were interested in agriculture as a possible career hadn't had a direct opportunity to gain the knowledge and skills required to begin or continue the switch to specialty crop agriculture. Not only were the growing requirements of specialty crops an unknown for potential farmers so were marketing strategies. With over 1,000 farms in the area practicing conventional agriculture, providing an opportunity for strengthening the position of specialty crops was needed. Through educational opportunities, both on the farm and off, this project, regarding specifically strawberries and other high demand row crops, supported that interest.

Project Approach:

Twelve interns were recruited through local employment agencies and by word of mouth. The original plan was to acquire interns through advertising and accessing schools, however it was determined this was not possible due to time constraints regarding advertising and school policy. Besides assisting us in locating interns, the added benefit of utilizing employment agencies was that they handled all payroll requirements as well. Recruiting interns through employment agencies proved to be very beneficial to all parties and is highly recommended.

Tasks were outlined on white boards for each intern accompanied by ongoing daily instruction and weekly workshops. Strawberries as a specialty crop along with, herbs, greens and an assortment of other "row crops" and "nursery stock" were planted using organic practices and season extending methods. Extending the growing season simultaneously extended the time frame available for instructing interns as well.

All steps of the farming process were taught from cultivation to sales of successful crop harvests. Workshops were not only held on the farm but were fulfilled through the cooperation of local farmers markets, food co-ops, CSA locations and neighboring farms. All workshops were held spring thru fall, during working hours and all attendees were "paid interns".

Goals and Outcomes Achieved:

This project was designed to give on-going training to future specialty crop farmers by having them actively participate in the tasks at hand necessary to establish a viable strawberry field along with other produce considered to be specialty crops. Expected and unexpected accomplishments were achieved.

Expected accomplishments such as faster planting rates once interns were trained and practices were demonstrated. By comparing counts per hour during the initial week of planting, 25 plants per intern (3,000 plants placed by 6 workers in 20 hours) compared with counts per hour during the second week of planting, 50 plants per intern (6,000 plants placed by 6 workers in 20 hours) it was shown that beginning skill levels were improved over time with guidance.

Unexpected accomplishments were seen as interns took the initiative and began growing their own specialty crops early in the training program and duplicated what was taught in theory and practice into actual production on their own properties. Interns also took a proactive approach to problem solving, realizing that identifying problems early on is vital to a pro-active approach to problem solving as well as successful farming.

Beneficiaries:

Direct beneficiaries of the project were NanaDew Herb Farm owners and the interns themselves. Indirect beneficiaries of the project were other farmers, farmer's market participants, CSA subscribers, restaurant owners, and all those who came into contact with the interns who consistently expressed enthusiasm for growing specialty crops, the value of specialty crops and agriculture in general.

Lessons Learned:

The project has identified an on-going high demand for farming specialty crops. Training interns is an essential activity to ensure baseline quality standards and secure the production of a high quality product.

Involving local youth on the farm in developing a product that is recognized locally, helps embed them and the farm along with its other client groups into the broader community, providing learning opportunities and benefits for all.

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Project Title:

Western Nevada College Specialty Crop Institute

Project Summary:

This award was an addendum to Grant 12-25-B-0801 that established the WNC Specialty Crop Institute and provided funding for six workshops. This addendum added three more workshops to the scope of work established for 12-25-B-0801.

The mission of the SCI is to provide education and training for new farmers in order to establish farmers who seek to move from a production-centered farm model to a market-centered approach with specialty crops. Many Nevada producers grow traditional low-value crops such as alfalfa and do not have the technical knowledge, skills, and experience to adopt alternative farming methods to grow high-value, specialty crops. Little training is available in Nevada for high-desert farming, and this program was established to bring education and training to Nevada's producers.

The project is important and timely based on increased consumer demand for locally-grown specialty crops and limited availability of water in Nevada's high desert. Most specialty crops consume less water than row crops, and per-acre return on specialty crops is higher than low-value commodity crops.

This project was built on the success of the original SCBGP grant 12-25-B-0659 that produced four workshops, but did not establish a permanent program. Higher-than-expected participation at the original workshops and producer demand for more training confirmed the need for establishment of the SCI.

Project Approach:

The original budget allocation for this project funded three workshops. Due to lower-than-expected costs, four workshops were produced with partial funding for a fifth. All workshops combined classroom and on-farm training. Topics chosen were based on industry trends, applicability to Nevada's climate and economy, and farmer demand. The SCI conducted national searches for industry experts and workshop speakers along with presentations from successful local growers. The SCI collaborated with other agricultural organizations to ensure maximum benefits for attendees. More than 300 participants attended the four workshops. Workshop details are listed below:

Topic	Date	Location	Attendees
Commercial Orchard & Fruit Production	September 2010	Carson City	71
Road Show 1- Introduction to Specialty Crop Production	November 2010	Yerington	59
Road Show 2 - USU Hoop House Construction	January 2011	Yerington	138
Road Show 3 - Orchard & Fruit Production	May 2011	Smith Valley	54

Orchard & Berry Production for the Small Farm included classroom training on best varieties to grow in Northern Nevada's climate and soils, site selection, planting, pruning, pest and disease management, and marketing. It also included a tour of Agape Organics, a certified organic apple orchard in Washoe Valley, in addition to a session on permaculture practices to enhance orchard production. Featured speaker Michael Janik is a certified arborist and has been growing fruit in Northern Nevada for more than 15 years.

- Late spring frosts resulted in complete crop failure at Agape Organics, site of the farm tour. Lack of a harvestable crop provided a real-life lesson to attendees that crop failures are an ongoing risk to farm income.
- Permaculture was introduced to determine if there was producer interest its applicability to commercial farming. While some permaculture practices can be beneficial, the permaculture philosophy appears to be more suited to home use. Workshop evaluations showed limited interest in the topic.

SCI Road Shows - One road show was conceived as a workshop to re-introduce specialty crop production to the Mason and Smith Valley region near Yerington. The region has some of Nevada's richest farmland. Prior to the 1950s, truck farming (specialty crops) was a major source of agriculture. However, with the advent and competition from industrialized agriculture, the region turned to ranching and alfalfa production. In 2002, the Desert Terminal Lakes Program authorized the Bureau of Reclamation to reduce agricultural water use and return more water to Walker Lake. Farmers and ranchers are now looking for alternative low-water-use crops, but new generations lack the knowledge to grow them.

Project staff originally predicted that this would be the most challenging and least-attended workshop due to unfamiliarity of specialty crops in the area. The opposite proved to be true. The overwhelming success of the first workshop precipitated staff to change the scope of the grant and request more workshops for the area.

Road Show #1 - Introduction to Specialty Crop Production - The purpose of this workshop was to introduce specialty crop production to a region that is primarily alfalfa and grain production. The workshop included sessions to define what are considered specialty crops and the potential for production and sales in Northern Nevada. Three local successful specialty crop producers presented sessions on their specialty crop operations: Churchill Vineyards on viticulture, Custom Gardens Organics on hoop houses and organic farming, and Lattin Farms on subscription farming (CSAs) and direct marketing.

Attendance of 58 enthusiastic participants was almost triple original expectations. Guest speakers were bombarded with questions, especially about hoop house production. The demand for training on specialty crop production was obvious in this rural region that has little access to hands-on training. Staff committed to provide more workshops and received permission from NDA to change the scope of the grant to include additional workshops.

Road Show #2 - Low-Cost Hoop House Construction Workshop - This workshop included classroom instruction and actual construction of a hoop house, using a popular, low-cost design developed by Utah State University Cooperative Extension. Total cost for this type of hoop house is less than \$1,500, compared to the same size commercial kit that can cost \$5,000 or more. Featured speaker Dan Drost of Utah State University co-authored the construction manual for the hoop house and has conducted dozens of similar workshops in other states. This workshop proved to be one of the most popular and highest attended of all SCI workshops and a catalyst for increased hoop house production throughout Nevada.

- Attendance of 138 was the highest of any SCI workshop. Fortunately, the workshop was held in a school gymnasium that could accommodate the large crowd. Participants traveled 100 plus miles to rural Yerington in the middle of the winter. The diverse group included farmers, ranchers, educators, and home gardeners.
- The hoop house was constructed at Yerington Paiute Indian Reservation, continuing the SCI outreach to Native American populations. Representatives from five reservations attended the workshop.
- The workshop was designed with a "train the trainer" component that reaped subsequent benefits. Farmer Ray Johnson of Custom Gardens Organic Farm and UNCE specialist Randy Emm participated to learn how to teach the curriculum since Drost from Utah State University was unavailable for future workshops. Since the January 2011

workshop, Emm has taught several workshops throughout Indian reservations in Nevada, and Johnson has taught one workshop that also addressed construction issues relevant to Nevada's high winds.

- Farmers and gardeners throughout the state have constructed dozens of hoop houses since the workshops. Larger farms build them to increase production for their most profitable specialty crops. Established farms that were interested in hoop house production, but were reluctant to venture into the operation because of the high cost of commercial models, built the low-cost design to experiment with production and the potential for diversification. Home gardeners built small-scale versions for home use.

Road Show #3 - Orchard & Berry Commercial Production for the Small Farm - This workshop was a repeat of an earlier orchard production workshop with the addition of a session on drip irrigation. It was held at Smith Valley High School with a tour of the student farm that included an orchard of fruit trees, blackberries, and grapes. Silverado Ranch Supply provided drip irrigation for the orchard and an in-depth session on drip irrigation techniques. The orchard workshop was repeated for several reasons:

- Smith Valley High School teacher and FFA leader Andy Miller attended the original orchard workshop in Carson City with his students and requested additional training from the SCI for his student farm at the high school. Miller was impressed with instructor Janik's expertise in local orchard production.
- Conducting the workshop at the high school provided opportunity to teach high school students and local farmers. The farm site at the high school also provides high visibility to community members.

Significant Achievements:

The Road Show workshops to Yerington and the Walker River Valley introduced several dozen new and established farmers to specialty crop production. Several farms have constructed hoop houses, and at least two new CSAs were established.

UNCE specialist Randy Emm used his training from the USU Hoop House Construction workshop to coordinate workshops and construct hoop houses at several Indian reservations in Nevada.

The USU hoop house workshop provided significant Native American outreach. Representatives from five reservations attended the hoop house workshop, and two reservations attended the orchard production workshop.

Farmer Rick Lattin built five USU hoop houses for increased tomato production and hosted a free construction workshop for Fallon residents while his staff built the hoop houses. More than a dozen local residents attended, and Lattin reported that at least a half dozen Fallon farms have constructed the USU hoop houses after visiting his farm.

The SCI receive significant media coverage from regional media sources due to effective staff outreach and the success of the program. Press releases for workshops are often printed as feature stories in local newspapers and magazines.

The success of the Walker River Valley road shows resulted in recognition of the value of the program and the award of long term funding as part of the Desert Terminal Lakes Program. In January 2012, the SCI was awarded \$1.5 million to be budgeted for a five-year period to help reduce water use and expand agriculture in Northern Nevada.

Conclusions and Recommendations:

- Viticulture workshops were among the most successful and promising workshops when the SCI program began. However, they have been discontinued due to production difficulties in Nevada's climate, competition from other states, and lower sales due to the recession.
- The program's success led to over-crowded workshops and waiting lists for participants. Large class sizes can lead to a decrease in the quality of education. Limits on class size were established to ensure quality training for students.
- College staff reductions due to budget cuts, and increased demand for training have "taxed" current WNC staff. In response, more efficient processes were implemented, including online registrations, internet mailing services, and outsourcing of work.
- Business planning and marketing have been identified as critical elements that many new farms overlook and/or avoid. These topics are now stressed in all workshops as critical to the success of farm enterprises.

Goals and Outcomes Achieved:

- The goals of this project were to produce three workshops that would increase specialty crop production and profitability and to build infrastructure for the SCI program to make it sustainable on a long-term basis. Both goals were met.
- Four workshops were conducted, one more than originally budgeted. Average attendance of 80 plus participants per workshop far exceeded original expectations of 25-30 attendees per event. One workshop attracted 138 participants.
- Infrastructure was built for the program, including development of a 1,600-member database, website, and capability for online registrations.
- Most significantly, the goal to secure long term funding for the SCI was accomplished. The Bureau of Reclamation announced federal funding of \$1.5 million to be budgeted within a five-year period. The award was made based on the success of the SCI program since its inception in 2008 with an original SCGP grant of \$14,000.

Beneficiaries:

- Beneficiaries include new and established farmers who have successfully instituted or expanded specialty crop production as a result of the SCI training. Almost 2,000 attendees have participated in SCI events since its inception in 2008. Workshop evaluations revealed that 25-50% of participants would implement, expand, or improve specialty crop production.
- Economic impact is difficult to measure as quantitative data is not available for local agricultural sales. Additionally, many producers are in the beginning stages of production and sales. Increased production and sales are evidenced by program

participants who are now selling at farmers markets, establishing CSAs, and selling to restaurants and wholesalers.

- New partnerships and collaborations with private, nonprofit and government organizations are benefiting both producers and organizations. Recipients receive information and training for other beneficial programs; and collaborating organizations are reaching more constituents and reducing costs through these partnerships.

Lessons Learned:

The project's success clearly demonstrates the continuing need for specialty crop training and education for Nevada's producers. The project noted no negative outcomes. Its major challenges are the stresses created by the demand for training that far exceeded original expectations. These challenges reaffirm the Specialty Crop Institute's commitment to serve Nevada's producers and communities.

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(Fruit and Berry Production Workshop)



(Piute Reservation Hoop House Workshop)