

Specialty Crop Block Grant Agreement No. 12-25-B-0820

Final Report to USDA-Agricultural Marketing Service

Attn: Jenny Greer and Trista Etzig
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Submitted by



AGENCY OF AGRICULTURE, FOODS & MARKETS

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PROJECT 1: General Specialty Crops Support

PROJECT SUMMARY

Seasonal Promotional Publication - Orchards & Wineries Brochure

The Vermont Agency of Agriculture published 50,000 copies of a 4-page, full color brochure listing each orchard and winery in the state, along with suggested pairings and recipes.

Feasibility Study for Culinary Theater

In cooperation with other partners, the Agency supported a feasibility study for a culinary theater to showcase Vermont agriculture.

American Ginseng Calendar

VAAFAM set aside a small amount of funds for producer groups that traditionally have not received Specialty Crop funding. The Vermont Ginseng Association applied for these funds and produced a 2009 Calendar to educate Vermonters about ginseng.

Grant Administration

The Agency of Agriculture expended a total of \$936.34 on postage, phone, and office supplies, and \$1148.75 on personnel to administer the activities performed under this grant.

PROJECT APPROACH

Seasonal Promotional Publication - Orchards & Wineries Brochure

The Agency provided marketing support for specialty crops through the development of a seasonal promotional publication. It was decided to focus the publication funded through these SCBGP funds on the visitor experience. Vermont is building a stronger outreach campaign for drawing visitors into agricultural and culinary tourism activities. Pick-your-own orchards and wineries that offer tastings and education are two ways to engage visitors from out of state as well as Vermonters looking for a weekend activity. The Orchards & Wineries Brochure promoted visits to these locations.

Feasibility Study for Culinary Theater

Interest in *culinary tourism*, an innovative trend in agritourism, is of growing importance to Vermont. A number of partners are considering developing the concept of a culinary theater for the state, to showcase Vermont agriculture. In cooperation with other partners, the Agency supported a feasibility study for a culinary theater to showcase Vermont agriculture. The feasibility report was an important first step in the development of a culinary theater.

American Ginseng Calendar

The Vermont Ginseng Association produced a 2009 Calendar to educate Vermonters about ginseng.

GOALS AND OUTCOMES ACHIEVED

Seasonal Promotional Publication - Orchards & Wineries Brochure

The Vermont Agency of Agriculture published 50,000 copies of a 4-page, full color brochure listing each orchard and winery in the state, along with suggested pairings and recipes. The brochures were printed for distribution at the Welcome Centers, Chambers of Commerce, orchards, wineries, Vermont Department of Travel and Tourism and events such as the Vermont Cheese Festival, Vermont Travel Industry Conference, and the Eastern States Exposition.

Feasibility Study for Culinary Theater

Jennifer McConnell, director of Continuing Education for the New England Culinary Institute (NECI), created a business plan for a proposed Vermont Center for Culinary Arts. The final proposal outlines a showcase for Vermont foods coupled with interactive culinary education to draw tourists along with corporate trainings and retreats. The report found Vermont to be well positioned through both geographical location and national reputation to capture the culinary traveler market. Estimated start up cost was \$1.1 million.

American Ginseng Calendar

The Vermont Ginseng Association designed a 12-month calendar using pictures and information about the ginseng plant. The Association printed 500 copies to be sold at 20 Vermont businesses. Unsold calendars went into distribution at Vermont Welcome Centers throughout the state. Income from the sale of the calendars was used to reimburse the organization for printing costs associated with calendar; the funds from the SCBGP grant paid for slightly more than half the costs of production.

BENEFICIARIES

Seasonal Promotional Publication - Orchards & Wineries Brochure

Vermont's 30 wineries and 264 apple growers, who produce on over 3,200 acres, benefitted from this project.

Feasibility Study for Culinary Theater

The Culinary Theater would promote the Vermont brand, and therefore all of the agricultural businesses that benefit from that brand. Unfortunately, due to significant funding cuts and restructuring at NECI, they are no longer positioned to be the lead on business plan implementation.

American Ginseng Calendar

The calendar received positive feedback and benefitted the state's small but growing ginseng industry.

LESSONS LEARNED

Seasonal Promotional Publication - Orchards & Wineries Brochure

The Orchards and Wineries brochure is a useful tool, but needs to be integrated into a more comprehensive approach to helping specialty crop producers connect with the tourism sector. Vermont recently convened an Agricultural and Culinary Tourism Council to build this strategy. The VtACT has received support from a subsequent round of Specialty Crop Block Grant funding.

Feasibility Study for Culinary Theater

The Vermont Agency of Agriculture recently convened an Agricultural and Culinary Tourism Council to bring partners together collaboratively to identify priority projects and potential funding for tourism activities. This Council has received the business plan and has agreed to "house" it until the appropriate entrepreneur comes forward.

American Ginseng Calendar

The Ginseng Association has not complied with reporting requests, and may not be eligible for future rounds of SCBGP funding.

CONTACT INFORMATION

Seasonal Promotional Publication - Orchards & Wineries Brochure

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Feasibility Study for Culinary Theater

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American Ginseng Calendar

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PROJECT 2: Apple Industry Support

PROJECT SUMMARY

Apple and Grape Producer Educational Support

Apples are an important agricultural commodity in Vermont's rural communities and working landscape. Apples comprise approximately 91% of total acreage planted to fruit in Vermont (USDA NASS, 2008). The apple industry generates jobs and supports communities and businesses across the State of Vermont and is an important part of the state's diversified agriculture. Apple orchards are complex ecosystems that require intensive management to produce high quality fruit. Tree growth and fruit production are

intricately affected annually by the diverse biotic and abiotic factors within the environment which include numerous insects, mites, plant pathogens, weeds, and vertebrates. Effective IPM is critical in profitable and sustainable apple production. Vermont apple growers want up-to-date information on effective IPM practices and tools so that they can incorporate them into their pest management programs to reduce economic, health, and environmental risks.

The cold climate winegrape industry is rapidly expanding; it is a 'new' crop in Vermont and in the region that offers significant value-added and agri-tourism economic opportunities. The newly emerging industry is at a critical stage in establishing production practices. With the continued 'explosion' of new people who are starting winegrape vineyards with limited or no background in agriculture, it is imperative to not only continue the cold climate winegrape IPM program but also expand educational outreach and training demonstrations so the growers start *from the beginning* to make pest management decisions that minimize health, environmental and economic risks. The Vermont Cold Climate Winegrape IPM Program has become the acknowledged resource in northern New England for IPM information.

Feasibility of Opportunity for Utility Apples (Ice Cider)

Ice Cider has been identified as a high-value market opportunity for utility apples. SCBGP funds were used to host a series of introductory workshops on ice cider production as a way to make Vermont's apple orchards more profitable.

Mystic Pie/Coombs Co-Branding

The Vermont Agency of Agriculture partnered in a co-branding initiative with Coombs Family Farms, one of the state's largest maple sugar producers, and the Vermont Mystic Pie Company.

PROJECT APPROACH

Apple and Grape Producer Educational Support

The following were the activities performed during the grant period:

- Collected orchard and vineyard IPM data and information for inclusion into apple and grape newsletters and websites.
- Acquired and included weather data for apple and grape newsletters and websites.
- Developed, electronically published and distributed apple and grape newsletters.
- Developed and implemented apple and grape industry education and training workshops

[Please see "Additional Information" section for web locations of newsletters and websites.]

Feasibility of Opportunity for Utility Apples (Ice Cider)

Processing is an increasingly important component of Vermont's apple industry. Business development planning is needed to determine the feasibility of making certain investments in infrastructure. Specialty Crop Block Grant funds was designated for capitalizing on opportunities to develop new markets for utility apples. The first project pursued under this category dealt with an introduction to Ice Cider making, building from the success of Vermont's first ice cidery, Eden Ice Cider. The second phase of work, the creation of a detailed production and marketing guide, was completed with and RBEG grant.

Mystic Pie/Coombs Co-Branding

Advertising was done through Shaw’s supermarkets to publicize the two Brattleboro-based companies, and Vermont’s specialty crop industry as a whole. A full page ad was run in Shaw’s widely-circulated “Wild Harvest” coupon and recipe book to highlight apple orchards, sugarbushes, and “Vermont’s spectacular working landscape.”

GOALS AND OUTCOMES ACHIEVED

U.S. per capita utilization of fresh apples and the base price per pound stayed approximately constant over the course of the grant period.

Apple and Grape Producer Educational Support

The Vermont Apple IPM Program is committed to increasing IPM implementation in commercial orchards across the state by continuing to deliver an integrated extension program that addresses the IPM priorities identified by growers, their advisors (i.e., IPM consultants) and other industry service providers. These stakeholders actively provide input and are an integral part in the development of the Vermont Apple IPM Program. Stakeholder-requested information is provided via a multidisciplinary website, newsletter, presentations, workshops, orchard tours, demonstrations, and one-on-one education. A specific target goal of the Apple IPM Program is to have at least 67 % of apple growers in the state report that the program has increased their knowledge of IPM and they have adopted at least one new IPM practice and/or reduced-risk alternative each year.

The Vermont Cold Climate Winegrape IPM Program has become the acknowledged resource in northern New England for IPM information. Currently, there are 200 stakeholders (growers, consultants, state and federal agency personnel, extension personnel, and industry reps.) from Vermont and beyond that have requested to receive cold climate winegrape IPM information on a regular basis. Stakeholder-requested information is provided via a multidisciplinary website, newsletter, presentations, workshops, vineyard tours, demonstrations, and one-on-one education. Through addressing the educational priorities identified by stakeholders, the goals of the Vermont Cold Climate Winegrape IPM Program are to (i) increase knowledge of how to use IPM strategies and techniques effectively; (ii) increase knowledge on how to prevent pest management problems; (iii) provide education that allows growers to determine if pesticides are needed in vineyards; and (iv) if pesticides are warranted, provide education which will allow growers to make informed pesticide decisions which will reduce economic, health and environmental risks. A specific goal of the program is to have at least 67 % of winegrape growers in the state and region report that the program has increased their knowledge of IPM and they have adopted at least one new IPM practice and/or reduced-risk alternative each year.

The following are results from a survey conducted of users of the apple and grape websites, respectively, in 2009:

Has the information obtained through the apple website allowed you to:

		Unsure 7.69%
		Reduce or minimize pesticide use
Increase your knowledge or understanding of Apple IPM	Yes 95.00%	Yes 85.00%
	No 5.00%	No 5.00%
	Unsure 0.00%	Unsure 10.00%
		Determine if pesticides are needed in your orchard
Adopt at least one new IPM practice	Yes 92.31%	Yes 89.47%
	No 0.00%	No 10.53%
		Unsure 0.00%

Effectively time pesticides if they were needed.
Yes 85.71%
No 14.29%
Unsure 0.00%

Reduce or minimize pesticide use
Yes 67.65%
No 2.94%
Unsure 29.41%

Has the information obtained through the grape website allowed you to:

Increase your knowledge or understanding of Grape IPM
Yes 97.06%
No 2.94%
Unsure 0.00%

Determine if pesticides are needed in your vineyard
Yes 91.18%
No 0.00%
Unsure 8.82%

Adopt at least one new IPM practice
Yes 69.23%
No 19.23%
Unsure 11.54%

Effectively time pesticides if they were needed.
Yes 67.65%
No 14.71%
Unsure 17.65%

Feasibility of Opportunity for Utility Apples (Ice Cider)

The Vermont Agency of Agriculture, Food and Markets contracted with Peter Mitchell, a professional trainer in cider and perry production, to offer an introductory course in ice cider production in August, 2009. Twenty two interested producers participated. The workshop combined classroom presentations, hands on work in the laboratory (supported by the Vermont Agency of Agriculture laboratory) and a tour of a local winery.

As a result of this project, a portion of the state's utility apple crop that was previously unprofitable has become profitable through value added ice cider production.

Wild Harvest/Coombs Co-Branding

The promotion, which included a coupon for pies, increased the number of Vermont Mystic Pies sold in the Wild Harvest section of Shaws. Anecdotal evidence suggests that the partnership may have been responsible for an increase in awareness of the Coombs brand.

BENEFICIARIES

Apple and Grape Producer Educational Support

The beneficiaries of the apple and grape programs are the many growers, consultants, state and federal agency personnel, extension personnel, and industry representatives in Vermont and beyond. Vermont's economy as a whole benefits from a vibrant, sustainable diversified agriculture of which apples and winegrapes are important components.

Feasibility of Opportunity for Utility Apples (Ice Cider)

The 22 participants in the courses were direct beneficiaries, but Vermont's apple industry stands to benefit from a high-value market for utility apples. Vermont's emerging wine industry could also be boosted by the success of a Vermont ice cider.

Wild Harvest/Coombs Co-Branding

Along with the two companies, which were direct beneficiaries, the Vermont suppliers of apples and blueberries to Vermont Mystic Pies also benefitted from an increase in sales. All producers that benefit from the strengthening of the Vermont brand were indirect beneficiaries, as the text of all publications spoke about Vermont’s “working landscape” and the “progressive, cottage-industry nature of the state.”

LESSONS LEARNED

Apple and Grape Producer Educational Support

Vermont apple and winegrape growers want up-to-date information on effective IPM practices and tools so that they can incorporate them into their pest management programs to reduce economic, health, and environmental risks. Through the support of the Vermont Specialty Crops Grant Program, this was provided.

Feasibility of Opportunity for Utility Apples (Ice Cider)

Significant interest exists in creating a fine Vermont ice cider product. However, ice cider is only one of several options for using utility apples; interest also exists for expanding traditional hard cider lines and crafting apple brandy. These efforts would complement a separate “Taste of Place” marketing initiative by the Vermont Agency of Agriculture that highlights traditional products that are uniquely tied to Vermont.

Wild Harvest/Coombs Co-Branding

This was a somewhat expensive promotion, and it was difficult to get evaluation data from Shaw’s. In the future, an evaluation plan should be developed before the expenditure is made.

CONTACT INFORMATION

Apple and Grape Producer Educational Support

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Feasibility of Opportunity for Utility Apples (Ice Cider)

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Wild Harvest/Coombs Co-Branding

Kelly Loftus, Communications Director, Vermont Agency of Agriculture, 802-828-3829, Kelly.loftus@state.vt.us

ADDITIONAL INFORMATION

Apple and Grape Producer Educational Support

Websites:

The Cold Climate Grape Production website: <http://pss.uvm.edu/grape/>
UVM Apple Orchard website: <http://orchard.uvm.edu/>

Weather Information (Degree Days)

2009 Growing Degree Days for Grapes
<http://pss.uvm.edu/grape/2009DDAccumulationGrape.html>

2009 Degree Day Accumulation for Apple Arthropods
<http://orchard.uvm.edu/uvmapple/pest/insects/2009DDAccumulationforArthropods.html>

2009 Degree Day Accumulation for Apple Scab Ascospore Maturity
<http://orchard.uvm.edu/uvmapple/pest/disease/2009DDAccumulationforAppleScabAscosporeMaturity.html>

2009 Degree Day Accumulation for Plum Curculio Oviposition
<http://orchard.uvm.edu/uvmapple/pest/insects/2009PCddAccumulation.html>

PROJECT 3: Vegetable and Berry Industry Support

PROJECT SUMMARY

Canning and Preserving Workshops

The Agency of Agriculture hosted 13 workshops during the fall of 2009 that demonstrated canning and preservation techniques at events and community centers across the state.

Support for Producers Seeking GAP Certification

Vermont berry and vegetable growers must develop skills to become more competitive in the world market. Those skills include becoming more cognizant of food safety issues and becoming more involved with third-party audit processes, in particular GAP. In an effort to increase awareness and participation in the third-party audit process, the Agency offered reimbursements of up to \$300 to cover USDA GAP-audit costs, educational opportunities to farmers, and support for our state GAP auditor to remain current in his knowledge.

Produce Safety Workshops

All vegetable and fruit growers, both organic and conventional, can benefit from reliable, up-to-date information about agricultural practices that contribute to the improved safety of their products, as well as information about food safety and handling requirements of wholesale buyers. The purpose of this project was to organize and offer on-farm workshops for vegetable and fruit growers that demonstrated and discussed such practices and, therefore, better enabled them to adopt improved food safety practices on their farms in the future.

Attention to good practices bearing on safe production, handling and marketing of fresh fruits and vegetables is of increasing importance to consumers, wholesale buyers and government regulators. Producers' success in protecting and expanding their markets, both direct markets and wholesale markets will increasingly depend on demonstrated adherence to well- established food safety practices.

Note: Planners of this project concluded that the informational needs of conventional and organic commercial fruit, apple and vegetable growers were sufficiently congruent that the workshops should address the informational needs of all of the above producer groups and that the workshops should be publicized and promoted accordingly.

PROJECT APPROACH

Canning and Preserving Workshops

Peggy Thompson demonstrated canning techniques with a variety of produce items such as berries, tomatoes, apples, cucumbers and more at various events and community centers around the state. Peggy provided the audience with an hour long demonstration as well as recipes and the Vermont Agency of Agriculture Preserving the Harvest booklet.

Support for Producers Seeking GAP Certification

The Vermont GAP auditor kept his training up to date, including attending a mandatory assessment in Maine. The GAP auditor also worked with a total of twenty farms over the course of two years, preparing them for GAP audits. Farms that successfully completed their audit were then able to submit invoices for up to \$300 to the VAAFM for reimbursement for the cost of the audit.

Produce Safety Workshops

A series of four planning discussions took place involving representatives of the Vermont Apple Growers Association, the Northeast Organic Farming Association of Vermont, the University of Vermont (UVM) Extension Service, the UVM Center for Sustainable Agriculture and the Vermont Agency of Agriculture, Food and Markets. During these discussions, the scope and content of two on-farm food safety workshops for commercial vegetable and fruit producers were developed; prospective farmer hosts were identified; tentative dates and promotion plans were identified. Implementation as follows:

- September 8, 2010: “Food Safety Practices for Direct Market Fruit and Vegetable Growers” at Cedar Circle Farm, E. Thetford. Tour of recently updated produce handling facility on an organic, direct-market farm. Interactive discussion of Cedar Circle’s recently adopted comprehensive food safety protocols and facilities for produce harvesting, washing, and handling and comparison with USDA-GAPs Program (Cedar Circle Farm Managers; Vern Grubinger, UVM Extension Vegetable Specialist; Steve Parise, VAAFM GAPs auditor; Ginger Nickerson, UVM GAPs Coordinator; Hans Estrin, UVM Extension Local Food Network Coordinator). Update on federal food safety legislation (D. Rogers, NOFA Vermont). Distribution of farm food safety-related publications. Attendance: 19 (8 growers, 2 service providers, 4 farm hosts, 5 workshop organizers).
- September 22, 2010: “Food Safety and Good Agricultural Practices (USDA-GAPs) for Commercial Fruit and Vegetable Growers” at Paul Mazza Farm, Colchester. Discussion of USDA-GAPs standards and auditing practices. Tour of farm facilities that pertain to safe food harvesting, processing and handling. Farmer-host perspectives and experiences on implementing and complying with GAPs standards, inspections and audits on a conventional, wholesale market farm operation. Discussion of food safety certification and wholesale marketing trends. Update on federal food safety legislation. (Mazza Farm Manager, Vern Grubinger, UVM Extension Vegetable Specialist; Steve Parise, VAAFM GAPs auditor; Ginger Nickerson, UVM GAPs Coordinator; D. Rogers, NOFA Vermont). Attendance: 22 (11 growers, 3 service providers, 2 farmer-hosts, 6 workshop organizers).

These workshops were well received by attendees, who participated actively in the discussions. An important outcome was a verbal recognition by a number of participants in each workshop that the development and adoption of food safety practices could be less onerous and expensive than they had previously thought. The September 8 workshop provided attendees with a firsthand opportunity to learn about an exemplary and well-developed farm safety plan for direct market growers. The September 22nd workshop provided participants with firsthand comprehensive and authoritative information about USDA-GAPs standards and auditing procedures.

These workshops were collaboratively organized, facilitated and publicized by: Vern Grubinger, UVM Extension Vegetable Specialist; Steve Parise, VAAFM GAPs auditor; Ginger Nickerson, UVM Center for Sustainable Agriculture, GAPs Outreach Coordinator; David Rogers, Policy Advisor, Northeast Organic Farming Association of Vermont; Steve Justis, Vermont Tree Fruit Growers Association; Hans Estrin, UVM Extension Local Food Network Coordinator. Also, coordination with farmer-hosts (Nickerson and Grubinger); draft workshop planning (Rogers); publicity planning (Rogers, Nickerson, Justis); USDA GAPs materials (Nickerson and Parise).

GOALS AND OUTCOMES ACHIEVED

Canning and Preserving Workshops

Ten demonstrations took place across Vermont, along with demonstrations throughout the day at Burlington's Chew Chew Food Festival and again at the Grow Local festival in Montpelier. The casual setting of fairs and field days, which hosted most of the demonstrations, did not allow for formal audience surveys.

Support for Producers Seeking GAP Certification

Five went through the audit process during the first season with \$300 reimbursement from SCBGP funds. Those original five, plus an additional 15 went through the audit process in the second season, receiving \$500 total in reimbursement, with \$300 coming out of this round of SCBGP funds, and up to \$200 coming out of a subsequent round.

Produce Safety Workshops

As described above, the projects goals were met through on-farm demonstrations and discussions for commercial growers of exemplary techniques, practices and facilities that contribute to improved safety of farm produce. Information bearing on food-safety-related marketing trends and buyer expectations were included to better enable growers to meet current and future marketing requirements.

While no long-term outcome measures were part of this project, the outcomes of this project will, of necessity, be long term. Growers will apply information and insights gained through their participation to develop and adopt improved food safety practices on their farms as dictated by changing market demands, economic and practical considerations.

On-farm workshops matched the stated goals of the project closely by providing commercial growers with information, demonstrations and discussions of exemplary food safety-related techniques and practices bearing on the production, harvesting, handling and marketing of fresh fruits and vegetables. Attendees were provided with important information and practical advice about USDA GAPs standards and auditing procedures. Attendees learned directly from farmer-hosts about the challenges and opportunities of improving the safety of farm products.

Actual workshop attendance by commercial growers met project goals: Average was 9.5 growers per workshop (project goal: 10/workshop)

BENEFICIARIES

Canning and Preserving Workshops

Vermont's fruit and vegetable industry stands to gain from more consumers interested in and knowledgeable about eating locally year-round. Verbal feedback from audience members was highly positive, particularly expressing surprise at how easy it is to can. Older people often had previous canning experience and were interested in starting again.

Support for Producers Seeking GAP Certification

The 20 farms that went through the audit process are direct beneficiaries, as they now have a broader variety of markets available to them. Consumers will now be able to buy Vermont-grown produce at major supermarkets, increasing access to locally grown food. The entire Vermont produce industry benefits from the opportunity to learn from the experience of these initial 20 farms, and we anticipate that approximately 20 additional farms will go through the audit process in the 2011 season.

Produce Safety Workshops

Direct beneficiaries were the conventional and organic commercial (direct market and wholesale) fruit, apple and vegetable growers in Vermont. However, food safety is important for all of the producers that benefit from the Vermont brand. Quantitative data pertaining to impacts of the workshops was not collected, but the potential economic impact is that commercial growers in attendance furthered their understanding of agricultural practices that can contribute to the safe production and handling of their farm products, thereby better positioning them to protect and expand their markets in the future.

LESSONS LEARNED

Canning and Preserving Workshops

Demonstrations took place primarily in the northern half of Vermont, covering Essex Junction, Burlington, South Burlington, Barton, Montpelier and Perkinsville. While this placed demonstrations in the most heavily populated regions of the state (particularly Chittenden County) feedback indicated that greater regional diversity is desired.

Support for Producers Seeking GAP Certification

In the first year, we saw mostly retention of current markets, rather than expansion into new ones, since most of the growers "had" to be GAP & GHP certified in order to keep their Hannaford or Price Chopper contracts. However, several have started to use the fact that they are now certified as a marketing tool as they look to supply other outlets with their products. From a monetary standpoint, growers have indicated that the reimbursement amount was certainly helpful and appreciated, but compared to the other costs of certification, especially the labor involved (primarily the paperwork, documentation, record keeping, etc.), it was not major benefit. Some of the larger operations have had to designate an employee specifically to set up and monitor their food safety program. This was an employee that prior to the certification program would have been doing other duties such as field work, etc. However, some of the very small operations had a more positive view, and felt the reimbursement was a bigger help.

Produce Safety Workshops

In order to maximize grower attendance, workshops were scheduled late in the day and in the latter part of the season. Many growers, however, were still very busy with late-season harvesting. Even though the workshop met attendance goals, it would have been advisable to schedule these workshops even later in the season to increase attendance further. Post season workshops and presentations for growers should be offered to complement on-farm workshops in order to meet most growers' informational needs and to

accommodate their work and production schedules. Such workshops are now being offered with support from subsequent SCBGP funding.

The short duration and field locations of these on-farm workshops did not allow for attendees to complete written evaluations describing new information learned and opportunities for implementation of new techniques. A very short checklist evaluation should have been developed that attendees could have completed quickly while, e.g., leaning on a crate or piece of equipment. Comprehensive evaluations for subsequent and on-going post-season workshops have been developed.

CONTACT INFORMATION

Canning and Preserving Workshops

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Support for Producers Seeking GAP Certification

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Produce Safety Workshops

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PROJECT 4: Grape and Wine Industry Support

PROJECT SUMMARY

This grant provided funding for the Vermont Grape & Wine Council during 2009 and 2010 to support education and marketing activities for this new, growing industry in Vermont.

PROJECT APPROACH

The following activities were performed with support of grant funds:

- Enhancements were made to the Council website in July, 2009
- Marketing materials that promote Vermont wines were created for use at festival events. These included banners, including a map showing the locations of vineyards and wineries across the state, and rack cards.
- The Council sponsored and participated in several high profile festival events that celebrated Vermont food and wine. These included the Lake Champlain Quadricentennial celebrations in June, 2009, the first ever Vermont Cheesemakers' Festival in August, 2009, and the Vermont Life Wine & Harvest Festival in September 2009
- The Council put on an Annual Conference in June of 2010 with educational seminars for grape growers and winemakers. Experts in vineyard techniques and winemaking practices were engaged to provide workshops and these were very well received.

University of Vermont professor Monserrat Aliste-Almena provided technical expertise to the Vermont Fresh Network and Culinary Tourism Working Group as they developed a guide to pairing Vermont

cheeses and other products, such as honey, apples and meats, with Vermont wines and beers. This work ultimately resulted in evaluation of 25 different Vermont wines for their pairing possibilities and production of a pairing guide (the guide itself was supported with different grant funds). The guide is available at: <http://www.vermontagriculture.com/news/2009/PairingGuide.pdf>

The Vermont Cheese Festival was held in July, 2010. This festival drew 1,180 visitors from around New England to Shelburne Farms in August, 2009. In addition, 61 members of the press attended – leading to festival mentions in the New York Times, Martha Stewart Living, Oprah Magazine, Boston Globe, Saveur Magazine and Food and Wine Magazine. Nineteen beer and wine makers were represented. Vermont wines were featured prominently, and participants were educated on appropriate Vermont wines to pair with Vermont cheeses.

GOALS AND OUTCOMES ACHIEVED

The number of licensed wineries in Vermont has grown from 15 in 2008 to 30 in 2010, and continues to increase. Membership in the Vermont Grape & Wine Council has grown from 40 people to 50 people.

Attendance at the 2010 Annual Conference was 60 people, up from 40 in 2009. Feedback on the conference from attendees was very positive

Website traffic has increased 50%

Attendance at the festivals in which the Council participated with its own booth to promote the industry as a whole was over 3,000 people (VT Cheese, Quadricentennial, VT Life Wine & Harvest). 1,000 rack cards were distributed at these events. In addition members of the press were in attendance and several articles were written in major Vermont publications about Vermont wineries at the festivals.

BENEFICIARIES

This project benefitted Vermont's 30 wineries, which currently produce \$5 million in revenue annually. It is expected that this exposure will contribute to an expanded wine industry in Vermont, which has substantial excess processing capacity and is forced to import substantial amounts of grapes from other areas. Over 200 Vermont farms currently supply grapes, apples, blueberries and other produce for wine production.

LESSONS LEARNED

Pairings and event participation continue to be primary focus for Vermont wine marketing, and currently allocated Specialty Crop Block Grant funds from later rounds will support this continued activity.

CONTACT INFORMATION

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PROJECT 5: Maple Industry Support

PROJECT SUMMARY

Vermont maple syrup is a high quality product that finds fans both within Vermont and throughout the U.S. and even the world. The goal of this project was to make more potential customers aware of the unique flavor of genuine maple syrup.

The mobile sugarhouse project was started out of a need to replace the existing mobile sugarhouse used by the Vermont Maple Foundation for promotional and educational events. The existing sugarhouse was about 20 years old and was in need of repairs. It was homemade, large, heavy and cumbersome. It did not meet health inspection criteria which was a concern. The need for a new mobile sugarhouse that would meet health inspection criteria was an issue that needed to be addressed in a timely manner as it is used throughout the year at various annual events such as specialty food days held at area ski resorts throughout the State and the use of the mobile sugarhouse as a key component in representing maple as Vermont's signature agricultural product at the Boston Ski Show as part of our partnership with Ski Vermont and the Vermont Chamber of Commerce. It represents Vermont Maple and Vermont Agriculture at a number of events including Eastern States Exposition.



Also, a Vermont Ski and Maple Map was completed and distributed as a co-marketing project between the Maple and Ski Area industries.

PROJECT APPROACH

The mobile sugarhouse is a key part of outreach performed by maple sugar makers. A new mobile sugarhouse was needed in 2009 to be modernized for concessions (bringing it up to code with the Vermont Department of Health) and made lighter and easier to tow, particularly in winter. The Vermont Maple Foundation raised all of the funds needed to purchase a unit, solicited bids, and acquired the new unit in summer, 2009.

The project was broken down into stages:

Stage One: Decide on the size of the initial trailer and research dealers to establish which brand best fit our needs in terms of both price and custom features.

Stage Two: Establish a committee from those sitting on the Board of the Vermont Maple Foundation who would be responsible for the project and for making progress reports to the Board.

Stage Three: After a dealer was chosen there were several meetings held at the dealership with the committee to design the trailer. The color was chosen with the idea in mind that graphics would be applied at a later date. The type and placement of windows and doors were chosen with the idea in mind that this would function as a custom concession type trailer. Maple sugar on snow and maple cotton candy is often

served from the mobile sugarhouse. Shelves outside the windows was important for serving samples of maple syrup and related value added products and to hold educational materials within easy reach of the consumer.

All considerations were made when planning the inside design so that all health dept. qualifications were met such as a separate hand sink. Deep basin sinks with high faucets were chosen to accommodate the large pots used to cook maple. Stainless steel was also chosen for the countertops and cabinet fronts which can be easily cleaned along with a surface on the walls that could be easily scrubbed down. Lots of lights, a furnace for volunteers' comfort at winter events, plenty of outlets, two reduced height counters to accommodate a cotton candy machine, ice shaver, or small refrigerator were planned in as well as a space for a stove in the final layout. The unusual development was planning for a roof other than the original trailer roof to be placed on at a later date. It would have to be fabricated later and added on to look like an actual sugarhouse with cupola. The vent fan in the trailer roof was planned to open up into the cupola.

Stage Four: Finalization of plans with presentation to the Board for approval before sending them to the factory so the trailer could be made.

Stage Five: After taking possession of the custom trailer it was towed to Hinesburg, VT where the additional roof was to be fabricated. It was to be a peaked roof with cupola and metal roofing.

Stage Six: Graphics were designed and approved by the Board. A company was chosen in Bennington, VT to apply the graphics.

Stage Seven: There are 5 panels on the sugarhouse above the windows and one diagonally in each corner. A smaller committee was formed from the original to see to the design and the application of graphic elements to these panels.

Stage Eight: It was decided to hire a manager for the trailer who would be responsible for all maintenance and would be responsible for maintaining the permanent and semi permanent inventories after the sugarhouse was initially stocked. Also guidelines for use, checklists for set up, take down and sign up sheets for anyone using the sugarhouse were drawn up.

This was a large, costly project with a very favorable outcome being the development of an extremely efficient, useful, and visually pleasing promotional and educational tool for representing Vermont's signature agricultural product—pure Vermont maple syrup.

The Vermont Ski & Maple Map serves as a tool for promoting Vermont maple syrup to visitors by combining a map of ski resorts with a map of sugar houses open to sell syrup. It is a strong cross promotion with tourism. In 2009-2010, 100 sugar makers participated in the map.

GOALS AND OUTCOMES ACHIEVED

The goals were to make this mobile sugarhouse an effective marketing, promotional and educational piece for the entire Maple Industry. This goal was achieved and is evident in the number of events in its' first year.

1. Several ski areas to participate in Vermont Specialty Food Days
2. Governor's Tree Tapping Event to kick off Vermont Maple Open House Weekend
3. Establishing a theme—Experience Maple in New Ways. Using this at the Vermont Cheese Festival where maple and cheese were paired in a unique way to create a totally new appetizer.

4. Many other events throughout Vermont using every opportunity to educate the consumer about pure Vermont maple products such as the Strolling of the Heifers, The Vermont Maple Festival, Fair Haven Vermont Welcome Center Fun Day, etc.
5. Went to Eastern States Exposition with an invite to participate in the parade on Vermont Day. While things were busy and crowded in the Vermont Building the volunteers in the mobile sugarhouse had time to talk to consumers and answer questions about Vermont maple and related agriculture. It became evident that people are drawn to the unique shape of the mobile sugarhouse and the beautiful graphics. Kids, who are our consumers of the future, were drawn to the sugarhouse and had great questions about maple.

The sugarhouse will continue to travel to between 15-20 events in Vermont each year, often to events welcoming people from out of state, such as conventions and festivals. It also travels to special events beyond Vermont, particularly in Boston and New York City. The maple sugar makers estimate that the trailer advertises Vermont Maple Syrup to over 80,000 people each year. These events are managed by the Maple Sugar Makers Association and are independent of SCBGP funds.

The Vermont Maple Foundation printed 75,000 copies of the Ski & Maple Map. The map goes through six distribution channels: the Vermont Welcome Centers, Vermont Maple Foundation, Vermont Ski Areas Association, Vermont Chamber of Commerce, Vermont Department of Tourism, and Vermont Agency of Agriculture. Distribution occurs primarily at places where visitors stop for information (Welcome Centers) and events. The Vermont Department of Tourism also includes the map in all relevant promotional packet mailings.

BENEFICIARIES

Everyone in the Vermont maple industry benefits, as does everyone at any event that the mobile sugarhouse participates in. This is an exceptional marketing, promotional and educational tool that will hopefully increase the economic outlook for maple for many years to come.

LESSONS LEARNED

The mobile sugarhouse was a large and costly project that proved to all involved the benefits of effective team work. It did bring forth the expression of two opposing views as to how a graphic on a mobile sugarhouse would best depict maple. One was a very traditional viewpoint including nostalgia—buckets on trees, snow, horses in essence a sugaring scene. The other was a stack of pancakes with syrup pouring down that would really make your mouth water. It did lead to some lengthy discussion and an understanding that maple can mean many uniquely different things to many different people within the Maple Industry and the consumers outside of it. The problem was never really solved, that how the sugarmaker views sugaring and maple in general and how the rest of the world views it can be radically different, but the sugarmaker always wants their view to win out regardless of consumer perception. This attitude will need to be reviewed from a marketing aspect in the future.

The Ski and Maple map resulted in improved communications between the Maple Foundation and the Department of Tourism. The Agency of Agriculture and The Department of Tourism have strengthened their relationship and plan to work together on many projects in the future.

CONTACT INFORMATION

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ADDITIONAL INFORMATION

Listings of events and more information can be found on the Vermont Maple Sugarmakers website: www.vermontmaple.org, which is also posted on the mobile sugarhouse itself.

PROJECT 6: Hops Industry Marketing Study

PROJECT SUMMARY

The purpose of this project was to assess the feasibility of growing, harvesting, and processing hops as a viable crop for Vermont farms. This project was motivated by a desire for Vermont farms to find additional means of diversifying their farm income and to maintain Vermont farm land in agricultural production.

Why is there an interest in the commercial viability of growing New England hops, and why now?

1. The beer industry is a mature industry with demonstrated longevity and stable consumption. This translates into stable market demand for raw ingredients such as hops. Even in the midst of one of the worst recessions in history, 2009 U.S. beer sales only decreased 2.2%

(<http://www.brewersassociation.org/pages/business-tools/craft-brewing-statistics/facts>).

2. In the 1970's a segment of the brewing industry, craft brewing, began to develop popularity in the Northeast, particularly in New England and Quebec. Craft brewers, originally considered fringe, are now accepted in the mainstream beer industry and make up 5% of the total US beer market share

(<http://www.thefreelibrary.com/Craft+Beer+Segment+Continues+to+Set+the+Pace+for+the+Beer+Category...-a0167648025>).

Not only does the category now make up a respectable share of overall beer sales, it continues to rise as the shift in consumption trends away from consuming volume quantities of mass-marketed, low cost beer, to selective, smaller quantities of higher quality products (François Biron. Agronomiste. Ministère de l'Agriculture des Pêcheries et de l'Alimentation Québec. Guest Speaker. 2010 Winter Hops Conference. UVM Extension. 3/26/2010).

To further express this point, while overall beer sales were down 2.2% in 2009, craft beer sales rose 10.3% (<http://www.brewersassociation.org/pages/business-tools/craft-brewing-statistics/facts>).

3. The nature of the craft beer industry is built on product differentiation, tradition, innovation, quality, integrity, and community (<http://www.brewersassociation.org/pages/business-tools/craft-brewing-statistics/craft-brewer-defined>). These qualities all lend themselves to supporting a local commercial hop production effort. Craft brewers' desire for freshness and quality, their support of local economies, their interest in uniqueness as opposed to ubiquity all help influence their purchasing decision making, and thus they are not solely buying on price. This support has been researched and quantified through this feasibility study.

4. The size and scale of the micro and craft breweries (they must produce less than 2 million barrels per year) place them in a position to be able to work with smaller scale local commercial hop production (<http://www.brewersassociation.org/pages/business-tools/craft-brewing-statistics/craft-brewer-defined>). They can more easily adapt to incorporating local hops into their production and recipes, and their volume needs, or a portion of their volume needs, are of a size and scale that would be feasible for New England producers to attain and supply on a consistent basis.

PROJECT APPROACH

To complete the feasibility study, the first step was to research market demand and product specifications for the finished product. Craft brewers, brew pubs and homebrew supply stores in ME, MA, NH, and VT were identified as the direct prospective target market for a New England grown hop.

A survey questionnaire was developed (see appendices). The questionnaire was available by Survey Monkey, as an e-mail attachment, and as a telephone interview. Brewers were contacted and requested to participate. Follow up was made by telephone and e-mail.

The intent of the survey was:

- to determine what varieties of hops these brewers use
- what volume of these hops they use
- what they pay
- how these prices fluctuate
- what purchasing relationships they are engaged in
- what the parameters or limiting factors of these relationships are
- what they would find most valuable in influencing their purchasing decision for New England hops
- what the finished product would need to be for them to consider using a New England hop
- what they would consider a fair price for a New England hop

After conducting the market research, the study then researched hop production feasibility. Could hops grow in New England, what are the bottlenecks to commercial production? Following research on the bottlenecks, production models for a 1 to 10 acre hopyard were explored.

A final written deliverable was summarizing the findings and presenting any economically and logistically feasible business models for New England Hop Production (attached)

GOALS AND OUTCOMES ACHIEVED

Surveys:

47 responses were received, a 65% response rate.

Research:

Bottlenecks researched included:

- access to and cost of raw materials for hopyard establishment
- access to and cost of mechanized harvesting equipment
- access to and cost of secondary processing
- growing conditions
- issues affecting crop yield

Business Models:

Four production models were developed that could present a financially and logistically feasible commercial hop growing venture.

The research was summarized into a final report and submitted in electronic and written deliverable. It has been published on the Agency of Agriculture website, and is currently being used by at least one prospective hops grower to develop a business plan for commercial hop production in Vermont.

BENEFICIARIES

Beneficiaries include existing farmers, prospective farmers, craft brewers, suppliers and value added service providers (such as hops processors, storage & warehouse facilities, equipment suppliers, loggers), the State Agencies of Agriculture and Farm Viability Business Planning Programs.

Quantitative benefits:

- Each 1 acre of hop yard has the potential to generate a net return to the farmer of \$4,640 to \$12,910 per year.
- Each 1 acre of hop yard will require a minimum investment of \$10,000 in equipment and supplies such as poles from loggers, hop rhizomes, cables, etc.
- Every 3 acres of hop yard will require \$5,000 in drying equipment.
- Every acre of hop yard will yield an average of 1,500 pounds of dried hops for the craft brewing market.
- Every acre in hop production will strengthen the state's agricultural economy
- Every farm participating has the potential of leveraging the State's Farm Viability Business Planning Program and Services

LESSONS LEARNED

While it is quite possible to grow hops in Vermont, there are many variables that could impact the positive outcome for each individual operation. Developing a proven hop yard model designed for optimal return on investment that could be replicated from farm to farm, and access to commercially available source material for replicable infrastructure needs would be ideal. Access to a commercial hop processor would also provide more stability and security for the industry and for the individual farmer. To these ends, Atlantic Hops is a new venture that began forming during this research project. Atlantic Hops will be bringing the hop yard model designed by Gorst Valley Hops, a small mid-western outfit in Wisconsin that developed and tested a hop yard model designed for optimal return per acre. In addition to bringing the model to Vermont farmers, Atlantic Hops will supply the source materials enabling farms to replicate the model with proven equipment and supplies. Atlantic Hops will also become a hops processor, and will provide the value added services needed to transform the raw product into a finished product that meets the needs of the brewing community. With this turn of events, there is now a much higher likelihood for the success of this project without requiring additional investment in trial and error/research and development.

CONTACT INFORMATION

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ADDITIONAL INFORMATION

The complete study can be found online at
http://vermontagriculture.com/buylocal/documents/Hops_Feasibility_Study_2010.pdf