



15SCBGPNV0036
Final Report

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\$196,307.85 is the amount that has been reimbursed to NDA for this award.

Specialty Crop Block Grant Program – Farm Bill Final Performance Report

Point of Contact: NDA - Ashley Jeppson
Recipient: Churchill Economic Development Authority
Program Name: 15SCBGPNV0036
Project Title: Fallon Food Hub/Coop Project for Specialty Crops

Project Summary:

The Churchill Economic Development Authority aimed to create a space in the historic downtown corridor of Fallon, NV that would address the need within the community for easy, regular access to specialty crops grown within the food shed. Churchill County is home to more farms than any other county in Nevada, but the acreage per farm is one of the lowest in the state. The vast number of small and mid-acreage farms are producing specialty crops. The CEDA sponsored food hub facility will provide a location for these specialty crop farmers to sell their products to Churchill County residents. The vision of this project is to create a gathering place in the heart of the historic downtown which provides an outlet/market for these local small specialty crop producers to aggregate and process their products, providing distribution to larger buyers not always available to them individually. This will also work towards increasing specialty crop consumption among individual consumers by establishing another site in the local fresh food distribution system.

Project Approach:

The project approach for the Fallon Food Hub/Coop was to assess, establish, promote, and grow the local specialty crop production in Churchill County. Initial project activities included identifying specialty crop farmers who would partner with the food hub, establish relationships with specialty crop producers, establish a storefront location, advertise to grow customer base. After the storefront was established, stocked with local specialty crops, and open for business, project activities included: further customer recruitment, application for EBT/SNAP program, marketing through social services outlets to reach out to SNAP beneficiaries to encourage consumption of fresh fruits and vegetables. Final project activities were focused on steps needed to establish a shared use processing facility in the basement of the building. External support for this project was provided by: Western Nevada College, WNC Specialty Crop Institute, the Downtown Merchants Association, the Lahontan Valley News, Fallon Farmer’s Collaborative, Fallon Chamber of Commerce, Churchill County Library Board, NevadaGrown, Great Basin Food Coop, and the Healthy Communities Coalition of Lyon and Storey counties.

Goals and Outcomes Achieved:

- Expand the market for local specialty crops
 - Goal: the Fallon Food Hub/Coop will increase availability of specialty crops from local producers to sell in the store.
 - Baseline: at the commencement of this project there were 0 (zero) producers selling their specialty crops at the Fallon Food Hub
 - Final: at the end of this project there were 17 (seventeen) local producers selling specialty crops through the Fallon Food Hub

- Increase the number of consumers buying specialty crops
 - Goal: the Fallon Food Hub/Coop will develop a strong local customer base through advertising specialty crop producers and their products using local media outlets, social media, and promotion events.
 - Baseline: There are 46 people currently participating as committee members of the project what have expressed interest in and intent to purchase specialty crops from the food hub when it opens.
 - Final: at the end of this project we have 867 active customers in the food hub's database with an additional 147 customers who live outside of Churchill County but participate in the Great Basin Basket Farm Share program
- Increase the number of SNAP benefit holders in the local and surrounding communities who are buying specialty crops.
 - Goal: The Fallon Food Hub/Coop will have the capability to take SNAP benefits through the acquisition of the necessary EBT machines.
 - Baseline: At the commencement of this project there were 0 (zero) EBT/SNAP consumers shopping at the food hub.
 - Final: at the end of this project the food hub has the capability to accept EBT payments and is a certified participant in the USDA Senior and WIC Farmers market program. In the final year of the project, the hub accepted over \$8,000 in market coupons and EBT payments
- Expand the market for local specialty crop products
 - Goal: farmers/staff will package and process their specialty crop products on-site at the food hub facility.
 - Baseline: There are 22 members of the Fallon Farmers Collaborative who actively participate in some sort of existing farmers market structure, CSA or individual sales to customers.
 - Target: 5 members of the Fallon Farmers Collaborative will use the packaging/processing facility to provide specialty crop products for sale or distribution through the Food Hub/Coop.
 - Final: Over the course of this project, the Fallon Farmers Collaborative disbanded, the established Fallon farmers market closed, and negotiations for the original storefront selected for the food hub collapsed. As such, the food hub has been unable to create a processing/packaging facility for area farmers. The team at the food hub opened a new farmers market directly in front of the new storefront location and had participating by an average of 12 vendors. Specialty crop products were portioned on site for inclusion in the subscription farm box program. Kitchen use agreements have been negotiated with 3 small businesses who are using local ingredients in their value-added products and catering menus.

The leadership of the food hub/coop continues to be dedicated to the creation of a shared-use kitchen for processing and packaging of specialty crops.

Beneficiaries:

Since the Fallon Food Hub opened its doors in 2016 there have been several beneficiaries of this project. Local specialty crop producers have a new outlet to sell/distribute their produce in

Churchill County. These producers include: Lattin Farms, Pioneer Farms, Pick'n & Grin'n, Dave's Green Acre, Dayton Valley Aquaponics, Dexter Family Farm, Mewaldt's Organics, Snyder's, Custom Gardens, First Fruit Sustainable Farm, Boggeri Farms, Avanzino, The Green Man, and Bee Here Now. The food hub has helped facilitate the acquisition of an NDA producers' certificate for: 2 Ravens Ranch, Fisk Farm, Scarecrow Ranch, Gummow Orchards, Hardisty Farms, Cherry Dog Orchard, and Country Goats Farm. Additionally, the storefront customers benefit from easy convenient access to locally grown specialty crops. Since the commencement of the project, the food hub has served over 1200 different customers. Finally, 200-plus farm box subscribers benefit through weekly deliveries of specialty crops that are raised in Churchill & Lyon counties then delivered to Washoe Valley and Reno locations.

Lessons Learned:

There have been many lessons learned through the execution of this grant project. Project partners needed to be flexible and able to adapt quickly to outside influences to achieve their goals. Over the course of the grant period, project partners were better able to assess the needs of area farmers and which avenues were most effective in the distribution of specialty crops. The farm box subscription program is by far the most effective way to increase specialty crop sales within west central Nevada. Additionally, hub leadership has further identified the needs of partner producers with regards to a shared use kitchen and processing facility. These lessons are integrated into the continuing plans for a dedicated facility. Finally, hub leadership has learned to start small and grow programs & offerings as demand increases over time.

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Specialty Crop Block Grant Program – Farm Bill Final Performance Report

Point of Contact: NDA - Ashley Jeppson
Recipient: SCB 1610-02
Program

Name: 15SCBGPNV0036
Project Title: STEM Integration of Aquaponics in Nevada Schools

Project Summary:

The availability of emerging Aquaponics technology can provide a foundation for schools that develop programs that are geared toward STEM based learning. Schools can utilize systems to augment learning in a wide array of subjects while highlighting alternative methods for crop

production in the state of Nevada. The sustainable benefits of Aquaponics have a role in discussions for future crop production in desert regions like Nevada. It is expected that increased knowledge of these methods will promote future involvement and innovation thereby increasing production and consumption of Nevada Specialty crops.

Prior to this application, the partner organization obtained a small SCBG award for \$4,800 for educating consumers about the viability of aquaponics-based crop cultivation. This project sought to target student groups by collaborating directly with their schools to provide the schools with their own aquaponics-based system. Aquaponics systems were to be installed in five schools and educators were to be provided with recommended lesson plans that can be adapted to suit the teachers' class needs. The recommended lessons provided were to incorporate STEM and agricultural-based learning.

The objectives of this project were to “promote consumption of Nevada specialty crops by demonstrating and advocating aquaponics as a viable method of small-scale crop cultivation or farming, to create student education and awareness of agricultural science and the process of aquaponics-based crop growth, and to promote agricultural-themed STEM learning through delivery of standards-based lesson plans to project sites.”

Project Approach:

The project was executed in four separate phases over the course of three years. The project is still ongoing and expected to conclude by Spring 2019.

During the first phase of the project, Schools were identified and contacted as candidates for the system. This phase was surprisingly the most difficult part of the project. Several schools made commitments to receive systems, but later backed out on their commitments to allow installation. The reasoning provided ranged from not having adequate space for the system, to not being able to obtain administrative approval for installation. We persevered in this area and expanded our search for candidate schools to a wider area including rural Nevada.

During the second phase, we deployed the systems and established a culture of fish and bacteria. It was during this phase on site staff was taught how to operate the system and provided with the pertinent resources to integrate into their school curriculum.

During the third phase, schools were provided with learning materials and given ongoing support while establishing their learning program.

During the fourth phase, students were given assessments to determine their mastery of the knowledge provided. All partner schools reported a general overall increase in knowledge associated with the systems and their curriculum.

Goals and Outcomes Achieved:

The overriding goal of this project was to deliver systems to schools and provide a foundation where STEM based learning could be augmented through incorporating the resources provided by the project. Student education was facilitated through hands on experience with the resources, and delivery of STEM based lessons created for the systems.

[GOAL]. The project will establish benchmarks of knowledge via the administration of lesson directed pre-assessments.

[OUTCOME]. Instructors at the site were provided with Lesson Plans that focused on the following content:

- Agriculture (Intelligent Technology)
- Aquaponics (Nevada Specialty Crops)
- Nitrogen Cycle
- Water Quality Chemistry

The instructors were encouraged to incorporate or modify the lessons into their learning units, as they saw fit. The teachers reported that the lessons would achieve the desired result of a transfer of knowledge on the given STEM subject. The students learned the material and were able to successfully show an increase of knowledge as evidenced through comparison of pre-assessments and post-assessments. Students in the recipient schools will continue to use the system as an educational tool for many years.

The **[PERFORMANCE MEASURE]** in the first year is an increase in knowledge for 3,000 students with a 10-year expectation of 30,000.

[GOAL] To provide an increase in availability for selected student participants about STEM focused materials and education.

[OUTCOME]. The selected schools were interviewed, and an inventory of teaching aids was identified for each learning program. Only one of the target schools had attempted to incorporate Hydroponic/Aquaponic technology into their curriculum. This one school had a small-scale aquarium that was not as capable as the new system. The teachers and Administrators were interviewed and reported that the introduction of the system as a teaching aid would enhance their curriculum and provide students with a tactile tool that they could manipulate and achieve a greater level of STEM based understanding than their existing accommodations provided. These schools incorporated the systems and had an immediate increase in their STEM related accommodations. The **[PERFORMANCE MEASURE]** in the first year is an increase in accessibility to multifunction STEM related accommodations for 3,000 students with a 10-year expectation of 30,000.

Short-Term Outcomes:

Students learned about Aquaponics and acquired hands on experience with the technology. They were exposed to an alternative Sustainable method for Specialty crop production that could be scaled according to need while using minimal water resource. The importance of this technology and its importance for water conservation was stressed.

Long-Term Outcomes:

The schools that have systems will continue to innovate and expand on their use of the resource. We have received reports that multiple departments have started using the resource for subjects ranging from Science to Mathematics. It is expected that over 30,000 students over the next 5-10 years and on will have the opportunity to have hands on experience and will receive an increase in knowledge from this interaction. While unquantifiable, it is expected that this interaction with the young impressionable group will promote innovation and future involvement in related areas including Conservation, Farming, and Sustainability.

Beneficiaries:

We are basing the number of students affected on the enrollment numbers in the schools that participate in the science curriculum. Because there are many possible exposures to the systems in several classes, it is difficult to pinpoint an absolute number of students exposed. Every student exposed learns about Aquaponics and the viability for the system to be used to accommodate

sustainability in our dry Nevada climate while producing various speciality crops. The number of students enrolled and exposed this calendar year is approximately 3000. We are unable to receive individual test results for students as it is restricted by FERPA guidelines. We provide a curriculum that includes pre and post testing. The teachers apply this into their lesson plans and report group or class overall education successes as tied to the schools standards. We recognize that there will be thousands more students that will be affected by the integrated curriculum and systems over time.

This project benefitted the public education system in the following counties: Washoe, Lyon, Pershing, Churchill. These districts and the schools in them were the recipient of equipment that can be used in the curriculum for their students. The systems are expected to provide a lasting STEM resource that will have a significant impact on the learning of students for many years to come.

By the schools having accessibility to the system, the students in the schools received benefit and will continue to receive benefit for many years. It is estimated that over a 10-year span, 36,000 students will have the opportunity to have hands on experience with the systems. The learning of these students will be impacted through operation and research of the system.

This project benefits the growth and consumption of Nevada Specialty Crops by providing familiarity with a sustainable system that can be used to produce crops with minimal resource input and water consumption. In a state like Nevada that is heavily dependent on water conservation, the knowledge of Sustainable growing methods is of paramount importance. The systems have been deployed to schools and will be used in providing education of children during a crucial development phase. During this phase, students are more receptive to information that often guides their beliefs and behaviors for the remainder of their lives. The affected students will grow up with an understanding of how the systems function. This has the potential to produce desire for future employment in related fields, as well as advocacy for adoption of sustainable programs at the ballot box. It is our belief that in this area the system will have the most lasting impact.

Lessons Learned:

We learned several lessons during the project. In many cases, these lessons supported prior understanding. In other cases, the lessons were a surprise and represented difficult hurdles that were required to be overcome. These lessons are as follows:

1. School teachers are receptive to having systems placed in them. However, many school administrators are not receptive to having the equipment in their school. The reluctance we faced was primarily related to a concern of how much learning space would be taken by having the system installed in the school. Several schools reported interest only to back out when it was determined that the system would not fit in the space they envisioned it being placed in. This was a difficult hurdle to overcome and resulted in our expansion of the project to rural districts as well as several unforeseen delays to the project.
2. Schools that received systems were able to adapt it to accommodate several additional learning areas outside the project scope that focused on growth of Nevada Specialty Crops. This adaptation and inclusion in STEM based learning was enthusiastically received and can, in our opinion, have wide impact in the quality of education afforded the students in those programs.

3. Our final lesson learned is a combination of the first two. There is desire for the systems to be placed in schools. The schools are especially receptive to a no cost resource that can be used for STEM based programs. However, they are concerned about the footprint of the system and ability to incorporate it into their usable space. It is our recommendation that the program be expanded to a wider audience while providing an allowance to custom build the system to fit the target schools available space. Development of a portable system would benefit some schools that were unable to accommodate the 48 square feet that the project requested.

Nevada Department of Agriculture observations: It is critical that resources be provided to schools to help quantify the impacts of these systems. For example, if it is intended that pre and post assessments of student knowledge be compiled, teachers should be provided with the appropriate documents. This is an especially critical step for grant recipients and for future project planning within schools to rely on hard data as opposed to anecdotal.

This project delivered educational resources to Nevada schools for augmenting their existing programs and providing equipment that could serve multiple STEM based educational needs. Students on hands learning taught them in areas of Science, Mathematics, and Technology. There was an increase of knowledge and it is expected that the effects of this project will have educational impact on students for the next 5-10 years and beyond.

The project ran into difficulty delivering all the planned systems to schools. Several schools agreed to receive systems only to back out at the crucial moment. Because of this, we expanded our search for candidate schools to districts across the state. Systems were delivered to 3 schools during the project period. We were pleased to place systems in remote locations including Lovelock, and Fernley. We were also pleased to deliver a system to a school in Reno. The final two systems are currently scheduled to deploy by January 2019 in A Charter School in Fallon, and The High School in Winnemucca. Our organization is committed to deliver these final two systems. The combined enrollment of these schools suggests that this project has had lasting impact on 2,826 students with an expectation of 30,000 students over the next 10 years.

Additional Information:

The project was initially awarded \$23,750. Of this award, \$21,260 was expended, and the surplus of \$2,490 has been returned to the Nevada Department of Agriculture. Two systems have been fully paid for and not deployed. These systems are scheduled to be placed in the coming month. We are committed to their deployment and continued support of them as well as the other existing systems.

The remaining systems are assembled and awaiting deployment to schools. We are currently negotiating the last two systems to be placed in Hawthorne and Ely Respectively. They are scheduled to take delivery before June 15. We have had several setbacks from schools being unable to accommodate the systems after committing to receive them. However, we are committed to completing the task before the deadline given by Ashley in our past communications.

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Project 3: Folk & the Farmer

- This project has been cancelled and an amendment to revise the grant agreement was submitted to AMS on 6/5/17 and accepted.

**Specialty Crop Block Grant Program – Farm Bill
Final Performance Report**

Point of Contact: NDA - Ashley Jeppson

Recipient: SCB1610-04

Program Name: 15SCBGPNV0036

Project Title

High Desert Hops Project, Phase III

Project Purpose

Over the last four decades, the U.S. craft beer industry has experienced explosive growth. Prior to 1980, there were less than 100 breweries in the United States compared to 6,266 in 2017 (15.5% increase over 2016). Additionally, the craft beer industry accounts for over 98% of total breweries in the United States.¹ One consistent trait of the American craft beer industry is the heavy use of hops, for both high-alpha content (bitterness) and aroma. Because of the craft beer industry's characteristic demand for heavily hopped beers (e.g. American India Pale Ale), the recent growth of the craft beer industry has impacted the availability of desired high alpha hops, most recently notable in the hop shortage of 2012² where many varieties, such as Centennial, Amarillo, Chinook, Simcoe, and Citra, could not meet consumer demands.

Industry growth trends are also prevalent throughout Nevada. As of Fall 2018, there are 40 breweries in Nevada³. Additionally, according to the Governor's Office of Economic Development's (GOED) 2013 Agricultural Report, a 2011 survey showed that 80% of Nevada breweries experienced problems with the supply of hops and 100% of Nevada breweries would prefer to source locally grown hops. Finally, according to the GOED 2013 Agricultural Report, hops were identified as a future economic opportunity for the agricultural industry in Nevada because of demand and growth in the craft beer industry.

The purpose of the High Desert Hops Project is to identify hop varieties that will thrive in Nevada's high desert ecology and yield highly desirable qualities for Nevada brewers and supplement supply. The results of this study will provide Nevada farmers with reliable data (production, maintenance, harvesting, selling, etc.) that will encourage and guide producers to grow hops successfully.

The High Desert Hops Project is designed as a five-year study⁴ conducted on an acre of farmland at the Main Station Field Lab on the University of Nevada, Reno campus (MSFL) and consists of

¹ Brewers Association

² Craft Brewing Business

³ Nevada Brewers Association

⁴ Phase III consists of years 3-5 of the 5 year study

1,000 hop plants of 10 different varieties. Prior to the study, a survey was conducted with Nevada brewers, homebrew shops, and craft beer advocates to garner support for the project and identify hop varieties desired by the local industry. As a result of the survey, in year 1 of the project we propagated and planted the following varieties: Cascade, Centennial, Chinook, Crystal, Fuggle, Galena, Northern Brewer, Nugget, Vanguard, and Willamette. As hops require 5 years to fully mature, year 1 of the study focused on infrastructure installation, planting rhizomes, and developing a support network within the craft beer industry. Below is a tentative timeline for the 5-year study:

- Year 1: Installation & planting of hops at MSFL. FarmCorps intern works with craft brew industry to build support network for Nevada sourced hops;
- Year 2: First harvest. Samples of each variety will be lab tested for their alpha and beta acid contents. Furthermore, working with local business IMBIB Custom Beverages, hops will be utilized to produce small-scale batches of the same beer style to be compared and scored by professional beer judges certified by the Beer Judge Certification Program in partnership with the American Homebrewers Association. Continue to build support network in Nevada.
- Year 3: First mature harvest. Utilizing data from previous year, some of the harvest to be sold to brewers for small-scale experimental batches. IMBIB will conduct second study to compare with first year study. Identify and record healthier varieties/higher yields/brewing results. Introduce a variety of nitrogen-fixing cover crops. Grow and organize support network. Share results with farmers and brewers;
- Year 4: Identify healthier varieties/higher yields/ IMBIB brewing results. Most of harvest sold to local brewers. Grow support network. Share results with farmers and brewers;
- Year 5: Same as year 4. Share results with farmers and brewers. Compile and compare data set collected over course of study to identify hop varieties to interbreed (potential phase II of study), creating a hop(s) unique to Nevada. Publish High Desert Hops Manual.

Phase III consists of years 3-5 of this 5-year study and builds on Phases I-II which took place in years 1-2 of the study.

Project Approach

Phase III of the High Desert Hops project took place during 2016-2018 (years 3-5 of the 5 year study).

Work Plan

The following table comprises the three-year work plan for the High Desert Hops Project, phase III presented in the original application. Changes in project leadership and management as well as logistical challenges resulted in some proposed tasks not being completed.

Project Activity	Timeline	Description
Introduce cover crop / over wintering plants in rows: e.g. legumes; comfrey (Symphytum); Red Clover (Trifolium)	Winter 2016	Did not happen

pretense); ryegrass. Till into rows as hop shoots emerge in spring.		
First mature harvest. Utilizing data from previous year, some of the harvest to be sold to brewers for small-scale experimental batches. IMBIB will conduct second study to compare with first year study. Identify and record healthier varieties/higher yields/brewing results/acids tests. Grow and organize support network. Share results with farmers and brewers;	Fall 2016	First harvest sold to brewers. Small harvest. See text below and Data Tables.
Seed overwintering cover crops after late summer harvest.	Fall 2016 - Winter 2017	Did not happen. Irrigation system not effective to establish cover crop so it was not seeded.
Identify healthier varieties/higher yields/ IMBIB brewing results. Most of harvest sold to brewers. Grow support network. Share results with farmers and brewers;	2017	Acid tests completed. The other tasks did not happen (described below).
Same as year 4. Share results with farmers and brewers. Compile and compare data set collected over course of study to identify hop varieties to interbreed (potential phase II of study), creating a hop(s) unique to Nevada. Publish High Desert Hops Manual.	2018	Healthier and higher yielding varieties identified. IMBIB did not participate in brewing. Nearly all of harvest provided to Brewers. Data set presented. Interbreeding unlikely, varieties to consider are high yielding ones. Reno Fresh Hop Fest event.

Activities Performed:

2016

Phase III of the High Desert Hops Project commenced in June 2016 and was primarily focused on maintenance of the hop yard, the annual harvest and continued development of a brewer/producer network in Nevada.

From June to August of 2016, project staff and a crew of volunteers (3-5 individuals) spent at least 40 accumulative hours per week at the hop yard maintaining the weed population, trimming back excess growth from the base of each plant and ensuring proper vertical plant training. Also, in its third season, the drip irrigation system began to fail in-line and required constant maintenance throughout the growing season.

As in 2015, no significant aphid (*Aphididae*) populations were observed during the 2016 growing season. However, there was a sufficient population of ladybugs (*Coccinella*) observed that was likely enough to keep the aphids under control and limit damage to the crop. This success can be attributed to the practice of Integrated Pest Management, where *Kochia* was left in between rows of hops to serve as a habitat for beneficial insects.

In late June 2016, it was observed that the plants were not growing as fast as in previous years and a 60-20-20 fertilizer was applied to individual hop plants. By mid-July, most of the plants had caught up to where they were expected to be. (Note: it's ideal for a hop plant to reach its peak growth by the summer solstice).

The annual harvest began in mid-August and lasted through mid-September as different cone varieties matured at different times. Project staff and a volunteer crew (3-5) was not enough labor to harvest the entire hop yard without a hop biner (harvesting machine) and instead focused on: 1) harvesting enough of each variety to send to be tested for alpha and beta acid content and HSI in the laboratory, 2) harvesting a minimum of five full plants of each variety – selected at random - for a baseline to project total wet-harvest weight of each variety, and 3) harvesting enough for wet-hop orders from local breweries.

The total projected harvest weight came out to be about 10% of what is typically expected from a fully mature third year crop. It is important to consider that a typical hop yard would be planted with a single variety. An acre with ten different varieties leaves a lot of variables open that could potentially affect yield. However, we were able to see quite definitively which varieties were most successful.

Furthermore, northern Nevada experienced an exceptionally dry summer in 2016, with Reno officially going 81 days without precipitation. In speaking with other hop growers in the area (Bentley Ranch and Hops ENVY), they experience similar underperforming crop production at their hop yard as well.

After the 2016 harvest was complete, the hop yard was mowed and prepared for winter.

In September 2016, project staff tabled at the University of Nevada's Agricultural Field Day at the Main Station Field Lab. Data through the first three years of the High Desert Hops project was shared with the public and a project staff gave a few tours of the hop yard (mainly to discuss the grid infrastructure) with visitors.

During 2016, project management was transferred from Urban Roots to Polygrarian Institute, but the project lead remained the same.

2017

From March to early May of 2017, a project staff person spent a moderate number of hours at the hop yard maintaining the weed population, trimming back excess growth from the base of each plant, and other maintenance tasks in preparation for the growing season.

Unfortunately, during the summer months when the most amount of maintenance and management was needed to ensure success of the goals; the assigned, paid, and hired project staff person was unable to fulfill the requirements originally laid out in the assignment. Quick corrective action to navigate this crucial staffing setback was insufficient because the project lead took a different full-time job earlier in the year.

In late August, the project lead communicated the need for managing the hopyard to a new set of Polygrarian Institute volunteers, who took on the necessary responsibilities during fall of 2017, including communicating with the Nevada Department of Agriculture to clarify the responsibilities of the project.

But from September to October of 2017, a project staff person and a small crew (3-5 people in total) came together regarding taking on responsibility for the project. This group of people completed a representative harvest of hops for lab testing and prepared the fields for winter. See baseline data results detailed below in the Annual Harvest section.

As in previous years, a favorable mention is there were no significant pest populations visible in the field. However, there was enough population of ladybugs (*Coccinella*) observed that was likely enough to keep the aphids under control and limit damage to the crop. This success can be attributed to the practice of Integrated Pest Management, where *Kochia* was left in between rows of hops to serve as a habitat for beneficial insects.

The annual harvest occurred on just one day in mid-September due to the limited coordinating efforts this year.

The funds required (\$16,000) to front the purchase of the hop biner (harvesting machine) could not be secured in time to order the machine and have it delivered before the 2017 harvest. The cost of manually harvesting the entire 2017 crop was not financially possible nor was there the necessary management to implement a successful harvest.

Because project staff and a volunteer crew (3-5 people) were not enough labor to harvest the entire hop yard without a hop biner, the focus became

1. Harvesting enough of each variety to send to be tested for alpha and beta acid content and HSI in the laboratory,
2. Harvesting only those plants which could be identified as belonging to one variety.

Considering the amount of overgrowth and the lack of training, it wasn't always possible to determine where the base of the plant was located.

After the 2017 harvest was complete, the hop yard was mowed and prepared for winter.

In late 2017, project management was transferred to the new board members of Reno Food Systems (formerly Polygrarian Institute). These new board members met with several of the historic site managers and the project lead to learn about historic successes and challenges to managing the hopyard and the High Desert Hops Project as a whole.

2018

The primary focus of the project's Year Five was recovery and repair from a year of minimal maintenance and achieving the stated measurable outcomes for the Grant.

Repair and management of the hopyard

In 2018, the drip irrigation system required a retrofit, replacing all the ½" dripline that extended from the supply headers. Based on interviews with historic hopyard managers, irrigation leaks were identified as a major maintenance item. Previous managers suggested these leaks were the result of yellow-bellied marmots (*Marmota flaviventris*) and other rodents chewing through the drip irrigation lines. To prevent this, a raised drip irrigation system, like those used in grape vineyards, was installed. No leaks were experienced in this system due to rodents. Leak checks were performed weekly. Occasional leaks were found where emitters had popped out. These were quickly and easily fixed with the new system

Many of the trellis posts became rotten in 2017, these posts were braced for 2018, which worked well.

Local arborist wood chips were imported into the hopyard to suppress weed growth and cover the soil to reduce evaporation. Mulch 4-6" deep was applied to most of the yard and where it was at least this deep weed suppression was effective. Arborists wood chips provided a useful, free resource that diverted over 200 cubic yards of waste from the landfill.

Prior to woodchip application ¼" of compost and fertilizer was applied to all the hops rows. To determine the amount of compost and fertilizer needed, soil tests were conducted, and a custom blend was prepared by a local compost company, Full Circle Compost.

Where weeds grew, they were suppressed by mowing and weed-whacking from May - September.

Harvest occurred in late August and all hops plants were harvested. One hops variety was harvested per day, and hops cones were processed by hand and delivered to the brewery that same day. The entire hops harvest for the year was distributed to local breweries as fresh wet hops.

After harvest, the hopyard was mowed one last time and irrigation was shut down in early October after frost.

Identification of select hop varieties for our region

Select hop varieties for our region were identified based on yields and consistency with standard alpha and beta acid values for individual varieties. These data are shown in the Goals and Outcomes Achieved section.

All the higher yielding hop varieties were also the healthiest. The hopyard experienced minimal disease and insect pest problems. The major challenge and impact to yields came from weed competition, particularly native sod forming perennial grasses such as creeping wild rye (*Elymus triticoides*) and western wheatgrass (*Pascopyrum smithii*) which were likely exacerbated by the flooding in 2017.

Developing a producer and brewer network

Project staff met with most of the brewers in Northern Nevada and asked them to complete a survey. Only 3 out of 19 responded. The survey data is shown in the Goals and Outcomes Achieved section.

While meeting with brewers, they were invited to participate in our event Reno Fresh Hop Fest. Reno Fresh Hop Fest provided 10 local brewers with 1 hop varieties each. The brewers used their chosen variety to brew a beer of their choice which was entered into a taste testing competition between all 10 breweries. Eight out of 10 breweries attended the event (IMBIB did not participate in brewing). The event was attended by 50+ people who participated in judging the Fresh hop beers. Pigeon Head Brewing was the winner and used ‘Vanguard’ hops.

Additionally, Reno Food Systems networked with Bentley Ranch, which operates a 5-acre hopyard in N. Nevada and currently has the hop biner and pelletizer machines whose purchase was coordinated through efforts of the High Desert Hops Project.

Hops rhizome harvesting

During spring 2018, a workshop on hops history and hops production was conducted at the High Desert Hopyard. Over 10 local enthusiasts and homebrewers attended this workshop. Part of the workshop included a tour of the hopyard and harvesting rhizomes. Over 30 rhizomes were harvested and distributed to workshop participants.

Several challenges to establishing an effective rhizome nursery at the current hopyard site were identified. These include:

- existing perennial sod-forming grasses and weeds in the hopyard
- getting all varieties certified virus-free
- lack of financial capacity to continue managing the hopyard

That stated, UNR MSFL is encouraged to allow interested local producers to harvest rhizomes from the site to help them establish new hopyards in the region. Local producers can assess if they want to get the rhizomes virus tested or not.

Goals and Outcomes Achieved

The measurable outcomes for the grant are

1. Identify viable hop varieties that produce high yields and possess desirable qualities, grown in our bioregion
2. Develop a network that connects Nevada hop producers to Nevada brewers that will drive the economic impact of this specialty crop in Nevada
3. Create an established, locally adapted source of hops for rhizome harvesting that will spur the installation of new hop yards in our bioregion

Measurable Outcome #1

GOAL 1: *Identify viable hop varieties that produce high yields and possess desirable qualities, grown in our bioregion*

- **PERFORMANCE MEASURE:** *Number of viable hop varieties that produce high yields and possess desirable qualities.*
- **BENCHMARK:** *There is no previous data available for hop producers in our region - This project is the first hop-yard to be installed in Nevada. 10 varieties have been planted and are being studied.*
- **TARGET:** *7 of 10 hop varieties being studied will prove to be viable in our bioregion*

For the 5 years of the project, the Hops varieties that were harvested were tested for Alpha and Beta Acids and HSI (Hop Storage Index). Tests were performed by [Alpha Analytical](#)⁵ from 2014-2017. In 2018 Alpha Analytical discontinued their services to small scale producers without commercial accounts, so we sent hops to [AAR Lab](#)⁶ for analysis.

Annual values for yield, Alpha and Beta Acids, and HSI for all varieties tested are represented in Figure 1. Across the 10 varieties analyzed, most are consistent with industry standards by variety.

VARIETY	2014					2015					2016*					2017^					2018					
	HARVEST - WET	HARVEST - DRY	ALPHA ACIDS	BETA ACIDS	H.S.I.	HARVEST - WET	HARVEST - DRY	ALPHA ACIDS	BETA ACIDS	H.S.I.	HARVEST - WET	HARVEST - DRY	ALPHA ACIDS	BETA ACIDS	H.S.I.	HARVEST - WET	HARVEST - DRY	ALPHA ACIDS	BETA ACIDS	H.S.I.	HARVEST - WET	HARVEST - DRY	HARVEST - TOTAL	ALPHA ACIDS	BETA ACIDS	H.S.I.
CASCADE	6.53	2.16	7.70	5.40	0.218	119.48	37.33	8.10	6.40	0.235	112.00	29.47	8.30	6.50	0.212	-	-	9.00	4.80	0.200	40	7	27	10.23	4.83	0.2
CENTENNIAL	-	-	-	-	-	23.33	8.56	9.30	3.70	0.218	36.00	9.47	9.20	3.50	0.224	-	-	9.30	4.70	0.197	9	0.5	5	7.93	2.16	0.21
CHINOOK	4.47	1.19	9.60	3.00	0.228	82.14	17.84	10.50	2.80	0.195	94.00	24.74	11.30	2.90	0.208	-	-	13.10	3.60	0.222	31	8.5	24	9.81	2.17	0.2
CRYSTAL	0.41	0.13	-	-	-	115.76	21.68	7.00	6.70	0.178	43.00	11.32	7.30	6.30	0.196	-	-	6.60	5.80	0.200	9.5	1	5.25	9.92	5.82	0.21
FUGGLE	-	-	-	-	-	20.87	7.91	3.40	2.40	0.271	19.00	5.00	3.30	2.40	0.246	-	-	6.60	3.30	0.225	3	0.25	1.75	2.72	0.98	0.24
GALENA	6.13	2.13	9.70	7.10	0.218	61.24	22.35	15.10	8.30	0.188	47.00	12.37	15.20	8.30	0.203	-	-	15.40	9.00	0.211	25	1	13.5	12.15	7.05	0.21
NO. BREWER	-	-	-	-	-	10.67	3.98	7.30	4.00	0.242	7.13	1.88	7.20	4.10	0.233	-	-	-	-	-	-	-	0	-	-	-
NUGGET	7.28	2.19	8.90	6.00	0.221	49.56	13.24	10.90	7.10	0.216	44.00	11.58	11.10	7.20	0.203	-	-	13.90	8.50	0.215	30	0.5	16	12.86	7.71	0.22
VANGUARD	-	-	-	-	-	23.22	6.49	5.60	6.00	0.226	22.00	5.79	5.50	5.90	0.221	-	-	8.70	3.10	0.228	4	0.5	2.5	6.02	3.4	0.21
WILLAMETTE	-	-	-	-	-	11.03	2.87	4.80	3.40	0.177	68.00	17.89	4.90	3.40	0.237	-	-	5.80	3.30	0.231	13	0.5	7	4.08	2.05	0.18

Reno Food Systems partnered with the University of Nevada the High Desert Hops Project. The project is primarily grant funded by the Nevada Department of Agriculture through the Specialty Crop Block Grant program. For more information on the project or Reno Food Systems, visit www.renofoodsystems.org

*Estimated wet harvest weight according to harvested sample sizes of each variety.

^Only enough of each variety was harvested to send for Analysis. No Harvest weight or yield estimate data were collected this year

Harvest - Dry is the amount of hops harvested and dried in addition to the distributed wet hops
Harvest - Total is estimated assuming all wet hops were dried to 10% moisture content

Figure 1. Summary of Data collected for year 1-5 of High Desert Hops project.

Figure 2 (next page) shows the average values for Alpha and Beta Acids and HSI for all varieties tested and compares them with industry standards for each hops variety.

⁵ <https://www.alphaanalyticstesting.com/hop-testing/>

⁶ <https://www.aarlab.com/>

VARIETY		Alpha Acids (%)		Beta Acids (%)		HSI	
		average	range	average	range	average	range
CASCADE	UNR	8.67	7.7-10.23	5.59	4.8-6.5	0.21	0.200-0.235
	Reference		4.5-7		4-7.5		
CENTENNIAL	UNR	8.93	7.9-9.3	3.52	3.5-4.7	0.21	0.197-0.224
	Reference		9.5-11		3.5-4.5		
CHINOOK	UNR	10.86	9.6-13.1	2.89	2.1-3.6	0.21	0.195-0.228
	Reference		12-14		3-4		
CRYSTAL	UNR	7.71	6.6-7.3	6.16	5.8-6.7	0.20	0.178-0.200
	Reference		3.5-6		4.5-6.5		
FUGGLE	UNR	4.01	2.7-6.6	2.27	0.98-3.3	0.25	0.225-0.271
	Reference		4-5.5		2-3.5		
GALENA	UNR	13.51	9.7-15.4	7.95	7.1-9.0	0.21	0.188-0.218
	Reference		11.5-14		7-9		
NO. BREWER	UNR	7.25	7.2-7.3	4.05	4.0-4.1	0.24	0.233-0.242
	Reference		7-10*		3-5		
NUGGET	UNR	11.53	8.9-13.9	7.30	6.0-8.5	0.22	0.203-0.221
	Reference		12-15		4-6		
VANGUARD	UNR	6.46	5.5-8.7	4.60	3.1-6.0	0.22	0.210-0.228
	Reference		4.5-6		6-7		
WILLAMETTE	UNR	4.90	4.1-5.8	3.04	2.1-3.4	0.21	0.177-0.237
	Reference		4.5-5.5		3.5-4.5		

review of website and literature sources gives a diversity of ranges for 'reference' values. most values stated here are from Hop Variety Handbook by Dan Woodske. *No. Brewer Alpha acid range is from Alpha Analytics website.

Figure 2. Industry standard values and average values for Alpha and Beta Acids and HSI for all varieties tested at the High Desert Hops Project

Over the 5 years of the project, it has been determined that 1 acre is not a sufficiently large hopyard to generate yields that provide financial sustainability in N. Nevada. Similar results have been

found in Colorado where Dr. Ron Godin reports that 5 acres is the minimal viable size for a small scale hopyard⁷.

At the HDHP, yield results were about 10% of the commercially expected yields per acre. Hops yields averaged 96 lbs./acre/year and commercial hopyards expect ~1000-1200 lbs./acre/yr., depending on variety⁸. These lower yields are likely due to several factors including weed competition, fertilization, and other management factors. At these yield rates, no varieties studied are viable for commercial production. However, if the stated challenges were overcome, it is possible that several varieties could be successful for small scale producers. Yields for the 3 years of the study during which cones were harvested are shown in figure 3.

VARIETY	2015	2016	2018	Average (lbs/yr)
	HARVEST - DRY	HARVEST - DRY	HARVEST - TOTAL	
CASCADE	37.3	9.8	27.0	24.7
CENTENNIAL	8.6	2.3	5.0	5.3
CHINOOK	17.8	4.7	24.0	15.5
CRYSTAL	21.7	5.7	5.3	10.9
FUGGLE	7.9	2.1	1.8	3.9
GALENA	22.4	5.9	13.5	13.9
NO. BREWER	4.0	1.0	5.0	3.4
NUGGET	13.2	3.5	16.0	10.9
VANGUARD	6.5	1.7	2.5	3.6
WILLAMETTE	2.9	0.8	7.0	3.5
Total (lbs/yr)	142.3	37.4	107.0	95.6

Figure 3. Annual and average harvest yields by variety at the 1 acre High Desert Hops Project. 100 plants/variety, 1000 plants total.

Over the 5-year High Desert Hops Project, the top 5 yielding varieties are:

1. Cascade
2. Chinook
3. Galena
4. Nugget
5. Crystal

These varieties deserve consideration by any new hops producers in the region. Cascade dramatically outperformed all other varieties in yield and had high alpha and beta acid concentrations.

Measurable Outcome #2

GOAL 2: Develop a network that connects Nevada hop producers to Nevada brewers that will drive the economic impact of this specialty crop in Nevada.

⁷ personal communication

⁸ <https://hort.purdue.edu/newcrop/afcm/hop.html>

- *PERFORMANCE MEASURE: Number of producers and brewers participating in the network.*
- *BENCHMARK: There is no previous data for such a network in our region.*
- *TARGET: 10 hop producers and 10 professional brewers participating in the network to grow the industry.*

No new hops producers began an operation in Nevada because of this study and in general most of the interest in the project was among home gardeners and hobby homebrewers. Ten local craft breweries did show support for the project in 2018 and indicated interest in participating in Reno Food Systems hops harvest festival. These breweries were provided with no-cost, fresh harvested hops from the project to brew an experimental wet hopped beer to be judged in a consumer-choice event hosted in October 2018 by RFS. Though ten breweries agreed to participate in this event, only eight made successful beers and participated in the event.

A survey was prepared in collaboration with the Nevada Small Business Development Center and sent to all Nevada breweries but garnered minimal responses. Of the three responding breweries, two were in Northern Nevada and they both indicated that they were interested in purchasing local hops and indicated that they would pay a small premium for the local hops. Results of this survey supported anecdotal feedback that indicates there is plenty of interest in local hops but also an expectation that local hops are harvested, processed, and stored in a manner familiar to commercial brewers. For instance, all brewers noted that hops must be pelletized to be viable as an ingredient in the brewing industry.

Measurable Outcome #3

GOAL 3: Create an established, locally adapted source of hops for rhizome harvesting that will spur the installation of new hop yards in our bioregion

- *PERFORMANCE MEASURE: Number of hop varieties at the experimental hop yard that can supply new producers with rhizomes.*
- *BENCHMARK: Healthy hop plants can be harvested for rhizomes after year 4 without jeopardizing the health and/or yield of the plant.*
- *TARGET: After year 4 of production, 7 hop varieties at the experimental hop yard will be healthy enough to supply rhizomes to local/new producers*

After 4 years of production, 7 hops varieties were identified that are best suited to supply new producers based on the vigor and yield of these varieties.

The 7 varieties are

1. Cascade
2. Chinook
3. Nugget
4. Galena
5. Willamette
6. Crystal
7. Centennial

These 7 varieties were the top yielding varieties of the hopyard and the healthiest (Figure 3). All were close to the industry standards for Alpha and Beta acids (Figure 2).

Vanguard should also be considered for continued testing because it was used to brew the winning beer at Reno Fresh Hop Fest. However, it was not a high yielding variety, so it might be best offered as a fresh hop only and planted in smaller quantities in addition to high yielding varieties.

While the hopyard may be healthy enough to distribute these 7 varieties, Reno Food Systems has not received permission to continue using the hopyard in 2019. Also, it has not become financially self-sustaining, so if permission were received, funding would then need to be acquired to continue managing hopyard production. Due to these facts, we will not be distributing rhizomes, but as stated above, we encourage UNR MSF to allow distribution of these rhizomes.

Beneficiaries

Many groups benefited from this project. These include local homebrewers and commercial breweries, local hops producers and home gardeners, and craft beer enthusiasts.

Workshops and educational events in 2018 reached over 20 homebrewers and home gardeners providing them with guidance on how to care for hops plants and uses for hops cones as well as distributing over 30 hops rhizomes.

While we networked with over 14 N Nevada breweries, we were particularly successful in bringing attention to 9 local breweries and connect them with over 50 craft brew enthusiasts through our Reno Fresh Hop Fest. These breweries were

- Great Basin
- Lead Dog
- 10 Torr
- Pigeon Head
- The Brewer's Cabinet
- Shoetree
- Silver Peak
- Under the Rose

Lessons Learned

Since 2018 was the first year that Reno Food Systems managed the High Desert Hops Project, lessons learned primarily come from experiences this year and anecdotes from previous year. In addition to overall lessons learned, many logistical lessons were learned as well.

Overall lessons learned during this project include:

1. Transition of project leadership and management leads to setbacks and requires increased efforts to overcome these setbacks

- a. Because management of this project was transferred to Reno Food Systems in the final year of the project, there was a large learning curve for hopyard management activities
- b. New relationships needed to be developed between project lead/staff and local producers and brewers. This was very difficult because both brewers and producers are very busy people. Additionally, a lack of previous yields at the High Desert Hopyard may have created some skepticism among the network.
2. Site preparation particularly weed removal, prior to planting is critical for establishing hops plants and achieving high yields
3. Site selection should consider the potential effects of flooding. The current 1-acre site is in the 100-year floodplain of the Truckee River and flooding in 2017 likely introduced a lot of weed seeds.
4. Proper fertilization is critical to higher yields. Even with attempts a proper fertilization (250-400 lbs./N/acre), yields in the 1-acre hopyard were ~10% of industry standard.
5. The short growing season and late spring frosts in N Nevada are likely to decrease the expected yields of hops crops because there are fewer days for hops vines to reach mature size before shifting from vegetative growth to flower production in July.
6. Brewers require a very specific product for use in their equipment. This product is dry hops pellets. This is challenging to produce at a small scale because less expensive machinery doesn't work well, and expensive machinery requires larger acreages to cover the capital expenses.
7. Hand processing of harvested vines is extremely labor intensive and inexpensive, small-scale hop binner equipment doesn't improve labor efficiency much.

Some of the logistical lessons learned during the 2018 season are:

1. Timing is critical on all aspects of the hopyard operation
 - a. Trellis ropes must be in the ground with vines being trained up by the last 2 weeks of May
 - b. Selection of the most vigorous upward vines is important
 - c. A moisture meter is critical for rapid and repeated in field moisture tests of hop cones
 - d. The variety with the earliest dry cones should be sent to AAR labs (or desired lab) for testing of moisture % and acid content to determine appropriate harvest timing
 - e. Timing of harvest should be verified by getting a professional opinion from a local brewer or experienced grower
 - f. Sales of hops should be done early in the year, ideally in June when growth is assessed
2. Production improvements
 - a. Either eliminate competing vegetation, particularly sod forming grasses, prior to planting or suppress with other methods

- b. Mulch application at a depth of 12” did not inhibit hops bine growth but did smother all competing weeds. In fact, Cascade was both the most deeply covered variety and produced the highest yield
 - c. When hops are trellised in a V shape, they perform better. Enough trellis wires to allow all rows to be trellised as V’s should be added
 - d. Additional fertilizer should be added in mid-June to support growth spurt.
3. Brewers
- a. Brewers in Nevada’s emerging craft brewing industry are extremely busy people. It’s difficult to get ahold of brewers and to get them to participate in events or communications.
 - b. Brewers are already well networked and communicate effectively within the Nevada Craft Brewers Association⁹

Additional Information (Optional)

Beyond this document, we have provided two pdfs.

1. Figure 1 is also provided as a pdf attachment for easy legibility
2. A short High Desert Hops Manual also attached as a pdf.

Challenges

Due to the lead project staff accepting a new position in 2017, there was limited attention focused on coordinating the Hops Project. As mentioned this problem was compounded by the hiring of a UNR grad student to manage the field who was ultimately unable to do so.

Essentially, there was very minimal labor invested in the hopyard through the 2017 season. The most serious problem affecting the High Desert Hops Project to date has been the difficulty of obtaining committed and engaged staff to work on the project.

These challenges were addressed in the following ways: 1) The Project Lead Staff no longer has any position of responsibility with regards to the Hops Project and a new Project Lead has been selected 2) A request to reallocate grant funds is forthcoming to increase availability of labor dollars and supplies that will address the needs of the neglected hopyard 3) A renewed commitment to the High Desert Hops Project’s relationships with UNR, local producers of craft beer, and regional hops growers is currently being acted upon. The results of these changes are detailed in the 2018 Project Activities section.

Surprisingly very few hops plants died during the 2017 season and 2018 yields were comparable to 2015 and 2016 yields.

Efforts taken to course correct included:

1. Hiring a new Farm manager
2. Organizing volunteer days onsite during peak activities

⁹ <http://nvbeer.com/>

3. Repair of irrigation system
4. Managing weeds on site
5. Application of soil amendments (compost or organic fertilizer)

These efforts did not increase yields to commercially viable levels. Photos included here show the High Desert Hopyard during the 2018 growing season.

Lastly excessive rains during the winter of 2016-2017 caused flooding in the hop yard that damaged tools stored in a shed on site. Flooding was estimated at up to 3' of depth and site inundation for up to 10 days during the dormant season.



Photos from 2018 season at the High Desert Hops Project.

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Nevada Department of Agriculture
Point of Contact: NDA - Ashley Jeppson
Program Name: 15SCBGPNV0036
Final Report

Project Title

Promoting Local Honey Consumption and Honey Bee Education in Northern Nevada

Project Summary

The initial purpose of the project was to promote healthy eating habits and lifestyles that included beekeeping for all ages. Hobby beekeeping could be easily turned into a side business or a full-time occupation. Outreach and education were attempted to all age groups and backgrounds to inform stakeholders on northern Nevada beekeeping, potential businesses, marketing strategies and to encourage consumption of local honey. Another function of this grant was to educate people living in Northern Nevada that beekeeping could be a viable part or full-time business opportunity. Beekeeping and its products are additive to a community and takes nothing away such as resources or money.

The concern over declining potential declining populations of pollinators and especially honey bees and their role in the human food chain made this project timely and important.

This grant did not build off a previous or existing grant.

Project Approach

Most of the project activities and tasks were performed in the first year and many lessons were learned. Events were selected with attendance from a large volume of consumers and potential beekeepers. Further, the project coordinator tried to target education opportunities for next generation growers through the Churchill High School and FFA program. The approach was an education and outreach attempt at several public events, schools and small promotions throughout Northern Nevada with onsite displays, handouts and demonstrations. The Work Plan was thought out before the grant was accepted to the best ability of the grantee. The tasks assigned to key participants in the work plan seemed reasonable and were agreed upon before submission of the grant. Conclusions and recommendations include, having more people involved at the beginning of the grant process in case critical project partners are no longer able to participate. Favorable developments included increased business at The Beekeeper in Carson City and club membership increased at Mason Valley and Northern Nevada Beekeepers.

The overall scope of the grant did not benefit other commodities other than local honey and honey bees. The goal was to promote crops of local honey and honey bee pollination in Northern Nevada with an emphasis on potential part and full-time career possibilities.

Project partners contributed significantly to the success of this grant by attending events, interacting with participants and some sold products and services to those new clients to get them started in beekeeping as a business and hobby. Project partners included the following:

1. Mason Valley Beekeepers Association and its representative Bruce Coon who is also the owner of Sunset Vista Farm

2. Northern Nevada Beekeepers and its representatives Bill Goff and Bonnie Mclaughlin
 3. Sierra View Honey and its owner representative Robert Hickox
 4. Honey Hill Farm and its owner representative Michael Hamerski
 5. Butte Bee Company and its owner representative Marius Vanzyl
- These people benefitted most by increasing public awareness of their bee products and or membership.

Goals and Outcomes Achieved

All the activities in 2016 were accomplished except for two, due to a change in project partners. The measurable outcomes and goals were on track in the first year, but there were a couple setbacks in the subsequent year that could not be overcome. Below is a list of activities completed.

- Participating in education and outreach at the Cantaloupe Festival in September of 2016
- Participating in education and honey tasting at Urban Roots in June 2016
- Provided education and honey tasting at the Nevada Fair in June 2016
- Five farmers markets were attended with education materials from June through July 2016
- Education and honey tasting were provided at Spring Wings in May 2016
- Education and honey tasting were provided at Churchill High School for FFA students in January 2016
- Education, food pairing, and honey tasting was provided at the Great Basin Food Cooperative in December 2015
- Pyramid Lake Paiute tribe youth day beekeeping demonstration July 2016
- Due to difficulty in securing FFA teacher participation (there was a change in staff, so the original teacher that had committed to participating was no longer involved with the class) a scheduled outreach activity in Lander County High School FFA class did not occur

The Nevada State Fair event was a success due to the support of the Northern Nevada Beekeeper's club and the 12-hour daily booth promotion that was covered through varying shifts over four days. Dharma Bees, Dan Bailey assisted with honey tasting events at the Great Basin Food Cooperative. Much needed honey varieties were provided for people to taste and comment on and he was able to share his local beekeeping knowledge. Without his help and expertise, the measurable outcome of goal four would not have been achieved. Members of Al's Bees and the Northern Nevada Beekeepers club also assisted with the event.

Two hundred and thirty-four surveys were completed by participants this year during all activities. Baseline data that was collected because of survey forms for all events showed most participants knowledge of honey bees and honey was limited before the activity. One participant went on to become a backyard hobbyist farmer and was provided with assistance in acquiring all appropriate equipment and materials as well as bees through the natural splitting process.

Goal 1: Increase consumption and awareness of the health benefits of honey and honey products to approximately 1000 people at the Nevada Fair.

Performance Measure: Number in attendance at Nevada Fair and number of outreach materials provided.

Benchmark: Will be determined by responses on feedback form.

Target: By the end of the project, the target is to increase consumption and health benefit awareness of honey and honey products among the people surveyed. The questions presented on the feedback form will include, just as likely, more likely and extremely likely to buy local honey products after tasting. The target is to increase participants' likelihood to buy local honey products by 25% and increase awareness by 25%.

Performance Monitoring Plan: I will count the number of people that I contact and try to increase that number every year. This number will be the total of people contacted who either filled out, survey forms, taste honey, ask questions, buy honey products, or accept one of our handouts.

The Nevada State Fair event was a success due to the support of the Northern Nevada Beekeeper's club and the 12-hour daily booth promotion that was covered through varying shifts over four days. Dharma Bees, Dan Bailey assisted with honey tasting events at the Great Basin Food Cooperative. Much needed honey varietals were provided for people to taste and comment on and local beekeeping knowledge was able to be shared. Members of AI's Bees and the Northern Nevada Beekeepers club also assisted with the event.

For the honey tasting events, 4 questions were asked to assess baseline data and likelihood to purchase local honey. Questions included options such as not likely and not aware to correspond to a 0% value, somewhat likely and somewhat aware for a 25% value, likely and aware for a 50% value, very likely and very aware for a 75% value and extremely likely and extremely aware for a 100% value.

194 participants were surveyed and 12 said their awareness of honey production and likelihood of purchasing local honey did not change, 23 rose 12.5%, 38 rose 25%, 31 rose 37.5%, 29 rose 50%, 21 rose 67.5%, 15 rose 75%, 9 rose 87.5% and 16 rose 100%. This demonstrates that 182 participants increased their awareness and likelihood of purchasing local honey because of the project activities.

Goal 2: Increase awareness of honey as an alternative sweetener among Banner Churchill Diabetes Workshop attendees.

Performance Measure: Survey patients and family members regarding the benefits honey can provide and whether they would purchase and use honey products in the future.

Benchmark: Assessed by feedback forms provided to participants to see if they are currently using honey.

Target: Increase local honey consumption and awareness of participants by 25% based on feedback form benchmark survey question.

Performance Monitoring Plan: Based on survey forms, I will find out what the participants are interested in and modify my presentation, material and content. Possible impacts would be to allow diabetics with a choice to use a natural alternative to other sweeteners that they have not considered.

Initially, a diabetes workshop was anticipated to be held, however there was some transition with a project partner that made this objective more challenging. Since the original hospital group was unable to be reached, the project lead was able to encourage the Pyramid Lake clinic into participating in a beekeeping demonstration. This created a shift towards production education but also allowed participants to identify a sweetener alternative that is locally available. This demonstration had 30 participants involved. Survey responses are compiled in the cumulative

survey results reported in Goal 1 since the outcomes of this anticipated activity shifted more towards Goal 1.

Goal 3: Increase education to students interested in beekeeping as a hobby or business.

Performance Measure: Survey participants before and after presentations to determine how many would consider helping honeybees by becoming a beekeeper.

Benchmark: Ask students on the initial survey form if they have ever thought of keeping bees for honey production and food.

Target: At the end of each presentation issue a feedback form with the target of increasing awareness of this food producing business/job opportunity by 25%.

Performance Monitoring Plan: From feedback forms, I will determine what students are interested in and modify the presentation to fit either a hobby or business model. The impact of this outreach is to share with the students not only a rewarding hobby but a possible career path. I will then follow-up one year later via e-mail to all participants to determine if any of the students have started beekeeping and if they have increased consumption of local honey. I will share this information via e-mail to all beneficiaries and volunteers.

For the high school training 4 questions were issued that purposely used the words, not to which corresponded to a 0% value, somewhat to which corresponded to a 25% value, interested to which corresponded to a 50% value, very much likely to which corresponded to a 75% value and extremely to which corresponded to a 100% value. For example, if a participant said, before the presentation they were not interested in beekeeping, then after the presentation they were very interested, that corresponded to a roughly 75% increase in interest level. If they said before the presentation they were not interested in helping honeybees by becoming a beekeeper and after the presentation they were still not interested, then there was 0% (no) change in interest.

40 high school participants were surveyed and six of them said their interest did not change, 5 rose 12.5%, 15 rose 25%, 7 rose 50%, 2 rose 67.5%, 3 rose 75%, and 2 said their interest rose 100% from not at all to extremely interested. As a result, 29 students responded with interest in a food producing business/job opportunity by a minimum of 25%.

Goal 4: Increase public awareness of different flavors and textures of honey to increase consumption of local honey.

Performance Measure: Survey participants to assess their level of awareness on different and flavors and awareness of honey.

Benchmark: Initial survey issued at Heirloom Gardens honey tasting event.

Target: Increase awareness and use of local varietal honey products among event participants by 25% based on responses from feedback form.

Performance Monitoring Plan: Through feedback forms, I will monitor participants responses to the event and modify the plan to increase public awareness consumption of honey products. I will share this information via e-mail to all beneficiaries and volunteers.

The Heirloom Gardens honey tasting event was not able to be attended and the project lead determined that providing a broader demonstration on beekeeping practices, local availability, textures and flavors, etc. and then surveying on the likelihood of purchasing local honey because of the taste testing and information provided was more efficient and feasible for consumers and beekeepers. Awareness of different flavors and textures increased through education activities,

however this was not a specific survey question. The outcomes of increased knowledge of honey production, texture and flavors translates to increased intended purchases which was measured through the Goal 1 survey responses involving increased intention to consume and purchase local honey.

Goal 1 outcomes: 194 participants were surveyed and 12 said their awareness of honey production and likelihood of purchasing local honey did not change, 23 rose 12.5%, 38 rose 25%, 31 rose 37.5%, 29 rose 50%, 21 rose 67.5 %, 15 rose 75%, 9 rose 87.5% and 16 rose 100%. This demonstrates that 182 participants increased their awareness and likelihood of purchasing local honey as a result of the project activities.

Goals of reaching the public and educating them on healthy eating using honey, beekeeping as a hobby, and business was a success based on the figures above.

Beneficiaries

The beneficiaries of this grant included, The Northern Nevada Beekeepers Association, Butte Bee Company, Dharma Bees, Sierra View Honey, Mason Valley Beekeepers, Great Basin Food Cooperative, Pyramid Lake Paiute tribe, Churchill County School District, The Beekeeper in Carson City, Carson City Bee Club, and the Cantaloupe Festival in Fallon Nevada. Butte Bee Company sold over \$4000 in bees to beekeepers in northern Nevada for the first time, Dharma Bees and Sierra View Honey Co. bought most of those bees and are selling honey in Northern Nevada from those bees. Many first-time beekeepers also purchased equipment from The Beekeeper store in Carson City.

Lessons Learned

There were some challenges with coordinating all participants and confirming planned activities across the state. The first major challenge was that the project assistant was no longer able to dedicate the time needed for assisting with the project. However, another member of the Mason Valley Beekeepers club committed and was able to assume the role. This individual proved to be a valuable partner in all activities and is the liaison with Mason Valley Beekeepers club.

The next challenge was the change in the FFA teacher at Lander County High School in Battle Mountain; the new instructor was not prepared to commit to the honey bee and education lesson. As a result, the project coordinator contacted the Humboldt County High School FFA teacher in Winnemucca as a substitute location with no response to commit either for this activity.

An additional challenge was the need to change the honey tasting and food pairing event from Heirloom Gardens to another location due to change of heart and project conflicts. The Great Basin Food Cooperative was contacted, and they expressed interest in providing the space for the activity. The education, honey tasting, and food pairing event took place and was a success.

The last challenge was the diabetes workshop activity. The previous project assistant was the primary contact for this objective and the project lead was unsuccessful with connecting with the former contact for coordinating the event. As a result, the Banner Churchill Hospital with the Health Clinic on Pyramid Lake Indian Reservation was pursued to cover this objective. Unfortunately, this also fell through due to lack of commitment from the diabetes coordinator.

By a chance encounter at the Pyramid Lake tribe clinic, the Pyramid Lake Paiute tribe youth coordinator did contact the grantee about doing a beekeeping demonstration for their youth group. This demonstration had 30 participants and would not have happened if it wasn't for this chance encounter with the coordinator while the grantee was at the Pyramid Lake clinic.

The biggest lessons learned by the grantee are in the following order:

1. There needed to be more people involved and committed to this project.
2. The number of events proved problematic involving much more time and energy coordinating and participating than expected.
3. The cost of the events and travel involving volunteers prohibited many from being involved.
4. Education and outreach was critical for the success of this grant, but some people are not so good at it, others have great skills. Some volunteers and participants were great, others not so.
5. Some people agreed to participate in the beginning then backed out for various reasons. This caused much stress on the grantee to find suitable replacements, some were found others were not.

Project Contact

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Nevada Department of Agriculture
Point of Contact: NDA - Ashley Jeppson
Program Name: 15SCBGPNV0036
Final Report

Project Title

Operation Urban Desert Garden Farming

Project Summary

Operation Urban Desert Garden Farming reduces poverty-induced food insecurity and health issues through the promotion of specialty crops by: 1) increasing access to locally grown specialty crops in low income/low access tract areas, and 2) providing nutritional education and healthy lifestyle planning services that increase the consumption of specialty crops across multiple generations.

Objectives

- 1) Recruit 6 beginner Urban Desert Garden Farming families to grow specialty crops and produce a Spring and Fall 2016 harvest.
- 2) Host 8 Family Empowerment Training Services workshops to increase consumption of specialty crops and knowledge of their nutritional benefit.

- 3) Provide monthly gardening classes with weekly assistance in maintenance for each family's raised garden farming beds to ensure successfully fruitful harvests in Spring and Fall 2016.

Project Approach

February 2016, On the Ranch Alliance officers and volunteers set out to install 8'x4' self-irrigating garden beds in the backyard of 6 families in low income/low access areas of Clark County. Through a selection process where families could nominate themselves, and community members were able to refer families for the program, we chose 4 families off the Martin Luther King corridor and 2 families near Pecos and Las Vegas. These families were as diverse in size as they were in age. We had older family members who had experience growing crops in their younger days. Two families had date and pomegranate trees in their yards, which they never thought to tend to. One family had previously tried starting a garden but didn't have the "know how" or resources to follow through, so *Operation Urban Desert Garden Farming* was very well received by them. Families selected the specialty crops that they desired to grow in their garden beds. With the assistance of ORA staff, seeds were planted for their first season of growing. Master Gardeners were a phone call away to help troubleshoot when we ran into snags with delayed sprouting and pest problems.

Due to the delay in weather change, most family's original seeds didn't sprout. One family who had previous experience growing, chose to plant their seeds without us. Four families had to replant due to the weather not being warm enough. Since we originally taught the families how to plant their chosen crops, they were tasked with replanting by themselves. Master Gardeners of Southern Nevada were instrumental in assisting us with troubleshooting during the times of planting, awaiting sprouting, and pest control. Due to our climate, we also had to go back and install drip irrigation on the surface of their beds with timers.

Our first Family Empowerment Training Workshop, a Healthy Basket training, featured a local nutritionist, Aarika Counce, who conducted a snack preparation demonstration with raw produce and made a low cost, healthy alternative dip. The families were very receptive and engaged in trying the samples and collecting recipes. All families were present except for one.

Our second Family Empowerment Training Workshop was a Nutritional Content workshop where Ashanti Miller taught the families about the individual health benefits of various common vegetables and fruits. There were two families present for this workshop, and the information was invaluable for one of the families who suffer with multiple health problems.

Our third Family Empowerment Training Workshop was a Cooking for Life raw vegan meal prep demonstration with Atiya Ola & Ras Emil. We held this workshop at the farmers market for a larger audience of beneficiaries. They showed our audience how to prepare over 6 entrees with raw fruits and vegetables without heat. Then, they combined them into a very healthy tortilla wrap or pretzel sandwich served with a fresh smoothie. This culinary duo also introduced us all to sea moss and its nutritional benefits. Unfortunately, our gardening families did not show up to benefit from this empowerment training.

Our fourth Empowerment Training Workshop was a Marketing training workshop scheduled to be taught by Yausmenda Freeman. Held at our usual location, the Walnut Community Center, again, none of our gardening families showed up.

The lack of participation became the pattern over the next year. Life took hold of most of our families who had loss of family members, ongoing health issues, work schedules shifting, and they lost interest in keeping up their gardens. One of our families even moved out of state. When we followed up with the families in July 2017 to get the program back on track, only 3 families responded positively to continuing with the program but wanted to continue to just grow on their own. They didn't have the time to complete the Family Empowerment Training Workshops.

Even with the dwindled interest in moving forward with the program, we see the efforts of *Operation Urban Desert Garden Farming* as a success.

1. We introduced 6 families to growing their own food in an area that lacks adequate access to freshly grown produce.
 - a. Of those 6 families, 1 family excelled because the entire family, which included 5 children, got involved and excited when they saw their crops successfully producing.
 - b. 50% of our families successfully produced crops that they consumed and shared with family and friends. Those same 3 families also said they would continue to grow on their own.
 - c. None of our families were interested in becoming farmers for profit.
2. Out of the planned 8 Family Empowerment Training Workshops, we attempted to facilitate 4 of them. The 3 workshops that were completed had a nice range in information so that our beneficiaries still gained valuable information that they could retain and implement into their family's nutrition. The one workshop on marketing did not generate interest, and in hindsight, it may be because none of the families were interested in growing on a scale large enough to require learning how to market a farming business.
3. We have received several calls from community member desiring to partake in a second round of gardening families.
 - a. These requests are from residents that have large backyards and are willing to turn them into community farms that would grow to sell at our local farmers markets and to local small businesses.

Goals and Outcomes Achieved

The *Operation Urban Desert Garden Farming* project enhances the competitiveness of specialty crops by:

- 1) Increasing child and adult nutritional knowledge about specialty crops;
- 2) Increasing access to specialty crops in low income/low access communities;
- 3) Increasing consumption of specialty crops;
- 4) Teaching organic growing practices of specialty crops;
- 5) Spreading awareness of the ability to use SNAP benefits to increase the purchase of specialty crops in the form of seeds and seedlings; and
- 6) Increasing food security.

Expected Measurable Outcomes

GOAL #1: To increase awareness of the nutritional benefits of specialty crops.

PERFORMANCE MEASURE

Performance measures will be based on participant's knowledge base prior to partaking in the project.

The beginning knowledge was expressed verbally and the strategy for implementing this project changed since families were not attending group sessions as frequently. As a result, at home individual trainings were eventually identified as the best means of encouraging participation. Of our 6 families, 1 family contained only 1 person in the household. She did not cook anything besides oatmeal for herself and would shop for fresh fruits and vegetables at the grocery store once a month. She ate pre-cooked meals (i.e. fast food, heat and serve, etc.) 1-3 times per week. She was interested in eating more fruits and vegetables to establish a healthier lifestyle. She only attended 1 of the 4 Family Empowerment Training Workshops.

Of the remaining 5 families, the average number of household members were 5. Only 2 of those families considered their diet healthy. These 2 families consumed daily home cooked meals with a variety of fruits and vegetables. One of those families sometimes ate fast food or heat and serve meals once a month. These families looked to this program to help them explore new recipes with fresh fruits and vegetables. These families attended 2 of the 4 Family Empowerment Training Workshops.

Another one of the remaining 5 families desired to improve their family's diet through attaining meal prep ideas. This was the largest family, consisting of 2 adults and 4 children. The parents acknowledged that they did not have a healthy diet and disclosed that family members had health issues that caused frequent hospitalization. This family shopped at a grocery store, farmers market, and convenience store weekly for their food and snacks. They ate pre-cooked meals 1-3 times per week, and home cooked meals 4-6 times per week. Although, the children disclosed that they ate pre-cooked meals (fast food or heat & serve) 4-6 times per week. The fruits and vegetables they typically consumed were apples, bananas, spinach, kale, berries, melons, and celery. Sometimes, that produce was purchased from the nearest convenience store. This is the family that had the most success in growing and maintaining their garden. Their consumption of fresh specialty crops increased weekly. They participated in 3 of the 4 Family Empowerment Training Workshops.

The remaining families only cooked 1-3 times per week and were interested in information on how to eat healthier. Their consumption of fresh fruits and vegetables needed improvement. Due to health issues with family a member, 1 of these families never attended our Family Empowerment Training Workshops. The other 2 only attended the first workshop.

BENCHMARK: To commence with 6 families with little to no prior knowledge of garden farming and nutritional education.

TARGET: Participants should be able to readily identify specific specialty crops along with their nutritional benefits. Participants should also be able to create well-balanced bi-monthly meal plans incorporating various preparation techniques using specialty crops. All families increased their knowledge in identifying Nevada specialty crops and the corresponding health benefits. With specialty crop access at their own homes, three families were able to consume more fruits and vegetables and learned how to do so in future years. Though not all participating families were successful at growing due to busy schedules, they still received information on how to successfully grow crops and the nutritional benefits of doing so. The census tracts in North Las Vegas, NV where this project will be implemented have high poverty and food insecurity rates with low access to fresh fruits and vegetables. We dispersed nutritional education to the families through workshops/seminars:

- **Healthy Baskets** taught participants how to read food labels, select specialty crops in their raw form, and encouraged purchasing more specialty crops rather than processed foods when shopping at local markets;
- **Nutritional Content** teaches the health benefits of specialty crops and how they affect the overall condition of the body; and
- **Cooking for Life** taught various methods of preparing specialty crops for snacks and meals that the entire family will enjoy and can easily make.

We further enhance the competitiveness of specialty crops by teaching our 6 participating families organic growing practices to implement growing specialty crops in their backyards. This also fostered developing entrepreneurial skills that may be used to start local agricultural influenced enterprises.

We also increase the community's awareness of using their SNAP benefits to purchase specialty crops in the form of seeds and seedlings. This portion of awareness supports the general marketing efforts to enhance the competitiveness of specialty crops by supporting other producers/farmers outside of this specific community.

Participants were surveyed verbally and one-on-one. All those that continued participation throughout the project gained knowledge of specialty crop production and their nutritional value that can then be shared with others.

Lessons Learned

What we've learned from our experience is that in subsequent programs like this, participants will be required to have more "skin in the game". More sweat equity will be required, and an element of loss for not completing the program and partaking in every planned aspect of the program. By doing that, we are better equipped to assess the impact the program is having on the lives of our gardening families and the community-at-large. We also learned that when children are involved, it creates a more dynamic experience as the adults are excited to see the younger participants eager to learn and ecstatic in reaping the fruits of their labor. When the children are engaged, the adults become more dedicated to the program.

Beneficiaries

6 Urban Desert Garden Farming families growing eggplant, cucumbers, carrot, celery, collards (including kale), Swiss chard, mustard greens, spinach, cucumber, okra, watermelon, sweet potato, zucchini, melons, fig, pomegranate, strawberry, grape, tomato, asparagus, turmeric, ginger, cilantro. Additional 6 families or businesses who join the bartering network.

Impact: Improve overall health and quality of life, along with streamlining the monthly outflow of cash of the 6 beginner Urban Desert Garden Farming families who will possess lifelong skills in garden farming enabling them to spread the knowledge in their community and continue to produce specialty crops season after season.

Economic Impact: Reduction in health issues lower Nevada's direct and indirect healthcare costs over time. The bartering network also creates a micro-economy where lack of funds does not reduce one to poverty or excessive food insecurity.

Contact Information

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~~Project 7: School Food Service Director and Local Grower Training, Networking, & Field Trips~~

This project has been cancelled and an amendment to revise the grant agreement was submitted to AMS on 6/5/17 and accepted.

~~Project 8: On-Farm Food Safety Training on Produce Safety Rule Requirements~~

This project has been cancelled and an amendment to revise the grant agreement was submitted to AMS on 10/24/16 and accepted.

Nevada Department of Agriculture
Point of Contact: NDA - Ashley Jeppson
Program Name: 15SCBGPNV0036
Final Report

Project Title: School to Farm Youth Education & Specialty Crop Farm Field Trip Trials

Project Summary

In the past, school field trips to Nevada farms has been a common practice, which allows farmers to create marketing materials that can be sent home with the students to encourage future visits with parents. Although this practice is beneficial for educating youth about crop production and with encouraging the consumption of specialty crops, the farmers are not able to create immediate sales since the buyers (parents) are not present. However, encouraging participation from homeschool groups will bring the parent directly to the farm to purchase specialty crop products, also creating a learning environment specific to specialty crop production and consumption. The Nevada Department of Agriculture (NDA) will collaborate with Urban Roots in coordinating workshops that incorporate CORE requirements, with topics geared around specialty crops, for home school groups ages 5-15. Following this, field trips were coordinated with local specialty crop farmers to increase knowledge on Nevada agriculture with a secondary goal of increasing on-farm sales of specialty crop products. Urban roots and NDA collaborated with local farmers in scheduling field trips and provided helpful handouts/curriculum that farmers can utilize during on-farm lessons/tours.

Northern Nevada has a growing home school community that is active in local and educational events. Through coordinating the Specialty Crop Youth Education project (Parent Award 12-25-B-1683), it became evident that home school groups are eager to participate in agriculture related education. In addition, these groups highly stress the importance of regular consumption of fresh fruits and vegetables. During events coordinated through the previous project, parents and group leaders were surveyed regarding their interest in participating in one-day specialty crop related workshops, followed by a field trip to a local specialty crop farm. The response was overwhelmingly in favor.

In addition, farmers were surveyed regarding potential marketing and sales opportunities that would result from home school group field trips. The response was also in favor of coordinating events for these groups. This project would allow specialty crop growers to develop farm events that will bring the product buyers (parents) directly to the farm, while also increasing youth and

adult knowledge on Nevada specialty crop production. Encouraging participation from home school groups will bring parents directly to the farm to purchase specialty crop products and learn about local agriculture.

Project Approach

As stated in the original work plan, ten workshops at the Urban Teaching Farm and nine field trips to local specialty crop farms took place during the grant period. A total of 201 people participated in workshops and 91 in field trips. Many of these attendees were repeat participants and attended several paired workshops and field trips. Curriculum for the workshop was designed to highlight crops and topics that would be covered in the accompanying field trip. Typically, the farmer for the field trip location would give some guidance on appropriate crops for that season at their farm. Themes ranged from cut flowers to bees, to microgreens, and seed saving various specialty crops. Participants helped to transplant seedlings, harvest a variety of crops, create craft projects to highlight crop lessons, and take-home produce, flowers, and honey.

Surveys were conducted with adults and children able to read and write, typically seven years old and above. Questions were constructed to gauge *knowledge* of the specialty crop being addressed in the workshop or field trip, to gauge *awareness of specialty crops* produced locally and *awareness of producers* that they have access to. Results are summarized in the table below.

Attendance and Survey Results

Session Month	Program Style	# Families	# Attendees	Survey Results			
				# Surveyed	Specialty Crop Knowledge	Specialty Crop Awareness	Producer Awareness
May 2017	Workshop	18	45	36	89% (32)	86% (32)	33% (12)
June 2017	Workshop	12	32	20	85% (17)	75% (15)	50% (10)
Sept 2017	Workshop	4	10				
	Field Trip	4	10	8	100% (8)	75% (6)	100% (8)
Feb. 2018	Workshop	5	15				
	Field Trip	2	4	2	100% (2)	100% (2)	50% (1)
March 2018	Workshop	7	22				
	Field Trip	5	18	7	71% (5)	71% (5)	100% (7)
April 2018	Workshop	5	11				
	Field Trip	5	11	7	71% (5)	57% (4)	100% (7)
May 2018	Workshop	5	15				
	Field Trip	4	12	6	100% (6)	50% (3)	83% (5)
May 2018	Workshop	5	17				
	Field Trip	0	0	0	NA	NA	NA
August 2018	Workshop	5	15				
	Field Trip	1	2	1	100% (1)	0%	100% (1)
Aug/Sept 2018	Workshop	5	19				
	Field Trip	2	4	2	100% (2)	100% (2)	100% (2)
Sept 2018	Field Trip	5	15	2	100% (2)	100% (2)	100% (2)

In September of 2017, the workshop and field trip were held on the same day. We believed that holding the workshop/field trip on the same day led to low participation. Starting February of 2018, workshops and field trips were held on different days. While families expressed that this was a preferred method, attendance for the field trips remained low. Heavy rains in the spring made roads difficult and farms muddy, pushing attendance down during those months. In the late summer and fall, field trip locations were selected that were outside of the immediate Reno/Sparks area and families were not interested in traveling out of town to attend.

While many participants responded positively in all three categories on the surveys, the low attendance on many of the field trips and young age of many of the student participants made it difficult to collect meaningful survey data. In the future, it may be more useful to either keep field trips closer to the Reno/Sparks area or to find ways to better advertise to home school communities nearer the farms that will be visited in the program. Many families were unwilling to drive to some of the field trip locations because of the time commitment involved.

The success of this project was significantly helped by the support of our partners. The primary partners were the farmers for the field trips. Each farmer dedicated not only the two hours necessary for the field trip, but also spent time coordinating and preparing for the group and discussing the results of the field trip with Urban Roots staff. Many farmers also had specialty crops available for the students and families to taste and/or take home with them. City Green Gardens, Holley Family Farms, Mewaldt Organics, and Loping Coyote were particularly helpful during this project, dedicating extra time to coordination and working with the participants.

Goals and Outcomes Achieved

Goal 1: Increase specialty crop education and awareness to homeschool groups in Northern Nevada.

- *Outputs: Provide 10 specialty crop workshops and 9 field trips with 15-20 participants present per workshop.*
- *Output Performance Measure: Number of workshops/field trips conducted, and number of participants present per workshop.*

Urban Roots conducted 10 workshops and 9 field trips. Participation in workshops met our goal with an average of 20 participants per workshop but field trips had lower attendance at an average of 8.44 participants per workshop.

- *Outcomes/Targets: 200-250 participants will increase their knowledge and awareness of specialty crop production and growers in Nevada.*
- *Outcome Performance Measure: Number of participants present at each workshop and field trip.*
- *Impacts: Improved health among students and families due to increased consumption of specialty crops and more education opportunities for Northern Nevada home school groups.*

We met our goal with 201 total participants in our workshops. Only 76 of these participants also attended the field trips. Ninety-one participants were surveyed regarding their specialty crop knowledge before and after the programming. Seventy-eight reported an increase in their

knowledge of specialty crops and seventy-one reported and increased *awareness* of specialty crops in our area.

Goal 2: Increased sales to Nevada specialty crop growers during farm field trips/outreach opportunities. Increase awareness regarding farm events.

- *Outputs: Provide 9 field trips to Nevada specialty crop operations. Increase producer knowledge on methods for engaging participants on the farm and potential marketing opportunities to increase awareness of farm events.*
- *Output Performance Measure: Number of field trips coordinated.*

Nine field trips were coordinated and conducted.

- *Outcomes/Targets: 50% of participating farms will experience an increase in sales during field trips.*
- *Outcome Performance Measures: Number of farmers that experience an increase in sales during or directly after field trips.*
- *Impacts: Increased sales and marketing opportunities to participating growers because of field trips bringing buyers directly to the farm.*

None of the participating farms sold produce during the field trip though many chose to give away some amount of produce or goods to students. None of the participating farmers reported a noticeable increase in sales during or after the field trips. While fifty-five participants reported an increased awareness of local specialty crop producers after programming, the numbers are not large enough for farmers to notice a change in sales.

Beneficiaries

The families that participated in the programming were the clear beneficiaries: 201 people in all. Parents and children alike reported not only enjoying the programming and the surveys found that they experienced an overall increase in knowledge and awareness of specialty crops and specialty crop producers. (See Attendance and Survey Results table in Project Approach).

Farmers reported enjoying the field trips as well but there was no measurable financial benefit for farms participating in the program.

Lessons Learned

Project staff had several take-aways from this project. Families have limited time for such programming and are reluctant to travel outside of the immediate Sparks/Reno. In the future, focusing field trips on farms that are within 20 minutes from downtown Reno may be more attractive for families.

We also had some trouble coordinating with farmers. The spring of 2018 had some last-minute scrambling to find locations when farmers had to cancel or change the times with late notice. Weather was a large factor in these changes but having a standing back-up plan in place would have been helpful. Finally, getting in touch with farmers and getting them to commit was difficult. It would be worth considering including a budget to pay farmers for the tour. Farmers are very busy and while they enjoyed these programs, it was a burden for some of them to find the time to accommodate these groups. A small stipend for their time may have been helpful.

Contact Person

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Additional Information

Sample Marketing

- FarmToursForFams
- FTF quarter hand out

Sample Agenda

- August FFT Mewaldt Agenda

Pictures

- FTF Field Trip Feb 2018
- FTF Field Trip March 2018
- FTF helping to water
- FTF planting
- FTF Workshop Feb 2018

Nevada Department of Agriculture
Point of Contact: NDA - Ashley Jeppson
Recipient: 1610-07
Program Name: 15SCBGP NV0036
Final Report

Project Title: Meet Your Farmers App (Restaurant Extension Implementation)

Project Summary:

The Nevada Department Agriculture and NEON sought to enhance the competitiveness of specialty crops region-wide by extending the first of its kind Meet Your Farmer videos and correlating app into local restaurants. The videos and app were already created and administered live in the Great Basin Community Food Co-op from 2015 to 2016 with 25 Specialty Crop (SC) producers' films having been produced under already awarded and successfully finalized Parent Award 12-25-B-1241 and Parent Award 14-SCBGP-NV-0032. The project received substantial support from Specialty Crop (SC) producers, shoppers, and garnered incredible press coverage both locally and nationally.

The subsequent Restaurant Extension Feasibility Study, grant number SCB 1510-14 managed, and again, successfully finalized in 2017; established that 18 out of 25 restaurants approached (72%) were interested in integrating the Meet Your Farmer technology into their menu items, with 11 out of 25 expressing that they were Very Interested. The Meet Your Farmer Restaurant Extension project was therefore born. For the month of September 2018, the restaurant implementation project was in ten local restaurants showcasing ten local farms' specialty crop produce or honey. While enjoying a meal, coffee, or ice cream; table tents with the project's information was center stage at each participating restaurant. You could watch the Meet Your Farmer videos and learn about where one's food comes from via Instagram @MeetYourFarmerNevada.

The project is timely as it was designed to connect the consumer and the farmer instantly and easily on social media. In compelling, curated short films, farmers tell their story at their own farm in a

quick and easily absorbable way. You could see where your produce you're literally eating right then is coming from, how it was grown, and by whom!

The project is important because now more than ever people feel disconnected from their food. We also as a nation have an obesity epidemic; the majority (66%) of Americans are overweight hence there is a trend for the public towards a healthier approach to lifestyle, which encourages people to learn and care more about their food choices. This coupled with the growing 'buy local' concept, popularized as a reaction to the Great Recession, elicits a strong positive reaction from consumers about knowing where their food comes from as well as purchasing their food from people they know and trust.

Project Approach

The twenty-week project started with the project manager reconnecting with the restaurant feasibility participants in early summer. Ten restaurants were chosen by level of interest, Nevada grown specialty crop dollars spent through DROPP as well as by proximity (four restaurants shared an open space called West St Market). Participants were then asked what type of specialty crop produce item and/or farmer they were interested in pairing with out of the twenty viable farmer films provided. Some of the connections were already there, and it was a matter of promoting the relationship, but some were new and forged with the creation of the project. A few phone calls, quite a few emails, and subsequent meetings, and we were able to successfully pair ten restaurants with ten different farmers' produce (or honey) items! Once a general idea of these pairings was made, group emails were used to confirm which restaurant was going to be connected with which farmer.

Participating connections of farmers and restaurants:

- Al's Bees Sierra Nevada Honey @ Coffeebar
- Dayton Valley Aquaponics @ Homegrown Gastropub
- Hidden Valley Honey @Icecycle Creamery
- Holley Family Farms @ Chez Louie
- Jacobs Family Berry Farm @ The Union
- Lattin Farms @ The Pizza Collective
- Mewaldts Organics @ The Cheese Board
- New Harvest Farm @ Liberty Food and Wine Exchange
- River School Farm @ Thali
- Tahoe Living Greens @The Deluxe

Then in mid-summer, NEON's project manager and creative director worked with NEON's graphic designer to create the brand for the campaign. The logo created during the initial project was used with the same font, but we found a fitting master background image of a phone in a restaurant. This visual was used as the backdrop for the campaign.

We then created ten different placards to have at each restaurant along with an accompanying website, advertisements for Edible Reno-Tahoe and This Is Reno, as well as posters to hang around town at popular shops and the participating restaurants.

Simultaneously NEON's social media manager created the Instagram account with strategic yet

aesthetically curated content. Unique farmer hashtags were utilized on the @MeetYourFarmerNevada page:

#meetAlBeesSierraNevadaHoney
#meetRiverSchoolFarm
#meetLattinFarms
#meetJacobsFamilyBerryFarm
#meetNewHarvestFarm
#meetMewaldtsOrganics
#meetHolleyFamilyFarms
#meetDaytonValleyAquaponics
#meetHiddenValleyHoney
#meetTahoeLivingGreens

In early September all the table tents were placed at each restaurant and a launch night took place in mid-September to offer press and public ability to literally meet their farmer and shout about the restaurants who support these producers.

We also created a full press and social media campaign for the full month of September. We targeted local media outlets with a press release as well as ran ads on both Facebook and Instagram in addition to the organic social media work of posting all the videos and managing comments and liking other like-minded organizations to create a strong following. Stories highlighting the farmers as well as recipes of each farmer were created and shared as well via ‘stories’ on Instagram. We also connected with the farmers and restaurants who are active on Instagram to make sure they promoted the project through their social media platforms as well.

The project wrapped up at the end of September with three of the ten places interested in promoting the project year-round (since they use specialty crop items that are available year-round). More permanent displaying options were figured out at each location and more fliers were printed for the establishments to post year-round. Two additional restaurants (the local Co-op’s Foodshed Cafe and CAMPO) wanted to join in on the project with The Foodshed being able to affordably join with already created flyers put up in store. The project will also be shared with their substantial newsletters and social contacts.

All the Meet Your Farmer advertising and social media posts focused solely on a specific specialty crop items and the farmers who grew them so when we or any restaurants (who obviously have non specialty crop food on their menus) promoted the project, it talked about the farmer videos and sent folks directly to the @MeetYourFarmerNevada project on Instagram as to avoid any attention and energy going to non-specialty crop items. We did reshoot one of the videos that is an aquaponic facility so set up a cost sharing with the grant funds as to address the aspect of the farm that is not

specialty crop based.

Please see Goals and Outcomes Achieved for significant results. For accomplishments, conclusions and recommendations please see Lessons Learned.

Goals and Outcomes Achieved

Below are the four expected outcomes of our goals and their respective measurements:

1. Our first expected goal was to implement a digital application connecting consumers to their Northern Nevada Grown Specialty Crop Producers through restaurants or catering services. Our measurement was to directly connect at least 6 food purveyors with at least 6 different SC producer films.

We overachieved in this metric with being able to connect ten different farmers with ten different restaurants. One minor caveat is that four of the ten locations share a communal eating area hence the idea to be able to overachieve and do ten places instead of six. We also used Instagram as our digital application since it is the fastest growing social media app, connects consumers from all over the world, and has over 800 million users.

2. Our next goal was to increase appreciation of SC producers and their products. Our measurement tool was to use a survey to ask 100 video viewers if the films increased their appreciation of SC producers and their products.

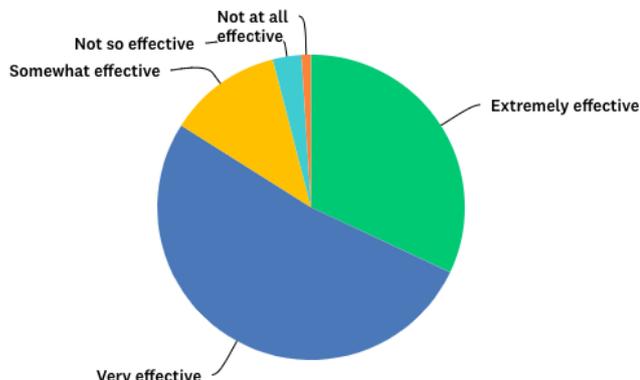
As you can see in the following survey results, the project was effective in increasing folks' appreciation of Nevada grown specialty crop producers and their products with 84% of people saying it was either 'very' or 'extremely effective' and 96% if 'somewhat effective' was included.

Q1

Customize Save As

Were the videos effective in increasing your appreciation for Nevada grown produce items or honey?

Answered: 100 Skipped: 0



ANSWER CHOICES	RESPONSES
Extremely effective	32.00% 32
Very effective	52.00% 52
Somewhat effective	12.00% 12
Not so effective	3.00% 3
Not at all effective	1.00% 1

We also created an open-ended section so those willing could enter more detailed thoughts and comments:

Q2

Save As

How did viewing the Meet Your Farmer Nevada videos affect you?

I knew so many of the farmers!

11/7/2018 10:49 AM [Add tags –View respondent's answers](#)
It increased my interest in the concept of Meet Your Farmer

11/7/2018 10:20 AM [Add tags –View respondent's answers](#)
I enjoyed hearing directly from the farmer about their farming

11/7/2018 8:40 AM [Add tags –View respondent's answers](#)
They made me more interested in the farmers in my area. I liked hearing their stories

11/7/2018 8:13 AM [Add tags –View respondent's answers](#)
Made my heart happy

11/7/2018 7:57 AM [Add tags –View respondent's answers](#)
I already had a fairly strong appreciation for Nevada-grown produce (through hands-on "behind the scenes" work), which is why I rated the videos as "somewhat effective"

11/7/2018 7:40 AM [Add tags –View respondent's answers](#)
Having a face and name make the local farmer seem more real

11/6/2018 9:51 PM [Add tags –View respondent's answers](#)

They were fun and made me excited and happy to meet the farmers growing the food

11/6/2018 8:31 PM [Add tags –View respondent's answers](#)

Made me want to buy more of my food from these farmers.

11/6/2018 8:19 PM [Add tags –View respondent's answers](#)

I know what farmers have to go through to produce our food. I love the videos

11/5/2018 6:39 PM [Add tags –View respondent's answers](#)

Pride

11/5/2018 5:17 PM [Add tags –View respondent's answers](#)

Made me think more about what is behind the food system, and made me feel closer to the food.

11/5/2018 5:05 PM [Add tags –View respondent's answers](#)

It mainly exposed me to farmers and farms that I didn't know existed in Nevada!

11/5/2018 5:01 PM [Add tags –View respondent's answers](#)

I loved seeing the names of the farms and the people running them. The farms all look great in the videos.

11/2/2018 9:24 PM [Add tags –View respondent's answers](#)

Fun to put a face to the food I buy

11/2/2018 8:34 PM [Add tags –View respondent's answers](#)

Positively - it makes me want to buy more local food and support restaurants who support local farmers.

10/22/2018 2:08 PM [Add tags –View respondent's answers](#)

It reminded me how hard it is to farm and the importance of the work our farmers are doing.

10/19/2018 10:59 AM [Add tags –View respondent's answers](#)

It was informative and cool

10/17/2018 11:37 AM [Add tags –View respondent's answers](#)

Inspired me to want to know more

10/16/2018 5:48 PM [Add tags –View respondent's answers](#)

It annoys me. It's a great idea in principle; however, as a fifth-generation Nevadan from an agricultural family, my people are not well represented. You've chosen some farmers who cater to the wealthy, liberal hipster crowd who eat at restaurants the rest of us can't afford and do not identify with. How about including more regular farmers, and including ranchers as well to talk about where our beef comes from? I could get behind that.

10/12/2018 10:21 PM [Add tags –View respondent's answers](#)

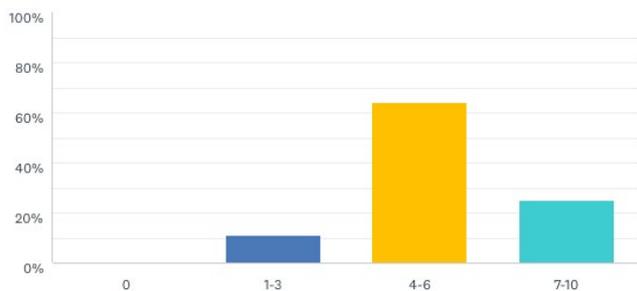
I want to meet them! Help them

Q4

Customize Save As

Out of the ten videos, how many did you watch?

Answered: 100 Skipped: 0



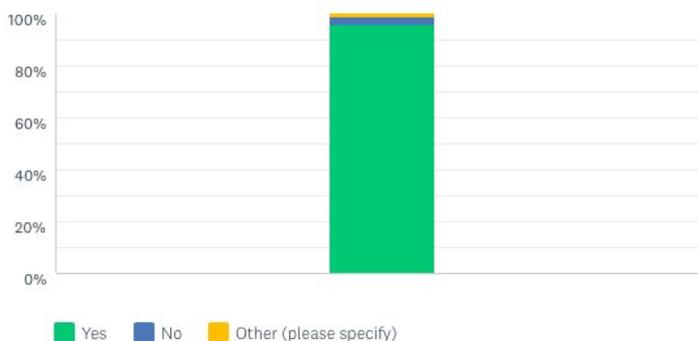
ANSWER CHOICES	RESPONSES	
0	0.00%	0
1-3	11.00%	11
4-6	64.00%	64
7-10	25.00%	25
TOTAL		100

Q5

Customize Save As

Would you like to see the Meet Your Farmer project grow?

Answered: 99 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	95.96%	95
No	3.03%	3
Other (please specify)	Responses 1.01%	1
TOTAL		99

Q6

Save As ▼

Is there anything else you'd like to add?

Thank you!

11/8/2018 11:19 AM [Add tags –View respondent's answers](#)

I think it's great knowing where your food comes from, and outreach with the youth would be a helpful component of teaching that. It's a lost art or necessity shall I say that is undervalued and overlooked. Reach out to wcsd or other schools to do guest speaking or demonstrations to show how food is grown. Thanks.

11/7/2018 9:00 PM [Add tags –View respondent's answers](#)

Local fiber

11/7/2018 10:49 AM [Add tags –View respondent's answers](#)

Nope, thank you!

11/7/2018 10:20 AM [Add tags –View respondent's answers](#)

I try to avoid using my phone when going out to eat. At West Street Market I have seen the little "table tents" with information about the app. Maybe those could have more information about the farmers themselves with directions to check out the others and the app. I realize space is limited. But my opinion is I prefer printed materials over IG at restaurants.

11/7/2018 8:13 AM [Add tags –View respondent's answers](#)

Appreciate all who are growing local food for our area

11/7/2018 7:57 AM [Add tags –View respondent's answers](#)

In general, I am skeptical of the authenticity of what people say on videos on social media (even farmers, haha), and spontaneous, unscripted in-person interactions are much more impactful to me.

11/7/2018 7:40 AM [Add tags –View respondent's answers](#)

no

11/6/2018 9:51 PM [Add tags –View respondent's answers](#)

Great work! Loved this project!

11/6/2018 8:31 PM [Add tags –View respondent's answers](#)

Good job!

11/6/2018 8:19 PM [Add tags –View respondent's answers](#)

Nothing right now.

11/5/2018 6:39 PM [Add tags –View respondent's answers](#)

It's a wonderful way to see the farms where things actually happen! Great work

11/5/2018 5:17 PM [Add tags –View respondent's answers](#)

This is a wonderful project!

11/5/2018 5:05 PM [Add tags –View respondent's answers](#)

Love this project and I'd love to see the focus on local business/farms/creatives grow

11/5/2018 5:01 PM [Add tags –View respondent's answers](#)

I definitely see myself becoming more involved in getting to know more farmers!

11/2/2018 9:24 PM [Add tags –View respondent's answers](#)

No

11/2/2018 8:34 PM

3. Our third goal was to increase sales of SC producers and their products. Our measurement tool was to liaise with food establishment to formulate comparative analysis of sales of SC crop dishes without the video to sales of the dishes once the video goes live and was implemented in -store.

This goal was much trickier to quantify because we set up the project to be looser than the original concept of having each restaurant create a specific specialty crop-based dish. We found that all but one of the restaurants preferred to purchase the specialty crop item from the farmer but not have to create a specific dish with it because of the cost prohibitive amounts involved in changing their menus, reprinting them, etc.

Having said that, DeLuxe Cafe has a seasonal dish that changes each week, so they highlighted Tahoe Living Greens sprouts on each of the highlighted dish for the entire month via a little sign at their register. Icecycle Creamery has created two specialty ice creams for the month of September with Hidden Valley Honey and labelled the choices 'Meet Your Farmer.' And Pizza Collective created a bespoke appetizer with Lattin Farm's shishito peppers since they have a chalkboard menu that was easily updated. The Cheeseboard was the only restaurant who did print new menus with a dish that had beautiful, heirloom tomatoes from Mewaldt's Organics. See photos below in the additional information section.

Since most of the restaurants choose to incorporate the ingredient into already occurring menu items, we surveyed the farmers to see if what their specialty crop sales increases were to the participating restaurants. We tallied all the farmers together (two of them did not respond to our survey- after multiple attempts- so those numbers are unknown) and found that \$2,500 was the sales increase in September alone. Two nuances that the aggregated dollar amounts don't tell is that two of the farmers we connected to two of the restaurants were new relationships. Both have year-round production and both restaurants are going to continue ordering from each farmer. One is Hidden Valley Honey through Icecycle Creamery, which albeit was only ~\$50 a month, but this adds up if used throughout the year. The other was Tahoe Living Greens through The DeLuxe. This too was roughly \$20-30 a week but The DeLuxe will order year-round so that's an impactful new customer for the farmer because of the project! We also asked if there were any subsequent sales (basically for October since this report was due mid-November) because of the project and found that \$3750 was the additional sales increase in October. We found that the number increased because one of the restaurants purchased three times the amount in early October than they did in September. We specifically asked if the sales increases were because of the Meet Your Farmer Project and the farmer answered 'Yes' so this is a wonderful outcome of the project. Every restaurant and farmer who responded to the survey said they would want to see the project grow (as well as 96% of the surveyed respondents) and possibly become part of an annual

celebration of Specialty Crops so we thought that using the above information to track increases in sales year by year could be baseline data that could be incorporated into an annual celebration of specialty crops that NEON is looking to foster, coined *Growing NV*.

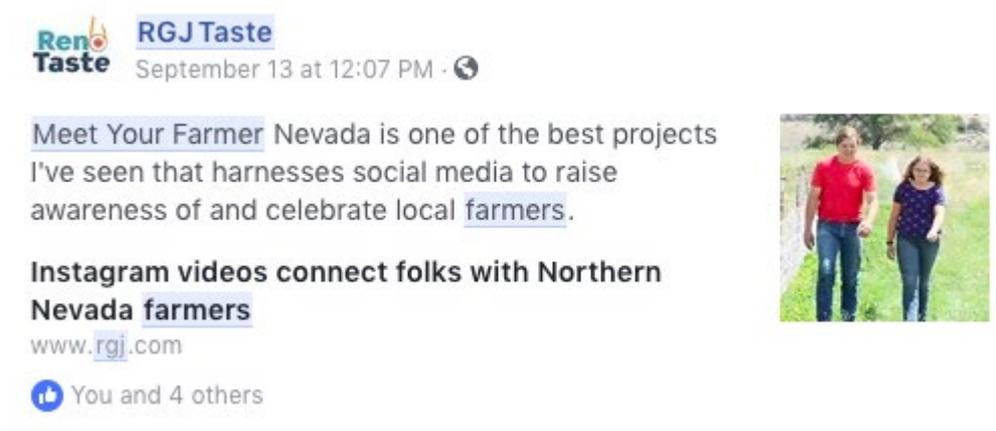
4. The fourth and final goal was to complete a press and marketing campaign with successful in store Meet Your Farmer Pilot Launch. See below for our relevant measurements:

Media outlets who actively promoted the Meet Your Farmer Project:

Reno Gazette Journal:

<https://www.google.com/amp/s/amp.rgj.com/amp/1291717002>

My favorite press coverage was the Facebook post that RGJ's Food and Beverage editor posted:



Fox News:

<https://foxreno.com/news/mornings-on-fox-11/meet-your-farmer>

KTVN News:

<http://www.ktvn.com/clip/14623166/meet-your-farmer>

Edible Reno Tahoe Magazine:

<http://www.ediblerenotahoe.com/blog/2108-farm-restaurant-partners>

West Street Market Blog:

<http://weststreetmarketreno.com/meet-your-farmer-takes-restaurant-goers-from-the-table-to-the-farm/>

This Is Reno Sponsored Post: <https://thisisreno.com/2018/10/meet-your-northern-nevada-farmer-with-your-phone/>

We originally wrote in the grant to quantify numbers of e-newsletter readers and Meet Your Farmer website links but since the campaign garnered so much social media support, we would be amiss if we didn't include this data:

Farmer	Views	# of people who read post	# of interactions with posts
Al Bees	404	1326	142
River School	472	1007	149
Lattin Farms	624	1264	132
Jacobs Farm	469	1269	130
Dayton Valley Aquaponics	439	1241	113
New Harvest Farm	631	1115	100
Mewaldt	423	1136	129
Holley Family Farm	495	1315	143
Hidden Valley Honey	930	1405	125
Tahoe Living Greens	319	1438	157
TOTAL	5206	12516	1320
Total Followers as of 11/09/18	564		
Selection of Comments			
We love local honey!			
We use honey for so many things! Coughs and sore throats and baking!			
I always enjoy my morning tea with a spot of your delicious honey.			
Harvesting carrots is harder than it looks!			
These videos are great to watch, informative, interesting, and well put together! Thanks!			
We love our backyard garden too! She is an inspiration!			
Tilapia is a fertilizer??? (DVA)			
I know my entire family loves berries!			
So, so, so sweet! What a treat.			
I made THE best raspberry jam this year with their berries!! So delicious!!			
We are in love with these beautiful peppers from @lattinfarms - we roast them in the wood fired oven and sprinkle sumac and sea salt on			

them.....simple and perfect!
Love, love, love shishitos!
Appreciate the work you put into your page.
Rick Lattin and the team at Lattin farms rock!! They produce some of the best. We love their melons and can't wait for squash season at #campo
Love those melons
How awesome it is that Reno honors the importance of real food in our communities.
Leafy greens!
Charlie rules! (Al Bees)

Attendance of people at the launch event including media partners and farmers.

Reno Food Systems, a local nonprofit, Facebook page was used to host the videos as well as to create an event for the launch night. Nevada Grown helped promote the project on their Facebook page as well. We also emailed like-minded organizations like Urban Roots and Great Basin Community Food Co-op to have them help spread the word. Around 80 people made it to the launch event, two press partners came, nine of the restaurants participated and seven of the farmers made it. Through Facebook promotion alone 7,800 were reached with various posts and shares.

Beneficiaries

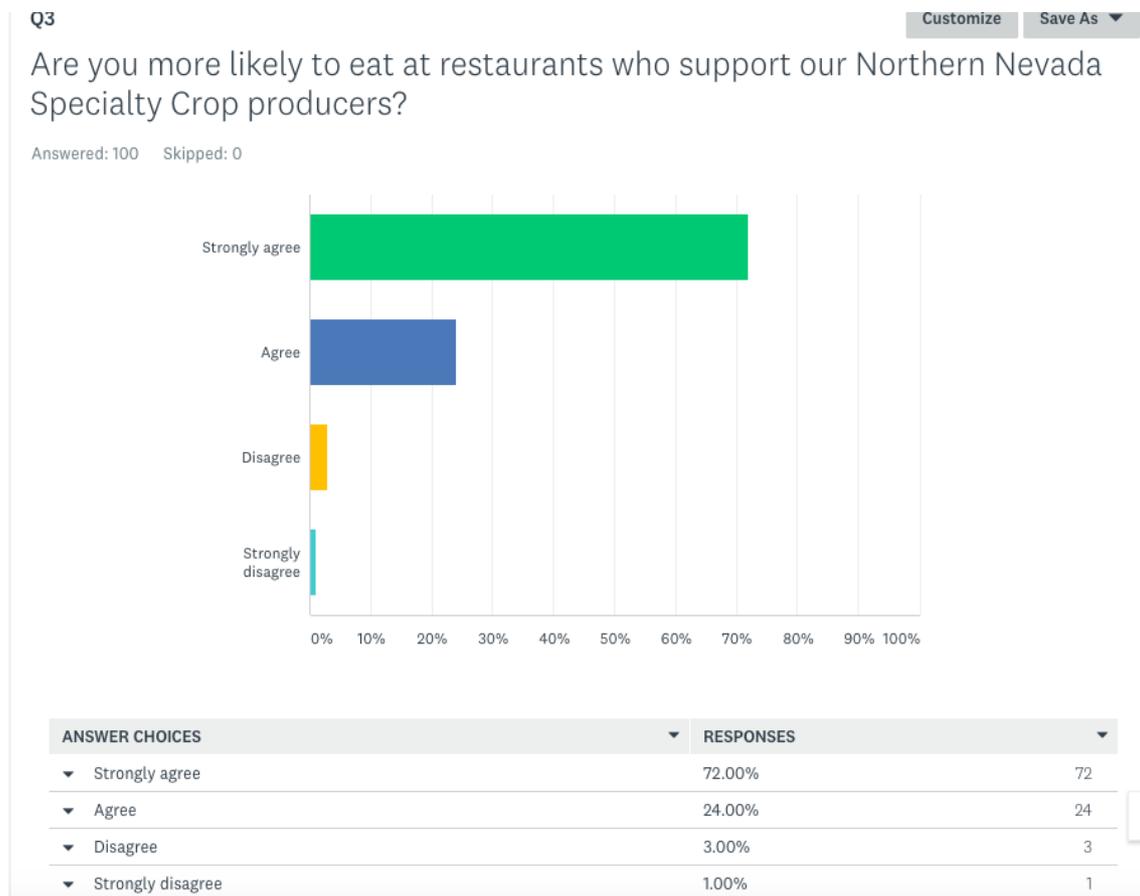
The ten local farms and the ten local restaurants who committed to buying from them were the top beneficiaries but so were the over 5,200 of people who watched the videos and the over 12,500 people who read the posts. Lastly the local food community who came out for the launch all benefited from the project by finding another reason to get together and support our hard-working farmers as well as the restaurants who are supporting them.

- [Al's Bees Sierra Nevada Honey @ Coffeebar](#)
- [Dayton Valley Aquaponics @ Homegrown Gastropub](#)
- [Hidden Valley Honey @Icecycle Creamery](#)
- [Holley Family Farms @ Chez Louie](#)
- [Jacobs Family Berry Farm @ The Union](#)
- [Lattin Farms @ The Pizza Collective](#)
- [Mewaldts Organics @ The Cheese Board](#)
- [New Harvest Farm @ Liberty Food and Wine Exchange](#)
- [River School Farm @ Thali](#)
- [Tahoe Living Greens @The Deluxe](#)

Lessons Learned

The biggest takeaway was the data gleaned in helping increase the appreciation of specialty crops and their producers. The digital nature of the campaign plus the professional curated content looked very sharp and ahead of the curve for a project of its size. We knew videos were becoming popular on Instagram, hence why we chose to use as the main place for implementation, but we were impressed by the viewing numbers and the subsequent survey responses. One unexpected outcome was that the project was more successful online then in the restaurants. The project manager thought that people would view the videos in situ, but we found that Instagram’s profiling tools were much more impactful in getting more followers to the project page.

Because of this, the project almost felt a bit divided in that it was a very successful social media campaign but perhaps could have more of a quantifiable impact on both the farmers and restaurants. More specifically to above point, there needed to be some sort of quantifiable way to measure social media impact in people knowing about and/or going to the restaurants. We had a general question in the survey about if it positively impacted people wanting to go to the participating restaurants with 96% Agreeing or Strongly Agreeing that it would encourage them to do so; but from the restaurants feedback in their survey, think we needed to be more concrete with a coupon or code that Instagram users could have mentioned to the restaurants for a discount or percentage off their meal.



And in relation to quantifying financial impact for restaurants, we should have had flyers with information about the project and a percentage off at participating restaurants that farmers could have handed out at farmers markets etc. This idea would have also helped track the project's promotional impact to both the restaurants and farmers.

But perhaps it was unrealistic to think that the first year's efforts would result in significantly higher financial yields since the average consumer needs to see something at least three times before giving it a second thought!?

Another lesson learned was in relation to the launch. We decided to do both a press and public launch; but we probably should have just done a press launch and paid for dinner and beer for the farmers and restaurants to network at the same time. We could have screened the film and introduced each restaurant and farmer, so everyone had faces to the names. It was a lot of energy (news interviews pointed being to the launch instead of maybe focusing on the overall idea of the campaign) trying to get the public down and think this energy could have been devoted to incentivizing folks to interact with the project in the restaurants throughout the entire month and not just for one night. The project manager had the idea that it could have looked almost like a book signing by having individual events at each restaurant with the farmer and the program manager having lunch but enabling folks to come and literally meet the farmer who grew the squash in the ratatouille they just ate. Reason being this intimate setting might have led to a better connection between interested consumer and vested farmer. This idea also might have helped create more concrete opportunities to track specific project generated sales since we could quantify amounts from each event and compare to similar days. The main restaurant benefactors were the four at West Street Market because of the launch being held there.

And a simple but short lesson learned was we should have had the survey live at the beginning of the project. We created it at the end of the project, which in hindsight didn't provide a timely opportunity for folks interested in the project to give feedback right away.

Contact Person

Jolene Cook

775-771-2580

jolene@thinkinneon.com

Additional Information

Table Tents



MEET YOUR FARMER
In this restaurant!

Find out where your food comes from by using your phone.

Creative agency **NEON**, in partnership with Nevada Department of Ag, extends the first-of-its-kind **MEET YOUR FARMER** project to THIS local eatery.

MeetYourFarmerNevada.com



MEET YOUR FARMER
In this restaurant!

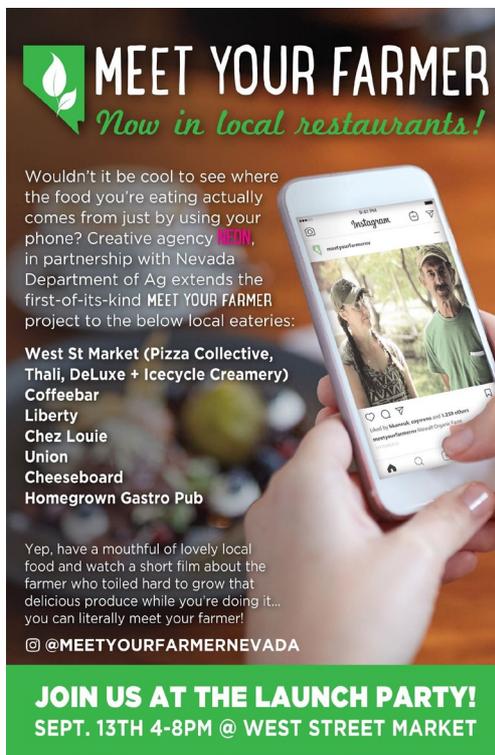
All the **HONEY** - all year round- used at Coffeabar is locals' favorites Al's Bees!

Search #MeetAlsBeesSierraNevadaHoney on Instagram to watch the video and **MEET YOUR FARMER!**

Support your Local Farmer

Post a photo of your dish with Honey and tag **@MeetYourFarmerNevada**

Poster



MEET YOUR FARMER
Now in local restaurants!

Wouldn't it be cool to see where the food you're eating actually comes from just by using your phone? Creative agency **NEON**, in partnership with Nevada Department of Ag extends the first-of-its-kind **MEET YOUR FARMER** project to the below local eateries:

West St Market (Pizza Collective, Thai, DeLuxe + Icecycle Creamery)
Coffeabar
Liberty
Chez Louie
Union
Cheeseboard
Homegrown Gastro Pub

Yep, have a mouthful of lovely local food and watch a short film about the farmer who toiled hard to grow that delicious produce while you're doing it... you can literally meet your farmer!

@MEETYOURFARMERNEVADA

JOIN US AT THE LAUNCH PARTY!
SEPT. 13TH 4-8PM @ WEST STREET MARKET



Check out @MeetYourFarmerNevada on Instagram to learn more about some of our Northern Nevada based farmers.

Support your Local Farmer

Post a photo of your dish from the Co-op and tag **@MeetYourFarmerNevada**

Instagram Account:

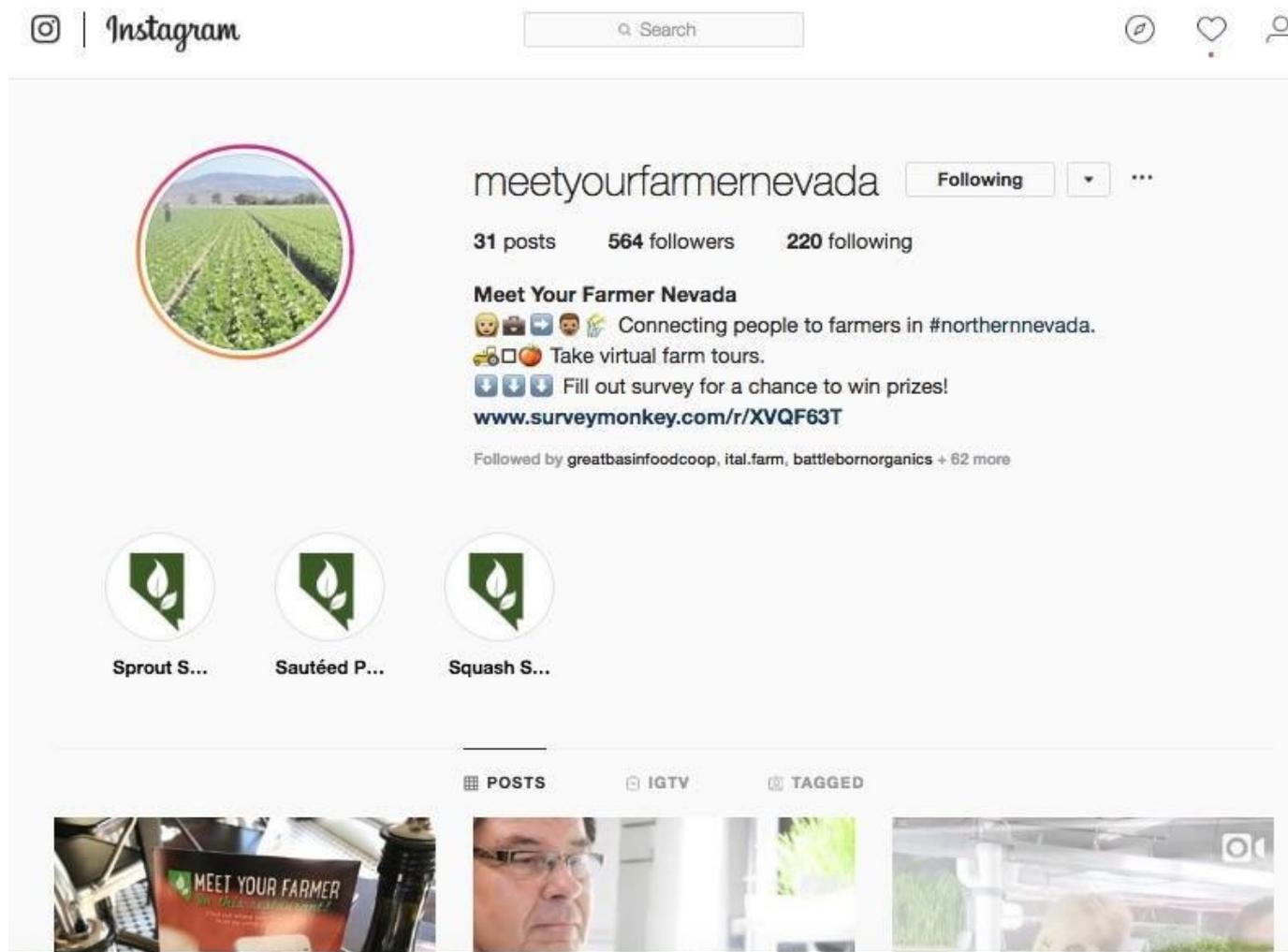
405 South 21st St.
Sparks, NV 89431

2300 East St. Louis Ave.
Las Vegas, NV 89104

4780 East Idaho St.
Elko, NV 89801

<https://www.instagram.com/meetyourfarmernevada/>

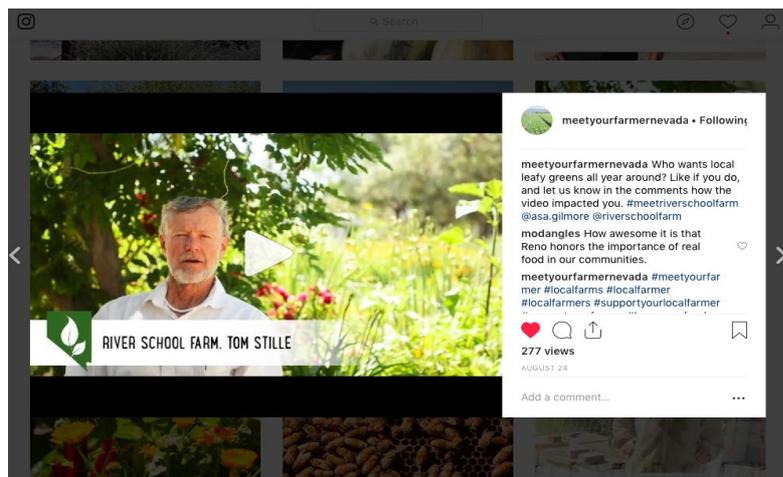
Instagram Home Page:



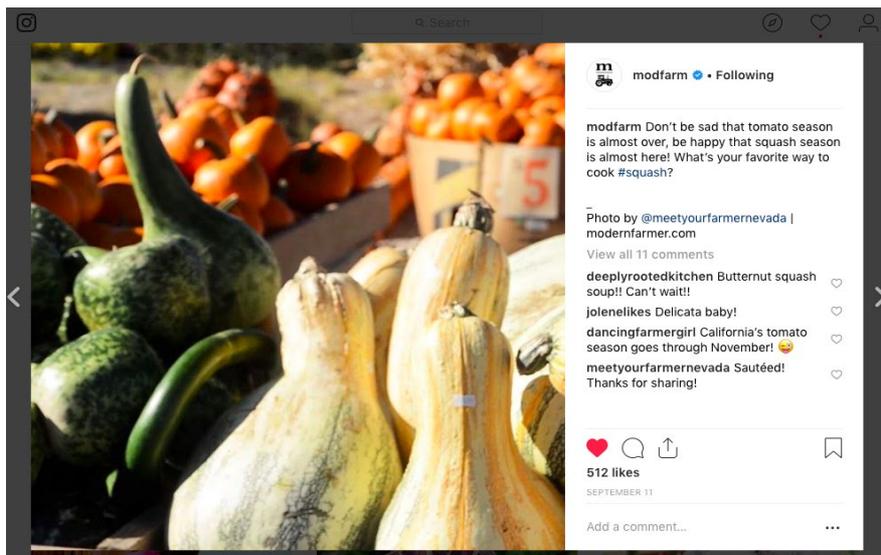
An example of one of the opportunities for education at the launch:



An example of one of the many lovely comments we received from our engaged audience:



A repost from #ModFam (has 124,000 followers):



An example of Coffeebar posting about the project (has 24,500 followers):



Facebook Event Page:

<https://www.facebook.com/events/289456918451803/>

Website:

<https://www.meetyourfarmernevada.com/>

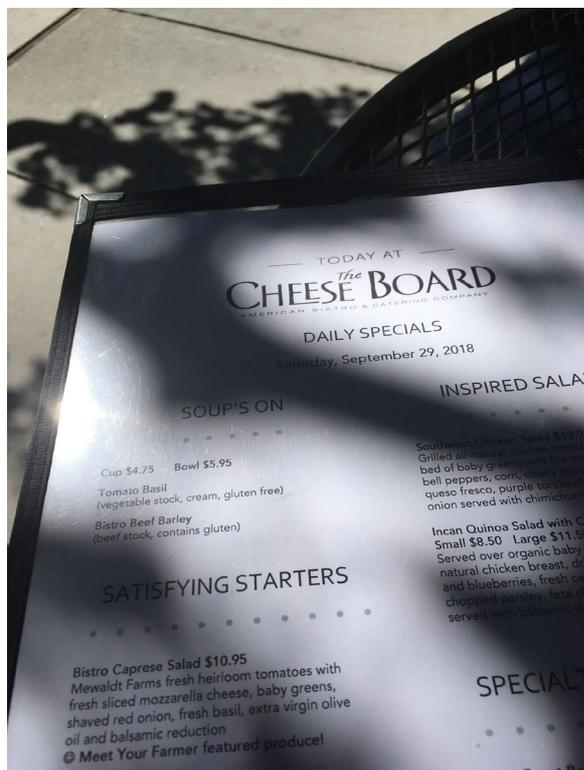
Nevada Department of Agriculture Youtube Channel:

<https://www.youtube.com/watch?v=W4PCEpme0Eg&list=PLGdlCTs4dQTeOBKOVEAY6yg2kDlKMYfWe>

Examples of table tents at The Cheeseboard along with the amazing Bistro Caprese Salad, it was soo delicious!:



Example of The Cheeseboard’s incorporation of the project on their menu:



FINAL PERFORMANCE REPORT

Point of Contact: NDA - Ashley Jeppson

Program Name: NevadaGrown

Project Title: NevadaGrown Website Upgrade and Expansion

Project Lead: Ann Louhela

Address: 3420 4th Street

Sparks, NV 89431

Phone: (775) 250-1339

Email: louhela.ann@gmail.com

Project Summary

Did the grantee provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project?

Did the grantee establish the motivation for this project by presenting the importance and timeliness of the project?

If the project built on a previously funded project with the SCBGP or SCBGP-FB, did the grantee describe how this project complimented and enhanced previously completed work?

The purpose of this project was to upgrade and expand the outdated NevadaGrown website to meet the needs of its users, including Nevada's Hispanic population. The website is one of the most comprehensive in the state and is used extensively by businesses and consumers to access information on specialty crop producers, CSAs, farmers markets, retailers and other sales outlets for specialty crops.

The six-year-old website was outdated and not mobile compatible. Website views had decreased in past years while NevadaGrown social media presence had expanded. The decrease in website views was attributed to the increase in the use of mobile devices, including cell phones for internet access.

With this grant award, NevadaGrown developed a mobile-friendly website and updated information on farms and retailers to ensure that information on the new site would be accurate. Additionally, the site was expanded to include Spanish translation capabilities as 25 percent of Nevada's population is of Hispanic descent. The purpose of this expansion was to increase knowledge, access and consumption to the underserved Hispanic populations in Nevada.

This project built upon a 2010 SCBGP award that was used to build the previous website. The previous website was built to include a searchable database and be more user-friendly. While keeping these features, this project enhanced the previous project by developing a mobile-friendly, bilingual website that would reach and be used by more consumers.

Project Approach

- Were the activities and tasks performed during the entire grant period briefly summarized? This section should discuss the tasks provided in the Work Plan or the approved project proposal. This includes significant results, accomplishments, conclusions and recommendations, as well as favorable or unusual developments.
- If the overall scope of the project benefitted commodities other than specialty crops, did the grantee indicate how project staff ensured that funds were used to solely enhance the competitiveness of specialty crops?
- Did the grantee detail the significant contributions and role of project partners in the project?

This project had two objectives: 1) Increase access and consumption of specialty crops to consumers and increase sales of specialty crops by upgrading and expanding the NevadaGrown website and 2) Increase sales of specialty crops by promoting the upgraded, expanded website to consumers and businesses. The activities and tasks performed to meet these objectives are listed below.

Activities

- A new website was designed and launched in the spring of 2018 that is both mobile-friendly and bilingual. Information on farms and retailers was updated to make sure that the website was accurate.
- A bilingual consultant/coordinator was commissioned to help translate and promote the bilingual capabilities of the website through print and social media.

Significant results including accomplishments and challenges

- Website development encountered challenges, and it launched six months later than anticipated, March 2018 instead of September 2017. This delay in turn delayed other scheduled tasks of the project. The delay was attributed to a few factors: a later award date than originally anticipated, non-availability of the contracted web designer for short periods due to other commitments, and computer anomalies in uploading information from the old website to the new site due to non-compatibility of old and new technologies. Only three months had been allotted in the original work plan to launch the new website. In retrospect, four to six months should have been allotted, and this is the time allotment that many web designers suggest. While there were delays, all objectives were met.
- Challenges and delays were encountered in securing a bilingual coordinator for the project, a search that began during the proposal process. Through the course of several months, it was discovered that many people were proficient in verbal bilingual translation, but that there are far fewer people proficient in written bilingual translation. These qualified people were often not available to take on extra projects. After much searching, NevadaGrown partnered with two young professionals proficient with these skills and who are interested in future projects.
- Small inroads were accomplished in outreach to Nevada's Hispanic community. A Hispanic restaurant was recruited for the website; a new relationship was developed with a Hispanic media company; the website was updated to include bilingual capabilities; and through print and social

media, more of the Hispanic community became aware of Nevada specialty crops and how to access them.

Contributions of Project Partners

Key project partners were the website designer and bilingual consultant. During project delays, both partners worked diligently to ensure that project goals were achieved. The website designer worked to design and launch the site as quickly as possible while ensuring its accuracy and workability. Two bilingual consultants were brought on board, and both will be excellent resources for future projects. They are actively engaged with the Hispanic community, and both work in the nonprofit and media sectors, and they will be an asset for future projects.

Recommendations

The biggest challenge of this project was outreach to the Hispanic community due to language barriers and cultural differences. It is recommended that outreach should be addressed in future projects on many levels. Most Nevada specialty crop farms are owned and managed by English-speaking Caucasians, and the types of specialty crops grown reflect this ownership. More than 25 percent of Nevada's population is Hispanic, and there are cultural differences in crop preferences. In addition to overcoming language barriers, Nevada farms need to diversify crop varieties for its ethnically-diversified population to increase access and sales of specialty crops.

Funds Used Solely for Enhancement of Specialty Crops

Some listings on the website are not for specialty crops, and this was addressed in the grant proposal and during the project. It was estimated that approximately 20 percent of the website was non-specialty crop products or producers. WNC adjusted its invoices for reimbursements accordingly for all work that was not solely specialty crops by requesting an 80 percent reimbursement with NevadaGrown paying the remaining 20 percent to contractors.

Goals and Outcomes Achieved

- Did the grantee supply the activities that were completed to achieve the performance goals and measurable outcomes identified in the approved project proposal or subsequent amendments?
- If outcome measures were long term, was a summary of the progress made towards this achievement provided?
- Did the grantee provide a comparison of actual accomplishments with the goals established for the reporting period?
- Did the grantee clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets?
- Did the grantee highlight the major successful outcomes of the project in quantifiable terms?

All activities were completed to achieve the goals and measurable outcomes listed below.

Goal Outcome 1: Sales increased from \$345,620 to \$362,900 and by five percent in one year, as result of marketing and/or promotion activities

The outcome of 6.5 percent increased sales exceeded the proposed goal of five percent in one year. It was impossible to establish an accurate baseline of sales since producer sales are unknown, so a reasonable, conservative hypothetical baseline was established on the following:

Of the 34,562 unique users on the website in 2016, it was estimated that 10 percent spent \$100 annually on specialty crops. 3456 website user/consumers spent \$100 for a total of \$345,620. Website use was anticipated to increase a minimum of five percent annually, and by 2018, 36,290 users would access the website annually. Ten percent of these users (3629 users) would spend \$100 annually for a total of \$362,900. This would be an increase of \$17,280 in one year.

Google Analytics showed the website had 36,518 users in 2018, an increase of almost seven percent. The number of website users in 2017 was 34,231, a decrease from 2016. This number is in line with the hypothesis of the original grant proposal that website views were decreasing due to its lack of mobile viewing. The increase from 2016 to 2018 was 6.5 percent, higher than the anticipated five percent increase. Sales calculation – Ten percent of 36,518 users spending \$100 is \$365,100 an increase of \$19,500 and 6.4 percent, exceeding the five percent increase expectation

Goal Outcome 2, Indicator 2. a. Of 36,290 of adults reached, 29,032 gained knowledge about eating more specialty crops in one year. This estimate is because 80 percent of the products on the site are specialty crops, and users will access this information. It can be reasonably assumed that most all website users are adults.

This goal was exceeded by 182 adults. The total number of adults reached was 36,518 which is more than the original estimate of 36,290. Of the 36,518 adults reached, 80 percent or 29,214 gained knowledge about eating more specialty crops in one year, 182 adults more than originally estimated.

Outcome 3, Indicator 1.a. Of the 36,290 consumers reached, 29,032 gained knowledge on how to access/produce/prepare/preserve specialty crops. This estimate is because 80 percent of the products on the site are specialty crops, and users will access this information.

This goal was exceeded by 182 adults. The total number of adults reached was 36,518, more than the original estimate of 36,290. Of the 36,518 adults reached, 80 percent or 29,214 gained knowledge about how to access/produce/prepare/preserve specialty crops in one year, 182 adults more than originally estimated.

Beneficiaries

- Did the grantee provide a description of the groups and other operations that benefited from the completion of this project's accomplishments?
- Did the grantee clearly state the number of beneficiaries affected by the project's accomplishments and/or the potential economic impact of the project?

Estimate the number of project beneficiaries: 40,010

This goal was achieved, but it is noted that the proposed number of 40,010 is the goal to be reached by 2020, not 2018, the end of this grant award. The number of beneficiaries was figured based on 34,562 website users in 2016 with a conservative estimate of a five percent increase per year after the website is upgraded. By the end of 2020, the projected users will be 40,010 per year. The goal for 2018 was achieved with a website increase of 6.5 percent which is higher than the proposed goal

of five percent. At this rate, the 2020 goal will be achieved. The reason for the 2020 goal is that this award was originally a three-year proposal, and then it was changed to 15 months. While other outcomes were updated with the shorter time, the project beneficiaries update was overlooked.

The project beneficiaries were specialty crop growers, consumers, retailers, restaurants and distributors that access the website. Producers benefited through estimated increased sales of \$19,500 in the first year, which will continue to increase. Consumers benefited through increased knowledge, access and consumption of specialty crops. Retailers, restaurants and distributors benefited through increased access to specialty crops, and increased sales and recognition for businesses that sell or use specialty crops.

Describe how the project will impact growers/industry stakeholders and enhance the competitiveness of specialty crops.

The project has and will continue to enhance the competitiveness of specialty crops and impact growers through increased specialty crop sales. The number of website users will continue to increase the number of customers, provide more visibility and opportunity for producers to promote their specialty crops, and increase sales for producers. Consumer stakeholders will be impacted by increased knowledge, access and consumption of specialty crops. While in its infancy, the expansion to Hispanic language translations will enhance the competitiveness of specialty crops by introducing Nevada’s underserved Hispanic population to a vast library of information on Nevada’s specialty crop producers and how they can access these crops.

Lessons Learned

- Did the grantee offer insight into the lessons learned by the project staff because of completing this project?
- Did the grantee provide any unexpected outcomes or results that were an effect of implementing this project?
- If goals or outcome measures were not achieved, did the grantee identify and share the lessons learned to help others

All the outcome measures were achieved, and this grant provided significant lessons to project staff in areas that they were not familiar with on a day-to-day work basis: website development and outreach to Nevada’s Hispanic community. Project staff underestimated the length of time and challenges to be encountered to accomplish these goals.

- Website development – The original estimate of three months to develop the new website was unrealistic due to the complexity of this website, mainly its search engines for products, farms and locations. This complexity and will be noted in future website enhancements, allowing more time to accomplish tasks.
- Hispanic outreach – While Nevada’s population is estimated to be 25 percent Hispanic, Nevada’s agricultural community including farm ownership and project staff is mainly homogenously Caucasian. This project was a first step in bridging the gap to include more ethnic diversity in Nevada agriculture. Language differences were the main challenge, and project staff will explore future projects to continue expansion and integration into Hispanic and other ethnic communities including working with other organizations to develop more ethnic farmers and more diverse specialty crops.

Nevada Department of Agriculture

Point of Contact: Ashley Jeppson

Recipient: 1610-09

Program Name: Specialty Crop

Final Report

Project Title: Local Food Week Feasibility Study

Project Summary:

The NEON AGENCY sought to enhance the competitiveness of specialty crops (SC) by conducting a feasibility study into developing a Local Food Week for Northern Nevada. Through one of our many brainstorming sessions, we coined the week *Growing NV - a celebration of specialty crops based in Reno, NV.*

Local Specialty crop food weeks are a captivating way to garner people's attention with event-based gatherings all focused around locally grown specialty crop food within a certain period (a week in this case).

Local food weeks are important because they are an established way to increase demand for local, specialty crop food by giving people an opportunity to meet local producers and join a community of other interested people to broaden and/or deepen one's understanding and appreciation of the value and benefits of the popular phrase 'Buying Local.'

The feasibility project is timely because Northern Nevada does not currently have an established week celebrating locally grown food. We see this as a huge opportunity to raise awareness of the burgeoning food scene blossoming in Northern Nevada. Northern Nevada has a restaurant week that has grown to a two-week celebration and well attended farmers markets and a food co-op. Point being there are currently multiple stakeholders but no major event that gathers and ties all the local food movement momentum together!

We are proposing an exciting yet established way to increase demand for healthy, specialty crop food by giving people a really well networked and marketed opportunity to meet local specialty crop producers, eat locally grown specialty crop food, enjoy locally grown flowers, and connect with local specialty crop food enthusiasts all with the main goal of not only understanding and appreciating the value and benefits of our region's specialty crops by experiencing them first hand.

NEON sees a local food week fitting into the area's activity calendar, so it becomes part of people's memories and is something residents look forward to attending with their friends and family year after year.

Project Approach

This includes significant results, accomplishments, conclusions and recommendations, as well as favorable or unusual developments.

If the overall scope of the project benefitted commodities other than specialty crops, did the grantee indicate how project staff ensured that funds were used to solely enhance the

competitiveness of specialty crops?

Did the grantee detail the significant contributions and role of project partners in the project?

Comments

The Feasibility Study was a 20-week project that included initial face-to-face meetings and discussions with the area's local producers and stakeholders to get buy-in and an understanding of how a Local Food Week could be developed and its potential impact.

Before we reached out to potentially interested organizations, individuals, businesses and nonprofits, we wanted to gather ideas about when might be the best time for the weeklong celebration. From our research a Northern Nevada specialty crop-based local food week celebration could either take place as a week-long addendum to the already wildly popular Artown scene in July; or two other options are the second week of August or the third week of September. Nevada grown specialty crops are still high in production at both times, but it's a calmer time with less 'busyness' of the Summer because kids are back at school. See below for the City of Reno events calendar incorporated into potential weeks:

Last week of July (during Artown): Potential Week

First week of August: Kids back at School

Second week of August: Potential Week

Third week of August: Aloha Festival

Last week of August: Burning Man Arrival

First week of September: Balloon Races

Second week of September: Air Races

Third week of September: Potential Week

We created a short, five question survey, researched and aggregated emails then disseminated it to our list of potential beneficiaries. The project manager analyzed the survey and then met with or phoned many of the respondents as well as additional interested entities like Edible Reno Tahoe, Reno Gazette Journal, the Great Basin Community Food Co-op, DROPP (Distributors of Regional Produce and Products), Reno Food Systems, Be The Change, Urban Roots, Masters Gardeners, UNR Cooperative Extension, Western Nevada College, Nevada Grown, Verdant Landscaping, RT Permaculture, Rail City, Washoe County Food Policy, Riverside Farmers Market and West St Market which is the location of three locally owned, organic, plant based restaurants.

We then had conversations with cities all over America including Guilford, NC; Gainesville, FL, and folks at Ohio State and even reached out to the program administrator of Ontario's Local Food Week. We have created a rough outline of what we think could be organized (see list below).

After meeting with the above beneficiaries and stakeholders and marrying with the research from other cities, a general idea calendar breakdown was created just to give a basic structure and ways for project partners to plug in from the list of ideas that culminated:

- Mailing List Pledge

- People would join either via website or mailing list at each event and pledge to purchase a specialty crop item during the week.
- A list of specialty crop items will be provided for educational impact.
 - We will have a very clear and concise definition of what counts as a specialty crop and what does not.
- Local Restaurants Scavenger Hunt
 - The idea here is percentage of curated Nevada grown specialty crop will be included on daily menus for the week. Patrons who choose and buy said dish can enter to win raffle gift card (at participating restaurants) by going to our website and/or social media outlets using hashtags and selfies to show participation.
 - The food items included on the restaurant's menus will be managed by the project manager and only qualify if the ingredient is a specialty crop.
 - NOTE: The project manager is well versed in specialty crops and will be able to successfully manage the implementation of solely specialty crops.
- Local Restaurant Local Food Competition
 - Restaurants in West St Market (Thali, Maya, Deluxe Cafe & Pizza Collective) would use the same 3-5 specialty crop ingredients and each make a dish. People would buy a sample plate of all three and cast their favorite. Restaurant with the most votes, wins. Participants' ballot would be entered to win raffle gift card at the actual event.
- Farmers Markets
 - A specialty crop food tasting event by local chefs could be sampled at Farmers Markets.
 - The food tasting would only involve specialty crops, for example, delicious summer salads, vegetable, or fruit-based dishes etc.
 - The Nevada Grown book would be for sale with free take home recipe cards.
 - A flag or sign would highlight Nevada-based specialty crop farmers.
- Urban Farm Tours would be curated.
 - New Harvest is a local sprout producer, River School Farm has grapes and herbs, and Park Farm is a specialty crop funded urban production educational farm. These three farms qualify under the specialty crop umbrella.
- A backyard gardening demonstration tour with local businesses and garden club chapter could be offered.
 - An informational leaflet focusing solely on specialty crop production would be offered and backyard gardeners would educate on just specialty crops.

- Specialty Crop Seed Swap (partner with fellow organization Truckee Meadows Seed Alliance).
- Blooms, a floriculture-based art show at local coffeehouses Hub and Coffeebar.
 - Could be publicly garnered with a launch night, etc.
- Urban Roots demonstration garden event could host a workshop
- Kid-based events at Wingfield or local library themed reading events
 - By engaging people at a young level, we capture their imaginations and inspire them to eat healthier! Plus, kids can share their interest and education with their parents.
- A GBCFC (Great Basin Community Food Co-op) grocery store tour could be organized with Nevada grown specialty crop producers highlighted.
- DROPP (Distributor of Regional Organic Produce and Products), our region's local food hub, could provide a presentation and how-to purchase from their website.
 - The main topic would be how to bulk order specialty crops from our Nevada growers.
- Bartley Ranch - Workshops are already hosted by this County park and could just be incorporated.
- Cooperative Extension - Host a Panel or Kickoff event
- A preserving, pickling, and fermenting night could be held at Liberty Food and Wine by local pickle and kombucha makers (**both specialty crops!**)
- Food Truck signage
 - Food Trucks who purchase locally during the week would have special signs highlighting the specialty crop producers who have specific specialty crop items being used.
- Be The Change Pop Up Flash Food Event
 - Quick concept - Tomato night where different cultures get together to celebrate the tomato (Latino, Native American, Italian, etc.)
 - The local food provided would be solely specialty crops.
 - Block Party vibe with music and community members getting together
- Reno Garlic Fest - Could be the culminating event of the week
- Edible magazine will provide a special insert/spread that communicates our messaging and highlights schedule and all the festivities of the inaugural event!
 - Interest in possible sponsorship in subsequent years to provide a wider bandwidth of local food incorporation but at this point feel there is more than adequate specialty crop focused events to make the week a success.

With completion of the feasibility study, we analyzed the above and organized the ideas into daily events:

IDEAS	PROJECT PARTNER
405 South 21st St. Sparks, NV 89431	2300 East St. Louis Ave. Las Vegas, NV 89104
agri.nv.gov	4780 East Idaho St. Elko, NV 89801

FUNDAY SUNDAY - Backyard Garden workshop gatherings	Master Gardeners
	Sierra Garden Club
	Verdant Landscaping
	Rail City Nursery
	Truckee Meadow Seed Alliance presence
MEATLESS MONDAY - Pop up specialty crop-based potlucks	
Orchestrated neighborhood celebration of vibrant community, vibrant food and vibrant health through a pop-up potluck.	Be the Change
Meatless Specialty Crop Recipe dissemination, demo with instant pot featuring SC	
(TACO) TOUR TUESDAY - Culinary tour in midtown with Meet Your Farmer Project and farmers	Reno Bites
Challenge restaurant to buy 10% (or ??) specialty crops locally	DROPP
Local co-op store tour,	GBCFC
Dragons Love Taco book?	Washoe County Library
WASTENOT WEDNESDAY - An educational evening at Liberty food & wine	
Preserving	Reno Gleaning Project
Pickling	Food Bank
Fermenting	HOPES

Cost breakdown of sauerkraut etc	Down to Earth
Composting presentation	
THROWDOWN THURSDAY - Local chef competition using only specialty crop ingredients	
Chefs using the same three ingredients.	West St Market
Flat fee per sample plate, participants enter opinion via survey.	CAMPO
Winner announced and celebrated via Press Release.	
FRAMEWORK FRIDAY - Local food policy meeting, open invite.	
Lynne Barker, City of Reno, sustainability coordinator	City of Reno
Food Group networking	BAR-O
Food Hubs?	Tahoe Food Hub
	Fallon Food Hub
SATURDAY HAYDAY - Urban Farm Tour	
	Urban Roots 2nd St Campus
	New Harvest
	River School Farms
	Food Park Farm - Reno Food Systems
	Flint Street Farm
	DFI
	Nevada Grown presence

	Prema
	Anything in Fallon or Dayton?
NOTES	
Pledge to eat one specialty crop item each day - gamify?	
Coffeebar art exhibition to be decided with artists	
Scavenger Hunt at participating restaurants	
Education on what a food system entails: Growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food	

The study also attempted to understand the marketing strategy and associated costs required to develop and launch a successful Local Food Week in Northern Nevada so after the vision started to come together in a tangible day to day, holistic food system based on specialty crop way, NEON had enough material to create a subsequent work plan and accompanying budget (see below in the goals and outcomes section).

As a final note, we could see the week being compared to Artown (a local month-long celebration of everything art in Reno) with a few full-time staff members. From our initial research we can see Growing NV - A local food week celebration of specialty crops becoming so popular that corporate sponsors (for example, Patagonia or Tesla), educational resources, the local food co-op would be open to sponsorship, therefore reducing our dependence on grant funds (many local food weeks are funded this way).

Funds were solely used to enhance specialty crops. Any entity’s meeting time that wasn’t solely specialty crops wasn’t billed by NEON.

Goals and Outcomes Achieved

Did the grantee supply the activities that were completed to achieve the performance goals and measurable outcomes identified in the approved project proposal or subsequent amendments?

If outcome measures were long term, was a summary of the progress made towards this achievement provided?

Did the grantee provide a comparison of actual accomplishments with the goals established for the reporting period?

Did the grantee clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets? Did the grantee

highlight the major successful outcomes of the project in quantifiable terms? Comments

Outcome 1- To determine if a Local Food Week is a viable and desirable project for Northern Nevada.

Forty specialty crops producers’ beneficiaries were either surveyed, met with, or called to inquire about interest in participating in the week-long celebration outlined here. Thirty-five out of the forty expressed either strong or very strong interest in partaking in the Growing NV celebration.

With these numbers and the overall feedback from conversations and meetings, we found that there is overwhelming interest and excitement about the potential of *Growing NV* to positively impact awareness, appreciation, and sales.

Since there was such interest, we also started to formulate loose plans and ideas based on information from research of already happening local food weeks in similar communities as well as ideas from NEON’s meetings with local people who are part of our food shed. Please note above in project approach section above.

Outcome 2- Create a clear understanding of the scope of work of developing a Local Food Week.

We have been able to understand the scope of reference and have therefore completed a marketing strategy and associated costs required to develop and launch a successful Growing NV - A local food week celebration of specialty crops in Northern Nevada.

Work Plan for Execution of Event

We included the ~\$20K (“personnel funds requested”) to show that as part of the deliverable outcome of the grant, we created a budget of how much it would cost to create the week-long event.

<i>Project Activity</i>	<i>Who’s Responsible</i>	<i>Timeline</i>
<u>PLANNING STAGE</u>		
Finalize research, survey, speak, and meet with organizations to connect potential ideas	Project lead	4 weeks
Choose organizations, brainstorm ideas	Project lead	2 weeks
Create content with each organization	Project lead	4 weeks
<u>MANAGING STAGE</u>		

<p>Create marketing plan with content</p>	<p>Project lead & Marketing Campaign Manager</p>	<p>2 weeks</p>
<p>Liaise with organizations for approval, fine tune</p>	<p>Project lead & Graphic Designer</p>	
<p>Research and Construct Social Media Ideas and Calendar</p>	<p>Social Media Manager & Project lead</p>	<p>2 weeks</p>
<p><u>IMPLEMENTATION STAGE</u></p>		
<p>Press Campaign</p>	<p>Press Liaison & Project Lead</p>	<p>3 weeks</p>
<p>Social Media Campaign</p>	<p>Social Media Manager & Project lead</p>	
<p>Continual oversight and management of implementation including advertising, press and media campaign delivery</p>	<p>Project Lead & Marketing Campaign Manager</p>	
<p>Contingency</p>	<p>Project lead</p>	<p>1 week</p>

Budget Summary	
Expense Category	Funds Requested
Personnel	20,178
Fringe Benefits	
Travel	
Equipment	
Supplies	
Contractual	
Other	5,800
Direct Costs Subtotal	
Indirect Costs	

Total Budget	\$25,978
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Personnel Costs:

#	Name/Organization	Hours or FTE Equivalent	Funds Requested
1	Project Lead	284 Hours @\$42/hr.	11,928
2	Graphic Designer	72 Hours@\$25/hr.	1,800
3	Press Relations	40 Hours @\$30/hr.	1,200
4	Marketing Campaign Director	50 Hours @\$45/hr.	2,250

5	Social Media Manager	120 Hours @\$25/hr.	3,000
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Personnel Subtotal	20,178
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Personnel Justification

Personnel 1:

Research, meet and choose prominent organizations to partner with, form relationships with and create concepts with.

Create and implement marketing plan, work with all relevant entities.

Project management each concept with idea implementation.

Planning Stage - 8hrs x 10 weeks x \$42 per hour project lead = **\$3360**

More research, meet and choose prominent organizations to partner with, create concept with each

Managing Stage – 16hrs x 4 weeks x \$42 per hour project lead = **\$2688**

Implement ideas, project management, create and implement marketing plan

Implementation Stage (Week before, of and week after) - 40hrs x 3 weeks x \$42 per hour project lead = **\$5040**

Continual oversight, press, and management of implementation plus follow up and reporting

Contingency - 20hrs x 1-week x \$42 per hour project lead = **\$840**

Personnel 2:

Work with project manager to create brand identity along with a website, rack card, flyers, placards, and information cards.

Ads, banners, flyers and posters will also be designed using the branding materials created above.

Personnel 3:

To raise awareness of the inaugural event and to drive people to activities, the press liaison will create a full press, media and social media campaign. We will target local media outlets with a press release and engagement media including copywriting, press ‘sell-in’, press liaison and responses.

Personnel 4:

Will devise and run the marketing campaign for all areas of the Growing NV - A local food week celebration of specialty crops through events, services and ideas that will target consumers to engage in the festivities. The concept will be part education, part celebration and entirely to promote ‘Growing NV.’

Personnel 5:

Content oversight and implementation, scheduling, dialogue, hashtags construction and management, and event participation.

Other

Item Description	Per-Unit Cost	Number of Units	Acquire When?	Funds Requested
Edible insert - full page ad	\$3000	1	Summer 2019	\$3000
Reno News and Review Month-long Banner Ad	\$200	1	Summer 2019	\$200
Reno News and Review Print Ads	\$400	2	Summer 2019	\$800
Facebook Ads	\$20	33	Summer and Fall 2019	\$660

Instagram Ads	\$17	20	Summer and Fall 2019	\$340
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Posters	\$.5	100	Summer and Fall 2019	\$50
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Flyers	\$.2	1500	Summer and Fall 2019	\$300
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Placards	\$1.50	250	Spring 2019	\$375
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Banner	\$75	1	Spring 2019	\$75
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Other Subtotal				\$5,800
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Other Justification

Ad Spend

Edible Reno-Tahoe is distributed at selected grocery stores, restaurants, food merchants, wine and beer retailers, boutiques, hotels, medical offices, and special events in Northern Nevada, Lake Tahoe, and beyond.

- 10,000 copies are printed six times a year. Each copy is shared by about 5 people, equaling 50,000 readers per issue.

Reno News and Review's month-long banner has 10,000 impressions and two ads in the print version for two weeks leading up until the event will hit the following number of customers:

- 24,419 Average Net Circulation
- 1,200 Distribution Locations
- 124,628 Regular Readers

Social Media Ads A social media campaign will be created using Facebook and Instagram. One post will be posted daily to both accounts. To reach a broader audience, especially because this will be the first year, beginning four months in advance two posts a week will be boosted.

- Hashtags will also be picked to further promote posts through social media. We will also ask our partner organizations to post the events as well.

Printing Costs

Print color, double sided flyers to hand out at tabling events throughout the year. Print posters for placement at local establishments. Print banners to be used at events and as advertising at tabling events. Print placards to have at participating venues.

Measurable Outcomes:

With the above scope of work and accompanying budget, we're aiming to achieve the following expected measurable outcomes:

Increase customer awareness, knowledge, appreciation -and most importantly directly increase the sales- of specialty crops in Nevada.

Our first goal of the project will be to determine a baseline of sales dollars spent on specialty crop foods specific to the week-long event. Once this is measured, we will be able to extrapolate increased baseline values for each of the subsequent, annual specialty crop-based Local Food Weeks. Our baseline projections of sales data for this inaugural event will be quantified by of following activities:

- 1) At least 500 people to pledge to buy \$10 worth of specialty crops (or some variation of such), we will achieve \$5000 of specialty crop purchases that would not have been previously inspired or tracked.
- 2) By increasing participation in an educational tasting at three farmers markets, we will aim to increase overall specialty crop purchases of at least three specific specialty crop producers by \$250 at each market totaling \$750.
- 3) By creating a chef competition with paid for sample plates of \$10 each, we will attain at least 50 contest entries totaling \$500.

- 4) And by having at least 100 scavenger hunt participants spending \$10 on a specialty crop-based salad, \$1000 of additional dollars will be collected.

These specialty crop revenue-generating activities total a projected \$7250 of monitored specifically specialty crop dollars.

In terms of percentages, we will increase the baseline of specialty crop purchases either directly through our two food hubs (Fallon Food Hub and DROPP) by 25% compared to previous weeks without Local Food Weeks.

Our marketing campaign will raise awareness of specialty crops to 100,000 people indirectly being aware of the project in total. This will be calculated by eyeballs on commercials and traditional media outlets' data as well as a progressive social media campaign that will be liked by at least 5,000 followers.

Outcome 2: Enhance the competitiveness of specialty crops through increased consumption

1. Of the 25-total number of children and youth DIRECTLY reached,
 - a. At least 20 will gain knowledge about eating more specialty crops.
This data is will based on one library event and one homeschool event and collective attendee totals will be collected at each one.
2. Of the 500-total number of adults DIRECTLY reached,
 - a. Over 200 people will have gained knowledge about eating more specialty crops.
 - b. Over 100 will report an intention to eat more specialty crops.
 - c. Over 50 will report eating more specialty crops because of the efforts.

We will report these figures through aggregated mailing list and survey data to participants of each of the workshops/events as well as social media driven relevant outlets to garner numbers and feedback from each of the multiple events hosted during the week.

3. We believe we can introduce at least 2 NEW specialty crop items to consumers. The Goji berry and Mulberries grow well here and since both are considered superfoods, we could host a Grow Your Own Superfood workshop where we introduce these somewhat obscure but delicious and healthy foods to our region. There is a specialty crop producer in the area that is commercially growing goji berries, so we could work together on a concrete event idea.

We would be able to report on this specific workshop with attendee totals and educational resources that were provided.

Outcome 3: Enhance the competitiveness of specialty crops through increased access

1. Of the 12-total number of consumers or wholesale buyers reached,

- a. 8 out of 12 will gain knowledge on how to access/produce/prepare/preserve specialty crops
 - b. 6 out of 12 will report an intention to access/produce/prepare/preserve specialty crops
2. Of the 6-total number of individuals (culinary professionals, institutional kitchens, specialty crop entrepreneurs such as kitchen incubators/shared-use kitchens, etc.) reached,
- a. 5 out of 6 will gain knowledge on how to access/produce/prepare/preserve specialty crops
 - B. 4 out of 6 will report an intention to access/produce/prepare/preserve specialty crops
3. Number of existing delivery systems/access points of those reached that expanded and/or improved offerings of specialty crops
- a. _____ farmers markets
 - b. _____ produce at corner stores
 - c. _____ school food programs and other food options (vending machines, school events, etc.)
 - d. _____ grocery stores
 - e. _____ wholesale markets
 - f. _____ food hubs that process, aggregate, distribute, or store specialty crops
 - g. _____ home improvement centers with lawn and garden centers
 - h. _____ lawn and garden centers
 - i. _____ other systems/access points, not noted
- _____ total (if not reported above)
- 3 presence at farmers markets - During the week, we will have a booth at least 3 current farmers markets highlighting the local food week's activities. We will be able to report this figure by our attendance at each.

Outcome 8: Enhance the competitiveness of specialty crops through enhancing or improving the economy as a result of specialty crop development

- DROPP - Our region's local food hub will track sales directly to community partner purchases and compare overall sales to the previous week's specialty crop sales.
 - Growing NV will increase DROPP's sales by 15% compared to the week before of the same year.

Beneficiaries

The feasibility study was not designed to benefit one specialty crop producer but to gather input from current producers/stakeholders as to how to best benefit as many SC producers moving forward. With SC producers help and input, we can create a clear roadmap to developing and implementing the *Growing NV* initiative.

Estimate the number of project beneficiaries: 25+

Directly affect:

As many of our Northern Nevada specialty crop local food growers and value-added producers as possible:

[Al Bees](#)

[Andelin Family Farm](#)

[Apsara Gardens](#)

[Backyard Farms](#)

[Bee Here Now Farm](#)

[Bella Vista Berry Farm](#)

[Campie's Lavender Patch](#)

[Churchill Vineyards](#)

[City Green Gardens](#)

[Custom Gardens Organic Farm](#)

[Desert Farming Initiative at UNR](#)

[First Fruits Sustainable Farms](#)

[GGB Farms](#)

[Glorious Garlic Farm](#)

[Halleluyah Honey](#)

[Hanco Sierra Farm](#)

[Heirloom Gardens](#)

[Hidden Valley Honey](#)

[Holley Family Farms](#)

[Hyde's Herbs](#)

[Jacobs Family Berry Farm](#)

[Jamason Farms](#)

[Joy's Honey Ranch](#)

[Lattin Farms](#)

[Lavender Ridge](#)

[MacDougall Apiary Company](#)

[Mewaldt Organics](#)

[Michael's Apples](#)

[Mother Earth Growers](#)

[Mountain Mushrooms](#)

[Nevada Fresh Pak](#)

[New Harvest Farm](#)

[Reno Food Systems' Park Farm](#)

Peri & Sons Farms

Pioneer Farms

Pleasant Valley Farm

Prema Organics

Rail City Garden Center

Sierra Flower Farm

Silver Sage Honey

Tahoe Living Greens

Local restaurateurs, personal chefs and caterers who purchase specialty crops locally

Area Farmers Markets

Indirectly affect:

Food system related organizations:

Nevada Grown (nonprofit)

UNR - Cooperative Extension

Food Bank of Northern Nevada (nonprofit)

Urban Roots (nonprofit)

Reno Food Systems (nonprofit)

Washoe County Parks and Rec

Washoe County Food Policy Council

Local Food Network (nonprofit)

Be the Change (nonprofit)

BAR-O (nonprofit)

Great Basin Community Food Co-op

DROPP - Local food hub

City of Reno

Truckee Meadows Seed Alliance (soon to be nonprofit)

Sierra Nevada Garden Club

Down to Earth Compost

Rail City Nursery

Lessons Learned

Did the grantee offer insight into the lessons learned by the project staff because of completing this project?

Did the grantee provide any unexpected outcomes or results that were an effect of implementing this project?

If goals or outcome measures were not achieved, did the grantee identify and share the lessons learned to help others expedite problem-solving?

Comments

We achieved all the goals and outcomes expected in the feasibility study but did have a couple

lessons learned and one unexpected outcome.

One major lesson learned was after collating and inspiring the structure for the direction of a local food week, we aren't sure how many events to host and if doing something every day will dilute or strengthen the concept. People are busy and we're trying to set realistic targets for ourselves and other partner organizations regarding effectiveness of event-based activities. Marketing spend will have to be something we fine tune to ensure we're captivating the hearts and minds of our community and inspiring them to come out to the inaugural event(s)! Strategic networking will be a key lynchpin in the success of attendance and impact.

This local food week celebration will solely focus on specialty crops, which we can see being slightly narrowing as ranching as well as corn and alfalfa growing has a prideful history in our community. This was mentioned as a deficit in our Meet Your Farmer Nevada project that no ranchers/ranches or large-scale farms were represented. Perhaps we can see if these area enterprises want to be involved but find a way to pay their way. We didn't think we would include this aspect yet but are reacting and wondering how to best respond from some survey responses from the Meet Your Farmer project, a previous, like minded campaign.

Lastly an unexpected outcome was that the project manager connected with a previous Local Food Networker due to doing this feasibility study and has started to train and be mentored by this person. This is an exciting development and see *Growing NV* being a culmination of this networking work since we see the success of the event depending on collaborating with already present and successful entities joining in on big picture food community gatherings in simple, fun, and engaging ways.

Contact Person

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Additional Information below



LOCAL FOOD WEEK

JUNE 6-12, 2016



List of Growing NV - A local food week celebration of specialty crops resources:

North Carolina Cooperative Extension in Guilford, North Carolina -
<https://guilford.ces.ncsu.edu/local-food-celebration-schedule/>

Working Food Nonprofit in Gainesville Florida-
<https://workingfood.org/local-food-week/>

Ohio State in Massillon, OH-
<http://localfoods.osu.edu/ohio-local-foods-week>

Nevada Department of Agriculture
Point of Contact: Ashley Jeppson
Recipient: 1610-12
Program Name: 15SCBGPNV0036
Final Report

Project Title: Reno Garlic Fest

Project Summary

o Did the grantee provide a background for the initial purpose of the project, which includes the specific issue, problem, or need that was addressed by this project? o Did the grantee establish the motivation for this project by presenting the importance and timeliness of the project? o If the project built on a previously funded project with the SCBGP or SCBGP-FB, did the grantee describe how this project complimented and enhanced previously completed work? Comments

Reno Garlic Fest 2018 (RGF) was a convivial and educational one day event featuring local farmers selling garlic, local food producers selling garlic-based foods, educational literature about

garlic and a follow-up workshop highlighting the benefits of local garlic production and consumption.

RGF plays an important and timely role as a dynamic and valuable component in supporting and stimulating enthusiasm for locally grown, specialty crop foods. Nevada agriculture is an important part of the state's culture and heritage, and Nevada is the country's second largest producer of garlic, a testament to how well-suited garlic is to Nevada's climate.

RGF creates a positive and vibrant base of support for locally grown garlic while increasing the public's knowledge about Nevada garlic production and the value of supporting local farmers and locally grown specialty crops! RGF supports growers by providing them with a popular venue at which to sell their produce as well as offer a direct connection with local food caterers, apothecaries, and value-added artisans. Funding helped existing growers and producers by providing a new market for sales and by greatly increasing awareness of local production through outreach, marketing, and events.

RGF built on the success of the inaugural 2017 event (that was not grant funded) to further support local farmers, educate consumers and gardeners, build community, strengthen neighborhood ties, and raise awareness of local agriculture through direct interaction.

Project Approach

Were the activities and tasks performed during the entire grant period briefly summarized? This section should discuss the tasks provided in the Work Plan or the approved project proposal. This includes significant results, accomplishments, conclusions and recommendations, as well as favorable or unusual developments. o If the overall scope of the project benefitted commodities other than specialty crops, did the grantee indicate how project staff ensured that funds were used to solely enhance the competitiveness of specialty crops? o Did the grantee detail the significant contributions and role of project partners in the project? Comments

All activities laid out in the work plan were accomplished in a timely and efficient manner. The local growers were coordinated with and given tips for best ways to sell garlic, permits were obtained, and outreach and marketing efforts were developed and shared through our project partners. The event was hosted and was an absolute success in terms of educational and positive financial impact on current growers. Our attendance numbers were significantly higher than we projected (~800+, projected 500). Follow-up efforts included a one-day planting workshop and management of the garlic seed bank which provides free seed to first time growers.

Reno Food Systems staff organized meetings with every local garlic grower to purchase a few pounds of garlic to provide to the value-added vendors and food trucks. This was a fun and soulful way to support the growers and have the attendees support the local farmers in a second-hand fashion. We provided signage specifying which farmer's garlic was used by each of the prepared food vendors, so consumers could easily know whose garlic was in each dish.

Outcomes of the previous efforts brought together six specialty crop garlic producers, three local businesses, six nonprofit entities and five local food producers with over 800 attendees!

- Attendance was estimated by taking four separate crowd counts at different times during the event (roughly an hour apart). It was a five-hour event and at each count there were

between 500-600 attendees. If people spent an average of one to two hours at the event, it was estimated that there were over 800 attendees in total.

- Strong City Support: Two council members supported RGF financially with \$250 each from their general funds.
- Diversity - The event was hosted at a municipal park in a neighborhood that is historically diverse in terms of ethnicity and socio-economic status to attract a broad audience¹⁰.
 - We believe the diversity represented at the Fest is due to hosting the event at Pat Baker Park as well as inviting the local cumbia band Ritmo Ardiente to perform.
 - RGF is very kid and family friendly contributing to the attendance of community members of all ages.
- Other metrics demonstrating the success of the event:
 - Icecycle Creamery, Nom Eats, and Bite Me food truck each sold out of product
 - 6-4 Growlers sold out as well and had to get more beer.

All the value-added vendors sold items with garlic i.e. garlic honey, garlic pistachios, garlic bread etc. We made sure that the funds were used to solely enhance the competitiveness of specialty crops by charging the vendors and food trucks to participate but not charging the specialty crop farmers or educational nonprofits like Nevada Grown and BAR-O. Farmers didn't bring or sell any other commodities at RGF.

Reno Garlic Fest was a collaborative effort between Be the Change Project, Local Food Network and Reno Food Systems (RFS). RFS had the primary leadership role for the 2018 event but Be the Change Project helped tremendously with their knowledge and connections from the previous year. Local Food Network handed out information about the event and participated in the day's activities. Nevada Grown also helped raise awareness of the event by helping post and boost our Facebook event. All organizations have 501c3 nonprofit status and are passionately invested in Northern Nevada's local food efforts.

o Did the grantee supply the activities that were completed in order to achieve the performance goals and measurable outcomes identified in the approved project proposal or subsequent amendments? o If outcome measures were long term, was a summary of the progress made towards this achievement provided? o Did the grantee provide a comparison of actual accomplishments with the goals established for the reporting period? o Did the grantee clearly convey completion of achieving outcomes by illustrating baseline data that has been gathered to date and showing the progress toward achieving set targets? o Did the grantee highlight the major successful outcomes of the project in quantifiable terms? Comments

Goals & Outcomes Achieved

Outcome 1

Goal: Obtain farmer commitment to participate in a Reno Garlic Festival to increase garlic sales and awareness of Nevada allium production.

Performance Measure: Survey results at the event and post event.

¹⁰ <http://www.popcenter.org/library/awards/goldstein/2011/11-35.pdf>

Benchmark: 0, since this will be a new event the sales that will take place will be directly attributed to the event.

Target: At least 10 growers will indicate an increase in garlic sales and 200 event participants will indicate an increase in consumption/purchasing of garlic products.

We did successfully garner 10 growers (9 farmers listed below plus Misbeehaven Farm grows her own garlic and uses it in her honey and value-added goods) and increase their garlic sales.

In trying to collect 200 survey participants, we found it to be an unrealistic way to quantify increase in consumption/purchasing of garlic products. Instead, we could create baseline data and track this outcome by measuring sales and sales increase numbers to show dollar amounts and an increase in consumption and purchases of garlic. Please see the graph that captures this information:

FARMER SALES	FARMERS	2017	2018	Notes
Farmer	Wix	\$0	\$600	500 of subsequent sales directly from 2018 Garlic Fest. Didn't participate in 2017.
Farmer	Sweeting	\$200	\$300	
Farmer	Be The Change	\$100	\$250	
Farmer	Bee Here Now	\$0	\$450	Didn't participate in 2017.
Farmer	Prema Farm	\$200	\$600	
Farmer	Susan Arnold	\$0	\$250	Didn't participate in 2017.
Farmer	Earstin Whitten	\$100	\$80	
Farmer	Glorious Garlic	\$200	\$0	Didn't participate in 2018 (had prior engagement)
Farmer	Garlic Purchased from all vendors for Food Trucks	\$0	\$250	Only did this in 2018.
	GRAND TOTALS	\$800	\$2,780	
BUSINESS	BUSINESSES		People Spoken To	
Business	Rail City Garden Center		100+	
Business	Down to Earth Compost		3 new subscribers	
Business	Full Circle Compost		Dozens	
VALUE ADDED VENDOR	VENDOR NAME		\$	
Value Added Vendor	Charlie Nash (Honey, garlic honey and garlic)			
Value Added Vendor	MwintSoph Enterprises			
Value Added Vendor	Pumpkin Sumthin'			

Value Added Vendor	Treat Yourself			
Value Added Vendor	Misbeehaven Farm			
Value Added Vendor	Eagle Peak Herbals			
Value Added Vendor	Hot Sauce			
	APPROX.GRAND TOTALS			\$2,600
FOOD TRUCK	FOOD TRUCK NAME		NOTES	
Food Truck	Bite Me Food Truck		No survey response	
Food Truck	La Baraca		No survey response	
Food Truck	Bibo Freddo		Sold Out	
Food Truck	Nom Eats		Sold Out	
Food Truck	Icecycle		Sold Out	
Food Truck	Liberty		No survey response	
Alcohol Supplier	6-4 Growlers		\$800	
NONPROFIT	NONPROFIT NAME		PEOPLE SPOKEN TO	
Nonprofit	Reno Food Systems		200	
Nonprofit	The Girl Scouts of the Sierra Nevada		50	
Nonprofit	Nevada Grown		100	
Nonprofit	UCCE Master Gardeners of Lake Tahoe		80	
Nonprofit	Be the Change Project		150	
Nonprofit	The Local Food Network		35	*Flyers handed out
Nonprofit	Truckee Meadows Parks Foundation		75	
Nonprofit	BAR-O		120	
	APPROX.GRAND TOTALS			810

Other notable data points that can be tracked each year follows:

On our Reno Garlic Fest 2018 Facebook page, we had 5,488 people interested in going and 512 posted on Facebook that said they went to the event. We invited 534 people directly through administrators and have 631 following the Reno Garlic Fest updates on our Facebook page. Lastly 116,700 people were reached throughout all our shares and posts. This is baseline data and will be used each year to compare attendance and interest numbers in the context of social media.

Outcome 2

Goal: Increase awareness of sustainable production practices.

Performance Measure: Survey results from trainings.

Benchmark: 0, this will be new training provided as a direct result of the event.

Target: At least 10 participants will indicate an increase in knowledge of sustainable production practices.

After our garlic growing workshop, we directly asked, Facebook messaged, and emailed the participants asking if they increased their knowledge of sustainable production practices, and we had 10 out of the 20 responds with all of them saying ‘Yes’ the workshop increased awareness of sustainable garlic growing practices.

Based on four separate estimated head counts during the Fest, we had approximately 800+ attendees. Six Nevada-based and two California-based farmers sold garlic \$2780 in sheer garlic sales alone (all farmers responded to our survey).

The five value added producers sold an approximate total of \$2600 garlic products (only four out of five replied to our survey and it was anonymous, so we could formulate a grand total but not individual sales) and Reno Food Systems bought \$250 of locally grown garlic to use in Food Truck sales. Eight area nonprofits and three local businesses also set up informational booths.

Lastly, in the middle of October, we also had 20 participants at our free, fall planting workshops who benefited from hands-on experience with Eartsin Whitten, an enthusiastic master gardener and self-professed garlic guru.

Beneficiaries

o Did the grantee provide a description of the groups and other operations that benefited from the completion of this project’s accomplishments? o Did the grantee clearly state the number of beneficiaries affected by the project’s accomplishments and/or the potential economic impact of the project? Comment

In addition to the list of the 33 vendors (the farmers, value added vendors, nonprofits, and businesses listed above), plus the 800+ attendees and the 20 workshop participants all benefited from the event bringing the total to over 850 people!

All invested parties will continue to be communicated with throughout the year on our Reno Garlic Fest Facebook page, email newsletters, social media, Artown, vendor outreach, traditional advertising and press releases with local media outlets.

Lessons Learned

o Did the grantee offer insight into the lessons learned by the project staff because of completing this project? o Did the grantee provide any unexpected outcomes or results that were an effect of implementing this project? o If goals or outcome measures were not achieved, did the grantee identify and share the lessons learned to help others expedite problem-solving? Comments

Since we overachieved our outcome measures for the event, the lessons learned relate to fine tuning and suggested improvements for subsequent year events:

Next year, we will draw out each booth section in chalk a day before the event and label them then share with each vendor, so everyone knows where to go on the day. We will also space all the vendors out and take up the entirety of the park. We had all the action on one side of the park so two of the

entrances were packed and the other two were underutilized.

We will also have a workshop section where folks can learn from various garlic gurus on the day. Workshops will be on the hour, each hour and provide rotating ongoing information sessions followed with Q&As. Ideas include how to grow, braid, when to harvest, and yummy recipes shown step by step and in person. This year's event only had one side of a ten-foot booth with a garlic expert, but there were so many people, it wasn't enough space nor a suitable structure to share information in an impactful way.

We are going to reach out to all our local garlic growers in the early part of 2019 to make sure all relevant parties can make it. This year both Snyder Farms and Glorious Garlic had family reunions and were unable to attend. We'd also like to have more wellness vendors participate so will reach out to apothecaries early in the year. Some of the value-added vendors ingredients could be improved upon (using organic corn syrup instead for example).

This year we will create a 'to-do' list calendar, so tasks get done on time, if not earlier than needed, so event programmers have an outline of when things need to get done (permits, vendor response, press release send out etc.).

Next year we will have a mobile pizza oven that folks can have the vendor roast their garlic, warm and ready to eat while at the Fest and surrounded by a community of garlic lovers! The farmers who roasted their garlic and provided samples sold almost double the farmers who didn't provide warm, deliciously smelling samples!

One value added vendor mentioned wanting to taste the local garlic that she was going to receive, which gave us the idea that we could have a garlic tasting event by the farmers, so the prepared food vendors could pick and choose the garlic they wanted to use.

Encouraging the farmers to sell garlic braids and promoting the idea to buy garlic for 2-6 months were both well received so we will duplicate this idea again next year.

One unexpected outcome was that several vendors sold out again this year. Icecycle Creamery sold out last year, he doubled his offerings this year and still sold out! Same for Nom Eats and 6-4 Growlers. We might get garlic whiskey tastings and need to approve this with the City before this local vendor would attend.

We also expected our workshop attendees to reply to our email/Facebook messages about the workshop, but no one did. We had to ask people directly through friends of friends etc. Next year, we will bring surveys to the workshop, so we'll get a better read on the impact of the fall workshop.

Contact Person

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Additional Information

Facebook Page: <https://www.facebook.com/RenoGarlicFest/?ref=bookmarks>

Website: <https://www.renofoodsystems.org/garlicfest>

Artown: <https://artown.org/event-details.asp?ID=3190>

Press:

<https://mynews4.com/news/local/annual-garlic-fest-to-be-held-at-pat-baker-park>

<https://thisisreno.com/2018/07/photos-reno-garlic-festival/>

<http://www.kkoh.com/2018/07/19/reno-garlic-fest-this-weekend-at-pat-baker-park/>