# **Supporting Vermont's Swine Industry**

WLEF Final Report 7/31/16 Jennifer Colby jcolby@uvm.edu

## **Deliverables progress:**

- 1. Build a database of Vermont swine producers through existing workshops, social media, phone conversations, farmer word of mouth, etc.
  - As of July, 2016 there are 117 listserv members.
- 2. Use that database to establish centralized communication methods (as identified as preferable by participants).

To date, email/listserv has been desirable as identified through general conversations. <a href="mailto:vtswine@list.uvm.edu">vtswine@list.uvm.edu</a> was populated in early February, 2015. Currently 117 members on the list. Listserv outreach is ongoing through swine events and general livestock events, such as the Vermont Farm Show.

3. Develop pre-project surveys to capture the starting level and verify priorities within the industry as a whole.

The project started quickly, so pre-project surveys were not practical, however a mid-project short survey is in development. In addition, a swine advisory committee meeting served as a "focus group" to test a list of priorities developed through previous conversations.

- 4. Produce a minimum of eight on-farm and hands-on workshops in the field and at statewide locations to address issues of interest and concern. National and local experts in swine production, business management, nutrition, husbandry, carcass evaluation, value-added processing, regulatory issues, and environmental impacts will be invited to present information and in some cases provide direct technical assistance.
  - 9/10/14 Producing Better Pork: Genetics and Management at Hogwash Farm, featuring Dr. Steve Moeller, The Ohio State University Extension Swine Specialist
  - 1/16/15 Next Level Swine Production (full day event at VT Grazing & Livestock
    Conference) featuring Dr. Tim Safranski, University of Missouri State Swine
    Breeding Specialist
  - 1/17/15 Managing the Reproductive Needs of Heritage Swine (workshop at VT Grazing & Livestock Conference) with Dr. Tim Safranski
  - 2/14/15 Pigs: Creating the Right Conditions for Success (workshop at the NOFA-VT Winter Conference) with Brooks Miller and Anna Santini
  - 8/20/15 Planning for Great Pork Production Day One: Getting to Great Piglets with Dr. Tim Safranksi (at Sausage Man Farm)
  - 8/21/15 Planning for Great Pork Production Day Two: Finishing Fabulous Feeders with Dr. Tim Safranksi (at Snug Valley Farm)
  - 2/14/16 Pork Production at The Piggery (workshop at the NOFA-VT Winter Conference) with Heather Sandford
  - 2/14/16 Marketing Value-Added Pork (workshop at the NOFA-VT Winter Conference) with Heather Sandford

Approximately 264 attendees have attended these events, from five Northeast States. Assuming some overlap in attendance and multiple attendees from the same farm, this represents roughly 130 farm businesses. Additionally, direct farmer assistance was provided at 7 farms in August 2015, representing approximately 35 breeding sows and 580+ feeder pigs on the days we visited. The farms were in Addison, Chittenden, Windsor, Windham, Lamoille, and Caledonia counties.

Develop written and electronic materials for distribution through events and online opportunities.
 Discussion through the swine advisory committee has led to identification of informational needs. Fact sheets and other materials will be developed in preparation of spring/summer events.

General feedback through swine-related events has been that farmers are not looking for new fact sheets or quick materials; they are much more interested in one-on-one technical assistance and personal visits or workshops.

6. Use post-event surveys to identify further areas of educational need and new issues as they arise through discussion.

Some comments about further areas of educational need collected after the swine intensive day included:

- I would love to attend a farrowing specific class or one that focuses on pigs diet and how to supplement properly so the pig have a well-balanced and nutritious diet.
- Pasturing pigs in an ecologically sound way.
- Alternative feed sources for pigs and cattle. Also pasture plantings and rotations for pasture pork.
- More [Midwestern] swine experts.

#### Additional comments:

• I will change how I breed and wean my pigs. (2015 swine series attendee)

Professional development opportunities to help improve operation (from 2015 survey):

- Farrowing, nutrition, self-harvesting feed, growing grains for pigs
- Reproductive information
- Swine health (biosecurity updates)
- Pasturing info, crops/plants for in-field harvesting, AI training
- Alternative feeds—growing our own feed and working out a ration, winter housing for sows and farrowing
- Ideas for collaboration with farrowing operations, helping to maintain the integrity of breeding stock to produce good crossbreds for production
- Market stability is my main concern. We have created our system fully expecting that we will
  be overtaken by bigger players. I would like to see some effort statewide to assist smaller
  operations to develop sustainable and reliable markets.
- The biggest issue we have is the costs involved to improve our set up to expand our numbers.
- Organic production with less grain.
- Nutrition, balancing on pasture, health of sows, breeding how to choose breeds to match with sows, AI 201.
- More pasturing workshops.
- AI, sustainable land management with pigs.

Current trends affecting pork operations (from 2015 survey):

- Shortage of piglets this spring -hard to get pigs and expensive Lots of people interested in buying bulk meat and have the freezer space to do so. Very exciting.
- Feeder pigs are becoming really expensive. Due to what we see as an inflated cost we are looking to raise our own sow.
- Increasing awareness of difference between commodity pork and Vermont raised pork. How to maintain integrity and quality of Vermont raised product to honor that difference?
- Nutrient management (manure). one complaint could wipe a smaller producer out.
- We are scaling way back and only doing feeders because of the lack of infrastructure.
- People want to know where their food comes from and know it was treat with respect, got to be happy and was healthy. People want to eat pork raised naturally on the land.
- Organic Grain Prices.
- Not enough production to meet Increasing demand for humanely raised pork.
- Differentiating rotationally pastured product from pigs in dirt lots.
- Problems in the industrial production industry are resulting in increased farm sales. Also flavor and other meat qualities that can be hand by farm raised pork simply cannot be met my industrial chain. Customers notice.
- Availability of "quality" piglets.
- Age [not sure if age of farmer or pigs].

# Provide brief background summary which outlines the initial purpose of the project. Please include the specific need that was addressed.

Vermont's swine industry has been growing, as consumer demand for locally raised pork and specialty products like sausage have increased. Purchased-grain alternatives such as brewers' or distillers' grains, apple pressings, and whey are all being investigated as potential feed sources for hogs; utilizing waste products from Vermont's other growing food industries to produce an in-demand product more profitably. These indicators point to increased farmer opportunity.

One challenge for swine producers is establishing connections between farrowing operations, finishing markets (particularly on a year-round basis), and shared technical assistance for production. Some farrowing farms have trouble finding piglet buyers and some farmers with direct markets are challenged to find the right kind of piglets at the right time to satisfy their processing dates and customers.

Briefly summarize activities performed and tasks performed during the grant period. Describe the work accomplished in both quantitative and qualitative terms. Include significant results, accomplishments, conclusions and recommendations. Include favorable or unusual developments.

Activities and tasks performed during the grant period included on-farm and in-classroom workshops; development of networking opportunities for swine producers; direct technical assistance; producer needs survey(s) to capture current and future needs; and educational materials development.

Eight on-farm, classroom and conference workshops were offered in order to deliver technical information as well as create opportunities for farmers to interact and build stronger relationships. Workshops ranged from three-hours at a farm site to full-day conference sessions with multiple speakers.

An informational web page and VT-SWINE listserv were developed to encourage continued sharing of information. Topics discussed on the listserv have included biosecurity (PEDv) concerns, swine housing, bedding materials, shared purchases/trucking of equipment, piglets for sale, and state regulations.

While not a direct deliverable at the outset, a group of swine producers self-identified as serious business owners were included in direct technical assistance visits by a Swine Specialist with University of Missouri Extension. Seven farms were visited in five counties with sizes ranging from 8 to 350 feeder pigs and 3 to 15 breeding sows.

An electronic survey was distributed through the swine listserv with questions about animal numbers, labor, marketing methods, production systems, nutrition, and areas of need. Most use rotated or dedicated pasture, some use wood lots, and a small number use traditional barns. None of the respondents use slatted-floor systems.

Additional needs for professional development include reproduction and breeding, particularly artificial insemination; nutrition balancing on pasture; reducing costs of production; and market stability/managing growth.

Please highlight any major milestones that demonstrate the project achievements (based on your goals and outcomes template as defined in your grant agreement). Include: jobs, sales, total people worked with, and/or total hours of technical assistance provided.

Approximately 264 attendees have attended these events, from five Northeast States. Assuming some overlap in attendance and multiple attendees from the same farm, this represents roughly 130 farm businesses. Additionally, direct farmer assistance was provided at 7 farms in August 2015, representing approximately 35 breeding sows and 580+ feeder pigs on the days we visited. The farms were in Addison, Chittenden, Windsor, Windham, Lamoille, and Caledonia counties.

In addition to building local technical expertise and a network of producers (117 members of the VTSWINE listserv, for example), work under this project has increased the base of technical expertise outside of the state. Significant swine producing states such as Ohio, Missouri and Michigan have Extension Swine Specialists with different areas of expertise. From previous activities and projects, contacts in areas of genetics, carcass quality, and nutrition have been developed. This project allowed much more in-depth breeding and reproduction education.

Please provide insight into the lessons learned as a result of completing this project. Illustrate the positive and negative results of the project. Provide unexpected outcomes or results that were an effect of implementing this project.

Some of the greatest perspective on the whole project was captured within the mid-project producer survey. According to the survey conducted in 2015 (n=18), the number of pigs managed by respondents ranged from 0 to 230. The number of hours per week needed to manage the pigs ranged from 4 to 40. The number of people involved in the pig operation ranged from 1 to 4. The primary marketing approach is on-farm direct sales (farm stand, freezer meat), followed by off-farm direct sales (farmer's market, delivery). Only one third of respondents have pig rations developed by a nutritionist, however over half of the respondents use vegetables/non-apple fruits or dairy products to supplement their feed.

The sheer size difference between the farm with 10 pigs using alternative feeds and direct marketing, and the farm raising 500-600 feeder piglets for a wholesale client, make it difficult to offer one-size-fits-all technical education or resources. A lesson learned within the project was that the best approach for the range of needs was to take a requested topic (such as breeding and reproduction) and create an event around the topic where producers of various sizes would learn together and interact. Another lesson was to use a visiting expert for focused, individual technical visits.

One surprise resulting from these interactions was the positive reception to the use of artificial insemination (AI) in swine, particularly interest in using AI to preserve and improve the genetic traits of heritage breed swine.

If goals or outcome measures were not achieved, or if challenges were overcome, identify and share the lessons learned to help others expedite problem-solving.

When developing the project outcomes, we knew that some of the measures might be difficult to capture. Measures such as carcass yield, net costs and changes in labor are not always written down by farmers, or measured consistently across farms. Capturing benchmark data to assess whether farms are performing well or trending either up or down in comparison is necessary but also difficult when farms are small and variable in marketing and production methods. Project partners have communicated with the Farm to Plate Network and UVM Extension Farm Viability team to lead a viability indicators task force. Swine production is one of the possible focus areas for capturing cost and income data.

One lesson learned through this project is that short projects such as this one (eighteen months) are

difficult to capture long-lasting change or resulting trends. Offering workshops and technical assistance are activities that can be quickly delivered, however when livestock are involved, farm management changes can take much longer than one or two years to take effect, and results may be experienced much longer than that.

Finally, there is a distinction between fewer, larger Vermont swine farms growing for wholesale markets, and more, smaller farms who direct sell. The transition between small and large can be difficult and not all farms seek to grow. The project partners struggled with the question of whether to focus energy on the needs of the larger farmers (supporting more pigs) or encourage scaling up of smaller producers (more farmers).

### Please describe how the public benefited, directly or indirectly, from this project's accomplishments.

The increase in production by attendees at workshops and technical assistance recipients will benefit Vermont's public through increased ability to purchase local pork, which is highly in demand. It is too soon to tell, but the public may also benefit from more robust farms with viable community businesses.