Next Steps:
Implementation of Small and Very Small Niche Meat Harvesting and Cut-and-Wrap Facilities in California

A grant funded by
USDA Rural Development
Rural Business Enterprise Grant Program

FINAL REPORT

Submitted by

High Sierra Resource Conservation and Development Council
Auburn, California

November 30, 2012

2013 California Meat Summit
Board of Supervisors, El Dorado County Placerville Office
330 Fair Lane
Placerville, CA 95667
March 27, 2013
10 AM – 3:00 PM
Sponsored by UC Cooperative Extension – Placer and Nevada Counties
El Dorado County and Georgetown Divide Resource Conservation Districts

AGENDA

10 AM - Noon

1. Welcome and Introductions
2. RBEG Project Reports
    a. **Implementation of Small and Very Small Niche Meat Harvesting and Processing Facilities in California** – Dan Macon, Flying Mule Farm
    b. **Determining Demand for USDA-Inspected Beef Slaughter in an 18-County Region of California** – Morgan Doran, UCCE County Director and Livestock and Natural Resources Advisor, Solano County
    c. **Mapping Project of Slaughter and Processing Facilities in California –** Shermain Hardesty, UCCE Specialist, Agriculture and Resource Economics
    d. **Final Link: Getting Livestock from Farm to Fork** – Carina Bassin, Project Coordinator, Mother Lode Meats
    e. **Facilitation between Existing USDA inspected Processor and Niche Meat Producers for Improved Communication and Collaboration** – Roger Ingram, UCCE County Director and Livestock and Natural Resources Advisor
    f. **Regulatory Streamlining White Paper** – Pam Giacomini, Hat Creek Grown
    g. **Producer Value-Added Meat Economic Analysis Template**, Dan Macon, Flying Mule Farm

12:15 – 1:00 PM Lunch

1:00 – 3:00 PM

3. Identity top 3 priorities and break into discussion groups
4. Discussion group reports
5. Develop action plan of next steps
6. Adjourn meeting

Next Steps: Implementation of Small and Very Small Niche Meat Harvesting and Cut-and-Wrap Facilities in California

FINAL REPORT
Submitted by High Sierra Resource Conservation and Development Council

Background

The University of California Cooperative Extension organized a California Meat Processing Summit on April 8, 2010. The all-day event, held at the California Department of Food and Agriculture, included niche meat producers, meat processors, regulators and others interested in niche meat production and marketing. Following presentations from a variety of speakers, a facilitated discussion of opportunities and challenges occurred. This discussion identified the following barriers to the expansion of local and direct meat marketing opportunities:

- A lack of small and very small niche meat harvesting (slaughter) and cut-and-wrap facilities
- A confusing system of state and federal regulations regarding meat harvesting and processing
- Challenges for processors in working with a large number of small scale producers.

The flip charts from the 2010 Meat Summit are included in the attachments section at the end of this report.

With grant funding from the USDA Rural Development's Rural Business Enterprise Grant (RBEG) program, the High Sierra Resource Conservation and Development Council (HSRC&D) supported four projects that examined existing processing capacity and demand, opportunities for new and/or re-furbished facilities, and opportunities for increased producer and processor cooperation. In addition, HSRC&D examined the economic feasibility of a variety of approaches to increasing harvest and cut-and-wrap capacity with an emphasis on serving small-scale niche meat producers.

Our final report summarizes and synthesizes the findings of these related projects. We also provide references for producers, agency staff and rural economic development professionals to use in evaluating opportunities for expanding local meat harvesting and processing capacity.

Projects

I. *Inventory of Small and Niche Meat Harvesting and Processing Facilities with GIS Mapping*
Project Lead: Shermain Hardesty, University of California, Davis
Harvest and processing facilities were surveyed to determine whether they provide custom harvesting and processing services to individual producers. 213 CDFA Custom-Exempt facilities and 528 USDA-inspected facilities were contacted. A total of 96 facilities inspected by USDA or CDFA Custom-Exempt reported that they work with individual producers. Of these, 69 CDFA Custom-Exempt facilities indicated that they work with individual producers, as do 32 USDA-inspected facilities; five of these facilities reported being inspected by both agencies. Among the USDA-inspected facilities, 10 provide both slaughter and processing services, four offer only slaughter services and 18 offer only processing services. This database can be searched for facilities with specific characteristics, from the University of California Cooperative Extension Foothill Farming website: http://info.ucanr.org/smallfarms/index.html.

II. *Regulatory Streamlining*
Project Lead: Pam Giacomini, Producer
See Attachments section for white paper.

III. *State to Federal Processing Facility, ROP Program Training, Niche Meat Marketing Program Prototype*
Project Lead: Fred Hunt, Natural Resources Conservation Service
See Attachments section for report.

IV. *Determining Demand for USDA Inspected Beef Slaughter in an 18 County Region of California*
Morgan Doran, University of California Cooperative Extension
See Attachments section for report.

V. *Coordinate Live Animal Transportation, Delivery, Identification, Standardize Fabrication Instructions; Label Development; and Better Coordinate Product Pick-up and Transportation*
Project Lead: Roger Ingram, University of California Cooperative Extension
See Attachments section for report.

VI. *Lamb Fabrication Workshop*
See Attachments section for report

Synthesis of Project Findings and Recommendations

California livestock producers often cite lack of federally inspected meat processing capacity (for both slaughter and cut-and-wrap) as a significant impediment to economic success. The lack of processing facilities, according to this perspective, depresses prices paid to ranchers and restricts their ability to market meat directly to customers.

Based on this reasoning, some believe that the solution is to re-build a system of smaller-scale, community-based, USDA-inspected meat processing plants. Local ranchers would "flock" to these plants - and local consumers would as well. Like the baseball diamond in the midst of a corn field, people assume that if we build a small-scale meat processing plant, "they [ranchers and consumers] will come." However, while the raw numbers look positive (a plant that can process 2500-3000 head of cattle each year appears to generate a

positive return on investment), the details of actually operating such a plant are far less clear cut - for several reasons.

First, many producers talk about marketing their animals as meat directly to customers, but relatively few actually follow through on this marketing strategy. For example, a feasibility study completed in Siskiyou County in 2005 found that, "From a supply side, interviews with producers revealed that most commercial producers are happy with their present production arrangement…."[1] Marketing meat is much more labor intensive and people-oriented than hauling steers or lambs to the auction. Many ranchers would rather leave the marketing to someone else - they'd like to think that a local processor would pay them more for their animals AND handle all of the marketing responsibilities. Based on the projects funded through this grant, we are not convinced that there are enough producers who want to raise, process and market animals to support this type of smaller-scale plant.

Secondly, for decades, the meat processing business has largely been organized on the factory or manufacturing model - processors purchase raw material (live animals), convert it to another form (meat), and market this product to the end user. The factory model profits by using labor and technology to convert raw materials into a product that consumers want. Producers who market their own meat rely on a different model; they need a processor to provide a service. In this service provider model, ownership of the raw material and the finished product is retained by the producer of the raw material. The processor earns income through the service provided by its labor and technology rather than through the margin between the cost of inputs and value of outputs. In the current system, there is a tension between these two models - most processors try to serve both roles (with varying degrees of success).

Producer decisions about which processor to use are driven by the value of the service received. For example, a large USDA-inspected lamb processor in northern California charges $75-85 (depending on how many lambs a producer delivers) to custom harvest and process lambs. In addition, if a rancher can process 20 lambs in one lot, his/her transportation costs are lower - in other words, he/she can get lambs converted into meat products for $85-90 each depending on his/her distance from the facility. Conversely, having a ranch slaughter service and local meat processor provide the same services will cost a producer at least $125 per head[2]. This is a significant difference that can make a big impact on a rancher's bottom line. To win new business, a new local USDA processor would have to offer similar service at a competitive price. Based on our findings, it's not clear that this is possible from an economic perspective.

In our survey of CDFA Custom-Exempt and USDA-inspected harvest and processing facilities, 69 CDFA Custom-Exempt establishments responded that they do operate on a service-provider model. Similarly, 32 USDA-inspected facilities (of which five were also CDFA-inspected) responded to our survey. While the mapping project revealed gaps in access to inspected facilities for producers, it also suggests opportunities for increased

[1] "Siskiyou Slaughter Facility: Preliminary Feasibility Study and Action Plan," Great Northern Corporation and Economic Development "On Call" – July 2005, p. 9.
[2] These figures are for Placer County as of December 2012.

cooperation between producers and existing facilities. Given the difficulties (financial, regulatory and land use[3]) in establishing a new facility, our findings suggest the continued need to support these existing establishments.

Producers who were surveyed about demand for beef slaughter and processing services from three specific regional companies indicated strong (if seasonal) demand for these services. Given California's Mediterranean climate, demand for processing drops significantly from January through April. While an existing company that also processes its own animals may be able to cope with this seasonal fluctuation, these survey results suggest that a start-up company may have difficulty with cash flow during the slower months. The survey also highlighted the types of processing services most demanded by producers – especially the ability to make ground products. Based on these survey results, at least one existing company has considered adding a beef line to its facility.

The survey, as well as a more informal poll taken in Quincy, suggests that most producers who are interested in direct marketing meat products are operating on a relatively small scale. These findings indicate that processors who wish to increase business within this segment will need to work with a large number of small producers in order to operate their facilities at or near capacity. Consequently, operations, animal tracking, accounting and other functions become more complicated given the greater number of individual producers. In other words, it is far more complex for a processor to deal with many small producers than with fewer large producers, from both an operational and an administrative perspective.

Our project also examined opportunities for existing custom-exempt cut-and-wrap facilities to upgrade their facilities to obtain USDA inspection. While this strategy does not directly address the need for USDA-inspected harvest, it would potentially open up a wide array of possibilities for producers to work directly with local meat markets (which were mapped as part of yet another project). However, local custom-exempt meat markets may be reluctant to invest in facilities upgrades and deal with additional regulatory burdens to meet an uncertain demand for USDA-inspected processing. In many ways, the "culture" found in custom-exempt facilities is very different than that found in USDA-inspected plants, which further complicates efforts to "upgrade" existing operations.

Another solution might be to tackle the meat inspection regulatory system. Our meat inspection system was created to prevent the contamination of our food supply. Perhaps we need to look at a separate regulatory system that recognizes the differences between meat products that are marketed locally versus those that are shipped across the country or around the world. The white paper produced as part of this project proposes steps that would create greater regulatory flexibility while maintaining the highest degree of food safety.

Finally, there may be other opportunities for producers who market meat to cooperate. A survey conducted in Quincy as part of this project indicates that producers are interested in coordinating live animal and product transportation to and from processing facilities. Central shipping points and storage facilities would be relatively easy to establish and would help reduce individual producer costs.

To be sustainable over the long-term, producer and community decisions regarding meat processing and direct marketing must be made on sound economic principles. To assist in this effort, we have identified several spreadsheet templates for producers and communities alike to use in considering the economic feasibility of establishing slaughter/processing facilities. These templates are available through the Niche Meat Producers Assistance Network at www.nichemeatprocessing.org.

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[3] While this project did not examine the land use and permitting issues related to the construction of a new meat processing facility, these are likely to be significant considerations.

Economic Analysis

The Niche Meat Processor Assistance Network offers tools for economic analysis as well as links to recent meat processing feasibility studies. NMPAN's website is located at www.nichemeatprocessing.org. Links to recent feasibility studies can be found at http://www.extension.org/pages/27357/meat-processing-feasibility-studies. Obviously, any specific proposal for establishing a new facility or for upgrading an existing custom-exempt facility, would need to consider site- and project-specific economic factors, including producer demand, land and construction costs, permitting costs, and local labor and operating costs. In addition, individual producers should consider the economics of marketing processed meat versus more traditional live animal marketing channels. Accordingly, we have provided a template for producers to use in examining this economic feasibility.

Next Steps

1. We will post this final report and all attachments at the University of California Cooperative Extension Foothill Farming website (http://ucanr.org/sites/placernevadasmallfarms/). We'll also provide a link to our final report to the Niche Meat Processor Assistance Network.
2. We will provide the producer value-added meat economic analysis template as an Excel spreadsheet on the Foothill Farming website as well.
3. UCCE will present portions of this report at the 2013 PlacerGROWN Farm Conference at Lincoln High School in January 2013.
4. With the completion of this project, and with ongoing similar projects in other parts of California, we believe that a follow-up Meat Summit would be timely. The University of California Cooperative Extension and the El Dorado County office of the Natural Resources Conservation Service will work together to organize a summit in 2013.

Attachments

I. Steering Committee Members

STEERING COMMITTEE			
Last Name	***First Name***	***County***	***Representing***
Ahart	Greg	Solano	USDA-inspected Processor
Castle	Kevin	El Dorado	Custom-Exempt Processor
Cavalier	Jenny	Yuba	Producer
Doran	Morgan	Solano-Yolo	UCCE
Gates	Jim	Nevada	Producer
George	Holly	Plumas-Sierra	UCCE
Giacomini	Pam	Shasta	Producer
Gruen	Rick	Placer	RCD
Hadwick	Bryon	Humboldt	RC&D
Harper	John	Mendocino	UCCE
Harris	Jim	San Luis Obispo	Producer
Hunt	Fred	El Dorado	USDA-NRCS
Jerdee	Deana	Kern	RC&D
Johansen	Chris	Glenn	USDA-inspected Processor

Klinefelter	Valerie	Amador	RC&D
Larson	Stephanie	Napa-Sonoma	UCCE
Liable	Kathy	Nevada	Local Food System
Macon	Dan	Placer	Producer
Manas	Fred	Yolo	USDA-inspected Processor
Rodriguez	Jeff	San Luis Obispo	RC&D
Sinclair	Karin	Placer	Producer
Smith	Robyn	Madera	RC&D
Sorenson	Bob	Placer	Producer
Spaur	David	Merced	Economic Development

ADVISORY COMMITTEE			
Last Name	***First Name***	***County***	***Representing***
Firestein	Karen		USDA Rural Development
Hardesty	Shermain		UC Davis
Ingram	Roger	Placer-Nevada	UCCE
Riekse	Nancyjo	Placer-Nevada-Sierra-Yuba-El Dorado	RC&D
Sharma	Dr. Yudhbir		USDA Food Safety Inspection Service

II. Regulatory Streamlining White Paper

High Sierra Resource Conservation and Development Council
USDA Rural Development
Rural Enterprise Grant
Next Steps: Implementation of Small and Very Small Niche Meat Harvesting and Cut and Wrap Facilities in California
Regulatory Streamlining
Pam Giacomini, Project Lead
October 31, 2011

Concept for this paper

Growing out of a meeting coordinated by Roger Ingram, a Livestock Farm Advisor with University of California Cooperative Extension (UCCE) that was held at California Department of Food and Agriculture (CDFA) in April 8, 2010 a series of discussions began to try to identify and solve issues that surround the ability of ranchers to sell their meat locally.[4]

Funded by USDA Rural Development, with a Rural Business Enterprise Grant in conjunction with High Sierra Resource Conservation and Development Council this paper is one of several granted projects designed to help local ranchers and producers understand how to comply with the law in selling their products and to identify potential solutions for the future.

This paper specifically is to explore possibilities of regulatory streamlining as a way to enlarge the opportunities for local producers to have access to plants for harvesting and butchering of their meat in a manner that would allow them to legally sell to local consumers.

Background

The time appears to be ripe for a change in the current structure for the regulatory environment. Buy local; know your farmer; showings of "Food, Inc"; readings of "Omnivore's Dilemma" all have built a ground swell of consumers wanting to buy local products. Meat included and maybe especially meat.

The demand for locally grown food is growing dramatically. The U.S. Department of Agriculture (USDA) estimates the number of active farmers' markets to have more than doubled since 1994, to around 4700 nationwide. A person can do a quick internet search and find a myriad of local ranchers willing and working to sell their meat direct to consumers. Internet sites like "EatWild.com" are now abundant, where just a few years past, this wasn't the situation.

However, the current structure which came about due in part to state budget cuts in 1976, has the United States Department of Agriculture (USDA), Food Safety and Inspection Service (FSIS) (USDA-FSIS) handling all inspection of harvesting and processing plants in California, with a few exceptions. So while the demand for locally grown meats increases, the number of slaughter and processing facilities has decreased in the same period. Add to that

[4] See List of Challenges and Opportunities Developed by group participants, Meat Summit, April 8, 2010

the requirement of being able to sell only meat that has been harvested and processed under USDA inspection and that narrows the opportunity even more.

Issues

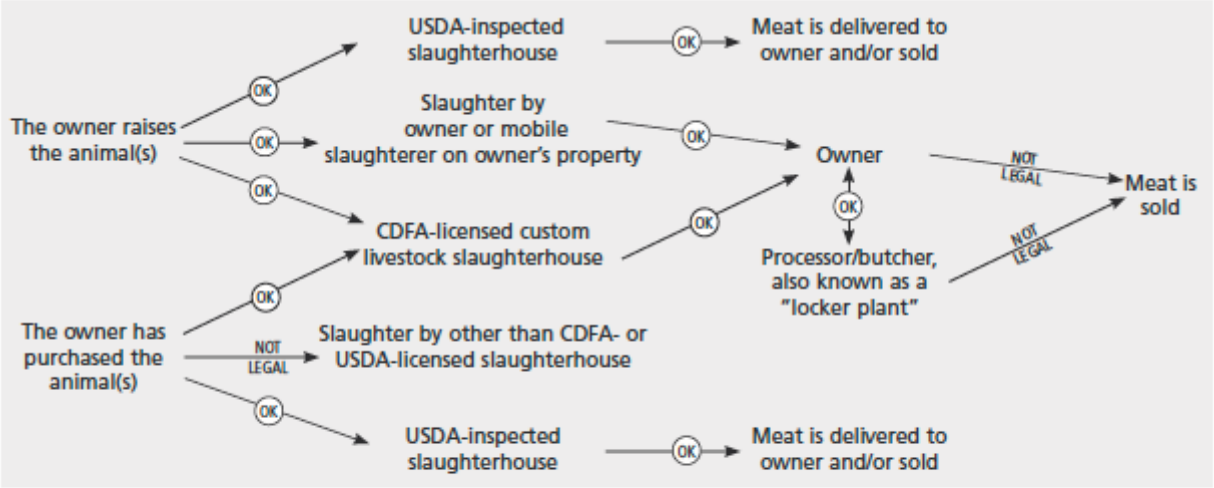

Figure 1: Schematic diagram for livestock slaughter transactions in California. Federal inspection is provided by the USDA Food Safety and Inspection Service (indicated here as USDA), and state inspection is provided by the California Department of Food and Agriculture (CDFA), Meat and Poultry Inspection Branch.

<u>Ability to Sell Meat To Your Neighbor</u>
In order to legally sell meat under the current set of laws and regulations both state and federal, a producer needs to have their meat harvested and butchered at an USDA inspected slaughter and processing facility. There are no exceptions.

California Department of Food and Agriculture does "inspect" some butchering (cut and wrap) facilities under two different exemptions. The first one is "custom exempt", which essentially means that these processors can cut and wrap meat, and the owner, the owner's family or workers, as well as non-paying guests can utilize the meat for their own use. It may not be sold.

The other exemption is "retail exempt". This is where the butcher (cut and wrap facility) purchases the meat from the producer after it has been harvested in a USDA inspected slaughter facility. That retailer then can further cut up the meat and sell it direct to consumers. In some instances these facilities are inspected by the County Environmental Health Department. This meat cannot be taken back by a producer and then sold.[5]

<u>Lack of USDA Inspected Slaughter and Processing Facilities</u>
Producers would say that there is a lack of USDA inspected facilities, both slaughter and butchering, that can accommodate their needs.[6] However conversations with local slaughter and butchering facilities would indicate that it is more a lack of coordination and uniformity in product delivered to them that causes them problems for staffing, and the ability to keep their doors open with all of the costs they incur.

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[5] See CDFA What We Do handout prepared by CDFA, Meat and Poultry Inspection Branch
[6] California USDA inspected Harvesting Sites, List compiled by High Sierra Beef. View at http://ucce.ucdavis.edu/counties/ceplacernevada.ucdavis.edu/Custom_Program550/USDA_Inspected_Harvesting_Sites.htm

It is imperative that a slaughter and butchering facility to plan their business volume in order to endure the financial overhead requirements, which includes staffing, compliance with USDA regulations, not to mention scheduling of intake of animals to slaughter and then butcher, package and have that product picked up and paid for in a timely manner.

A facility that can meet USDA inspection standards to do either slaughter and processing would cost beyond a million dollars to set up and operate. Numerous studies have been done that demonstrate a cost beyond $2 million for a moderately sized slaughter and processing facility from the ground up. Even a retrofit of a currently CDFA inspected custom exempt, butchering and processing plant, in order to achieve USDA inspection costs upwards of $1.3 million for a small (4000 square foot upgrade). Considering the cost factor to the Hazard Analysis and Critical Control Point (HACCP) requirements and it appears that there are many disincentives to a person who might be inclined to open a new or retrofit an existing facility that can meet USDA inspection requirements.

Meeting the HAACP requirements are a hurdle for many slaughter and processing facilities that may want to become USDA inspected.[7] Once a plant has their plan in place it becomes fairly routine and simply becomes the method by which the plant does business.

Add to that, neighborhoods that do not want a slaughter or processing facility in their backyard. However, they at the same time want to purchase their meat from their local rancher. They want to know where their meat came from.

Conversations with experts would indicate that the challenge for getting a facility to accommodate local needs is costly, time intensive, and highly challenged by the current regulatory climate. It appears that the only "fix" to the current regulatory scheme would be through federal legislation which would also require the state to assume the budgetary responsibility.[8]

For persons wanting to pursue development of a USDA inspected facility, USDA-FSIS will provide upon request a packet of information that contains a cover letter, instructions for filling out forms, timelines, process, as well as the related regulations and more.[9]

<u>The State Budget</u>

The failing budget back in 1976 was the initial impetus for the state relinquishing the bulk of its authority for inspection. The Governor saw that move as a way to cut costs. Therefore all inspection authority was granted to USDA, which means not just the authority, but also the responsibility to pay for inspection, which relieved the state of those costs. USDA will provide their inspectors free of charge to a USDA approved slaughter and processing facility up to five days a week and up to eight hours a day.[10]

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[7] Conversation with Chris Johansen, Johansen's Quality Meats, Orland, CA

[8] Conversation with Dr. Keith DeHaan, Food and Livestock Planning, Inc, 9534 N. Myrtle Ct.
Kansas City, MO 64156,

[9] Contact the USDA-FSIS, Field Operations, Alameda District #1, 620 Central Avenue, Building 2C, Alameda, CA 94501, or phone510-769-5716 and request the "USDA Compliance Packet"

[10] Meeting with United States Department of Agriculture, Food Safety and Inspection Service District Manager, Yudhbir Sharma, DVM; Abdalla Amin, Deputy District Manager; Adel A. Malak, DVM, MPVM, Deputy District Manager; and Mark W. Crowe, Supervisory Investigator, USDA Offices, Alameda, June 27, 2011

Prior to that, many state inspected facilities were in operation and commerce was able to take place between the local rancher and their neighbor that wanted to buy meat from a source they knew and trusted. Costs were paid by the state for their inspectors.

There are some however, that believe that having USDA inspection is the best system and we should not strive for other types of exemptions that would allow for CDFA inspection.[11] Studies have demonstrated that the sanitation level of USDA inspected facilities routinely surpasses that of CDFA inspected facilities.

Obviously the State Budget is still a mess and the opportunity to add back in a cost item (state inspection that is equal to federal inspection) probably won't occur anytime soon.

What If We Could Change the Regulatory Climate?

The deliverable for this paper was to create a streamlined regulatory proposal that could be carried forward in future years to make the USDA inspection system less onerous to smaller facilities that could perceivably be built or utilized in more small local communities. After the numerous conversations and meetings, it became apparent that no one with the USDA or the CDFA systems, as well as those working as professionals within the meat industry, believe that streamlining regulations will ever occur. That made it very difficult to craft a streamlined proposal. However, that was this papers deliverable, so two proposals follow. **The first would be federal regulatory reform:**

<u>Producer Transparency Act</u>

A slaughter or butchering facility must comply with the Federal Meat Inspection Act and the Humane Methods of Slaughter Act and is exempt from having a full time USDA inspector on site if they meet all of the following criteria:

- → The plant has in place an approved Hazard Analysis and Critical Control Plan;
- → The plant slaughters or processes less than 7,500 head per year.
- → The plant provides only custom slaughter and/or butchering services for producers that pay for custom slaughter and/or butchering services.
- → The producers the plant slaughters and/or butchers for deliver or have delivered to, the custom slaughter or butchering facility and then pick up or have picked up, the packaged meat product. The producers then deliver the packaged meat product to their own customers and can prove transparency to their consuming customers where and how the meat was raised. The producers customer may be households, or institutions that may be under another type of inspection authority (i.e.: state, county).
- → The plant completes an onsite inspection with USDA or a USDA certified inspector every two years.
- → The plant maintains records of HACCP procedures, HMSA procedures and the producers they slaughter or butcher for and shall certify compliance with all laws and regulations.
- → The plant shall not purchase animals for the purpose of selling packaged product themselves.

The concept behind the Producer Transparency Act is that the owner of the facility will have to ensure, by certifying processors comply with laws and regulations set forth in the Federal Meat Inspection Act which includes HACCP requirement, as well as the Humane Methods of Slaughter Act. This would offset the cost of having federal inspectors on site, thereby reducing costs for the federal government. It would also allow the

[11] Conversation with Dr. John Henson, Ph.D., Professor Meat Science, California State University, Fresno

slaughter and butchering plants to work longer hours if necessary and gain efficiencies in labor and overhead costs.

The Act would also ensure that in these types of plant approvals, the consumer knows the animal they are consuming can be absolutely traced and can directly question the producer that raised the meat on their table. This is exactly what the "eat local" movement is all about.

Of course, it is imperative as these proposed regulatory and statutory changes move forward that it results in a cost savings for small and very small slaughter and butchering facilities, and that it may provide a cost savings and incentives for those persons thinking about converting to USDA inspection that the costs and regulatory burden will be less, not more. No one is trying to undermine the safety of our current processes. There needs to be some adjustment to lessen the regulatory burden and cost requirements of these small plants.

The second would be a change to state statute and regulations:

→ Allow Mobile Slaughter Operators (MSO) on a "voluntary" basis be "licensed" by, and receive training and testing currently being administered by the California Department of Food and Agriculture, Meat Poultry Egg Safety Branch, to Livestock Meat Inspectors (LMI) in State licensed slaughter establishments.

→ Establish livestock producer "registration" requirements to be developed and implemented as stated in California Food and Agriculture Code Division 9 Animal Generally Part 3 Slaughtered Animals Chapter 4.1 California Meat and Poultry Supplemental Inspection Act Article 8

19014 Plant sanitation, sanitary dressing procedures, processing procedures, vehicle, equipment facility standards, and sanitation, including transportation and storage of product, shall follow procedures which may be set forth in regulations or operations manuals adopted by the department.

→ That only "licensed" MSO be allowed, with the owner's consent to slaughter livestock on proposed "registered" livestock producer's property.

→ Require that "registered" livestock producers that sell live animals use "licensed" MSO for slaughter on their premises with new owner's permission.

This proposal would allow a mobile unit to move to a producer's property and harvest livestock on those premises as long as both the mobile unit and the producers are registered. It would provide a much less expense unit to be available locally to producers.

How Do Producers Comply with the Law?

Currently, the only legal method for a producer to sell their meat that is packaged product to their local consumer is for the animal to be slaughtered and butchered (cut and packaged) at both a USDA inspected slaughter and processing facility.[12] These can be separate facilities, but each need to be under USDA inspection.

[12] University of California Division of Agriculture and Natural Resources, Publication 8146, Selling Meat and Meat Products, Linda J. Harris and Hsu Lint Tan. See also http://www.growninmarin.org for a very straight forward two page article written by Lisa Bush and Ellie Rilla, July 2008.

In the Central Coast a group of innovative producers recently went together to form the Central Coast Ag Cooperative.[13] They purchased a mobile harvesting unit, and found a way to comply with the requirements for USDA Inspection. The mobile unit will harvest, the meat is then transported to a USDA Inspected cut and wrap facility.

[13] "As Ranchers Return To Their Roots Everyone Wins – San Luis Obispo's New Mobile Harvest Unit" Press Release, August 3, 2011

III. State to Federal Processing Facility Report

High Sierra Conservation and Development Council
USDA Rural Development Rural Enterprise Grant
Next Steps: Implementation of Small and Very Small Niche Meat Harvesting and Cut and Wrap Facilities in California
Converting a State to Federal Processing Facility, ROP Program Development and Niche Meat Marketing Program Prototype
Fred Hunt, Project Lead

October 31, 2011

This project, "Implementation of a USDA Inspected Small Niche Market Harvesting and Cut and Wrap Facility in El Dorado County," achieved its greatest success in identifying the key questions relative to small-scale meat processing. This project brought helped increase collaboration between groups and helped new efforts that continue to work through the daily challenges inherent in offering local products to local people. Through this project there have been meetings with federal employees and with the California Department of Food and Agriculture (CDFA) to get assistance in navigating what appear to be uncharted waters (e.g., converting a custom-exempt meat processing operation into a USDA-inspected facility).

Because no two projects are the same, we found it difficult to develop a detailed budget. After looking at the two most recent projects (a USDA inspected cut and wrap facility, and Cal Poly San Luis Obispo's new meat lab) it appears that the cost per square foot would fall into a $350.00 to $570.00 dollar Ultimately, the existing regulatory system that local meat producers and processors are forced to work within does not fit for many reasons that will be discussed in this paper.

The El Dorado County and Georgetown Divide Resource Conservation Districts have been working with local niche meat producers and consumers to evaluate local interest in purchasing locally grown and processed meats. The interest level appears to be high and local meat is discussed at many functions throughout the county, from wine tastings to local restaurants. The best indicator is the increased demand experienced by local producers over the last several years.

The long term success of our County's local niche meat market is dependent on the availability of local USDA-inspected harvest and cut-and-wrap capacity.

Task 1: Acquire Construction Plans and Permits for the Expansion of Castle Meats Cut-and-Wrap Facility
For producers to be able to market cuts of meat (as opposed to live animals), their products must be harvested and cut-and-wrapped at a USDA-inspected facility. Castle Meats in Placerville was willing to explore the

possibility of seeking USDA inspection for its cut-and-wrap operation. The owner of Castle Meats has spent an entire life time working in the industry and for the last 20+ years had owned and operated his own shop. During that time he had been under state inspection as a State Custom Exempt Cut-and-Wrap Facility working with ranch harvests, county fair buyers, and processing wild game.

Over the course of several months, Castle Meats discussed plans to increase the size of the shop and to add a larger retail counter where local meat could be featured. High Sierra Conservation and Development Council's grant administrator, Nancyjo Riekse, met with the shop owner to discuss expansion plans. She indicated that there could be some type of monetary help in the form of a low cost loan or a grant, and she offered to explore the possibility. We were also encouraged by an effort to establish a new USDA cut-and-wrap facility in Esparto, California. Owner Fred Manas (of Manas Custom Meats) provided detailed information on his efforts. Mr. Manas mentioned several times that there were some real challenges in the process of receiving his certification from the USDA so he could open his doors for business. He employed two different consultants on his project, the first being the meat lab instructor (retired) from California State University Chico the other being the LeFiell Company from Reno, Nevada, an international company building harvest facilities throughout the world. Despite thorough planning and professional help, there still were problems with the final USDA grant of inspection for the facility. Ultimately, the facility (which had 2 existing buildings totaling of 4,000 square feet), cost $1.3 million to open.

Task 2: Construction - Expand Castle Meats production and retail floor space.
While the cost of the physical expansion of Castle Meats was not overwhelming, Mr. Castle balked at the cost and difficulty of working with the USDA Food Safety Inspection Service. Ultimately, he decided to continue operating as a state-inspected custom exempt shop rather than to jump through the additional hoops of USDA inspection. Should Castle Meats resume consideration of obtaining USDA inspection at some future point, CDFA may be able to provide some technical assistance.

Task 3: Equipment acquisition (Retail cold counter, compressor, light fixtures, meat rails and hooks)
Given the uncertainty related to seeking USDA inspection, Castle Meats has looked for creative means of financing the additional equipment needed. Despite assurances that low-interest loans and/or grants would be available, funds have not been readily accessible. As consequence, Castle Meats has not been able to proceed with expansion/upgrade plans.

Task 4: Provide facilitation and assistance to producers to meet regulatory requirements to become USDA compliant cut-and wrap-facility with a retail outlet.
As we began working on this task, we discovered that producers, processors and local food advocates throughout the U.S. are dealing with similar questions. The solutions (or lack thereof) vary due to differences in local and state policies relative to meat processing. Some counties have adopted the "Local Food and Community Self-Governance Ordinance of 2011." In other instances, states have inspection systems that are "equal to" USDA inspection. Prior to 1976, California also had an "equal to" system. Governor Jerry Brown (during his first term) cut the program to save money (and to eliminate what was viewed as a duplication of service). Currently, CDFA indicates that it is exploring re-establishing the "equal to" program. In the meantime, producers must work through the existing regulatory framework (which requires USDA inspection of harvest and cut-and-wrap processes). On June 27, 2011, Pam Giacomini (Hat Creek Ranch), Nancyjo Riekse (at that time, HSRC&D grant administrator), Carol Pranka (USDA Rural Development), David Schurr (Northern Area Supervising Meat Inspector for CDFA) and I met with Dr. Yudhbir Sharma of the USDA Food Safety Inspection Service in his Alameda office. We were joined by three additional regional FSIS staff (Adel Malak, Abdalla Amin and Mark Crowe). Dr. Sharma indicated that the current inspection system was established in 1906 by the Federal Meat Inspection Act. According to Dr. Sharma, "these laws are black and white – there is not any gray area." He

added, "We are here to enforce the law, not to act as consultants." We came away from the meeting discouraged about any opportunity for collaborating with FSIS on this project. Despite the negative tone of the meeting, David Schurr encouraged us to continue to explore opportunities for working within the system.

Based on what we learned at the Alameda meeting, the RCD reached out to local producers to let them know about the legal issues involved in marketing meat directly to customers. Producers agreed that increased local and/or regional capacity remains a top priority. Without increased capacity, USDA's "Know your Farmer, Know your Food" campaign, which is designed to increase demand for locally-produced foods and community support for farms and ranches, does not apply to livestock production.

While the lack of USDA inspected processing capacity is well documented in California and elsewhere, the expenses and operating costs involved in running such facilities is less well known. Based on discussions with producers, processors and consumers in El Dorado County and elsewhere, several key issues emerge:

1. Producers who want to direct market meat products need to be able to sell individual cuts as well as whole, half and quarter animals. Some consumers prefer buying in bulk, but most do not have sufficient storage space. There is also a need to develop partnerships with existing retail outlets and restaurants that will facilitate marketing greater quantities of meat (thereby increasing marketing efficiency for producers).
2. Some producers look to their processors as service providers; that is, the producers simply need a processor to convert a live animal into saleable product. The producer, in this case, is the marketer as well. However, most producers want to sell their animals to a processor at a premium and have the processor handle all of the marketing and distribution tasks. Most small scale processors are not set up to handle these additional tasks. Furthermore, this second model has not proven to be economically viable. To some extent, current regulations play a role in increasing costs; however, the high capital investment and long payback period necessary for constructing a new facility does not make the construction of such a facility attractive to potential investors. Regardless, there is simply not enough demand for this type of service (processing meat for a producer who does his/her own marketing) to provide sufficient throughput to make a new facility cash flow.

USDA does provide an information packet on state exempt cut-and-wrap facilities in obtaining federal inspection. While the information is very useful, it confirms our belief that such a conversion is extremely costly and complicated. The information packet can be obtained from the following contact:

United States Department of Agriculture
Food Safety and Inspection Service
Field Operations, Alameda District #1
620 Central Avenue, Building 2C
Alameda, CA 94501
Office Phone Number (510) 769-5712

Task 5: Meet with producers regarding processing and transportation logistics

Local producers are currently being harvested and fabricated in three facilities approximately three hours away (north, south and east) from El Dorado County. Due to scheduling challenges with the processors, the relatively small scale at which most producers are operating, and the difficulty in predicting when animals will reach finished weight/condition, collaboration on transportation is difficult.

Task 6: Develop ROP program in coordination with local high schools

Butchery, or the technique of taking a whole carcass and breaking it into retail cuts of meat, is rapidly becoming a lost art. Supermarkets typically purchase retail cuts; little if any meat cutting occurs on the premises. El Dorado County currently has three meat markets, two of which are state exempt cut-and-wrap facilities. The owner of one of the markets is enthusiastic about teaching a new generation of butchers. We met with the El Dorado Union High School District's Regional Occupational Program regarding the potential for this training effort. While the district representatives were also enthusiastic, they are unable to initiate any new programs due to budgetary constraints. While other sources of funding may exist, developing a training program locally is tied to the expansion of Castle Meats or another facility. Given the lack of funding for such expansion, we're not hopeful that a regional training program can be developed at this time.

Task 7: Develop marketing and promotional publications including advertising and economic development strategy

Despite the challenges outlined above, there is significant interest in marketing locally produced meat (on the producer side) and in purchasing locally produced meat (on the consumer and distributor side). While we have provided technical information to producers regarding processing and marketing, we have found that Castle Meats and our other local meat markets are the best educators for producers and consumers alike.

El Dorado County, like much of the Sierra Nevada foothills, is a year-round tourist destination. Agri-tourism, with our proximity to Apple Hill, offers an enormous opportunity for developing and expanding the market for local meat. During the course of this project, we met with wineries, food distributors and other local businesses, all of whom are interested in working with local meat producers. The challenge, in each case, is to provide a consistent supply in sufficient volume to meet local demand. While the lack of local processing is certainly a barrier, it is not clear that there are sufficient producers willing to engage in direct marketing to meet this demand.

To help address these issues, the RCD hosted a Local Meat Summit on October 14, 2011. This event brought producers, processors and consumers together to discuss opportunities for increasing the production of and access to local meat products. As a result of the summit, the RCD is moving forward with plans for developing an "El Dorado Gold Local Meats" promotional campaign.

At this time the local meat program is being referred to as El Dorado Gold Local Meats. This name is what the RCD has been using to promote and announce meetings. The producers will be able to put a name on their marketing campaign as it starts to grow and develop. It appears that the local meat campaign at this time is by word of mouth and through the local farmers markets. In a large urban setting this type of campaign would slowly wither, but in the hills it continues to grow due to the people of our county supporting each other and agriculture, the people of El Dorado County are the producer's best allies in continuing to keep and developing our sustainable agricultural base. Its true El Dorado County producers won't feed the world they won't even feed the state, but they will give the people of El Dorado County local traceable meat products.

IV. Determining Demand for USDA Beef Processing Survey Report

Determining Demand for USDA-Inspected Beef Slaughter in an 18-County Region of California

Prepared by Morgan Doran, UC Cooperative Extension, Solano County

This survey project was conducted to determine the number of beef producers interested in utilizing three specific USDA-inspected slaughter and processing facilities located in the southern-Sacramento Valley and foothill region of California for beef animals. At the time the survey was distributed only one of the three facilities in the survey was able to process beef, one facility was under construction and one facility was only considering upgrades to USDA-inspection. The survey was first available to producers online in early-March 2011 and was distributed through email lists maintained by Cooperative Extension and the California Cattlemen's Association. Paper copies of the survey were mailed to approximately 2,000 producers between the months of May and July 2011. All completed paper surveys were returned to the Solano County Cooperative Extension office. The survey and cover letter are available to view online at http://cesolano.ucanr.edu/files/122662.pdf.

The survey was designed to gauge producers' interest in three specific facilities described as Company A, Company B and Company C. Actual business names were not used to avoid the impression of endorsements from the University of California. Many survey questions were focused on the potential use of beef slaughter services from Company A since that type of service is a primary barrier to direct marketing beef products. The company profiles that were provided with the survey are below.

Company A is an employee owned company that has specialized in lamb products for nearly 50 years. Company A currently slaughters and processes lamb and goat under USDA inspection in their Dixon, CA facility and is considering the addition of small-scale beef slaughter services. Beef carcass processing and vacuum wrapping services will be offered, including high-end cutting and packaging of retail products. Hanging capacity is not a limitation. Ground meat will not be provided. Delivery of finished goods will be offered to the Bay Area and Central and Southern California. Certified organic services may be offered only if there is sufficient demand.

Company B is a nearly completed new facility in Esparto, CA (13 miles west of Woodland). Company B will provide USDA-inspected processing services for beef, lamb, goat, swine and game carcasses. Custom processing and vacuum wrapping will be the main service while also providing ground meat, sausage, curing, smoking, dry aging and retail. The facility will have a capacity to hang about 50 beef carcasses. If Company A provides USDA-inspected slaughter services, transport of carcass quarters between facilities (30 mile distance) will be arranged. Certified organic services may be offered, but not initially.

Company C is currently a State-licensed processor of meat and wild game and is located in Shingle Springs, El Dorado County. Facility upgrades necessary to offer USDA-inspected processing services are being explored and depend largely on upgrade costs and potential demand for services. If the necessary upgrades are completed, Company C will provide USDA-inspected custom processing and wrapping services for beef, lamb, goat, swine and game carcasses, including ground meat and sausage. The facility will have a capacity to hang 30 to 40 beef carcasses. Transport of carcasses from USDA-inspected slaughter facilities to Company C will be arranged.

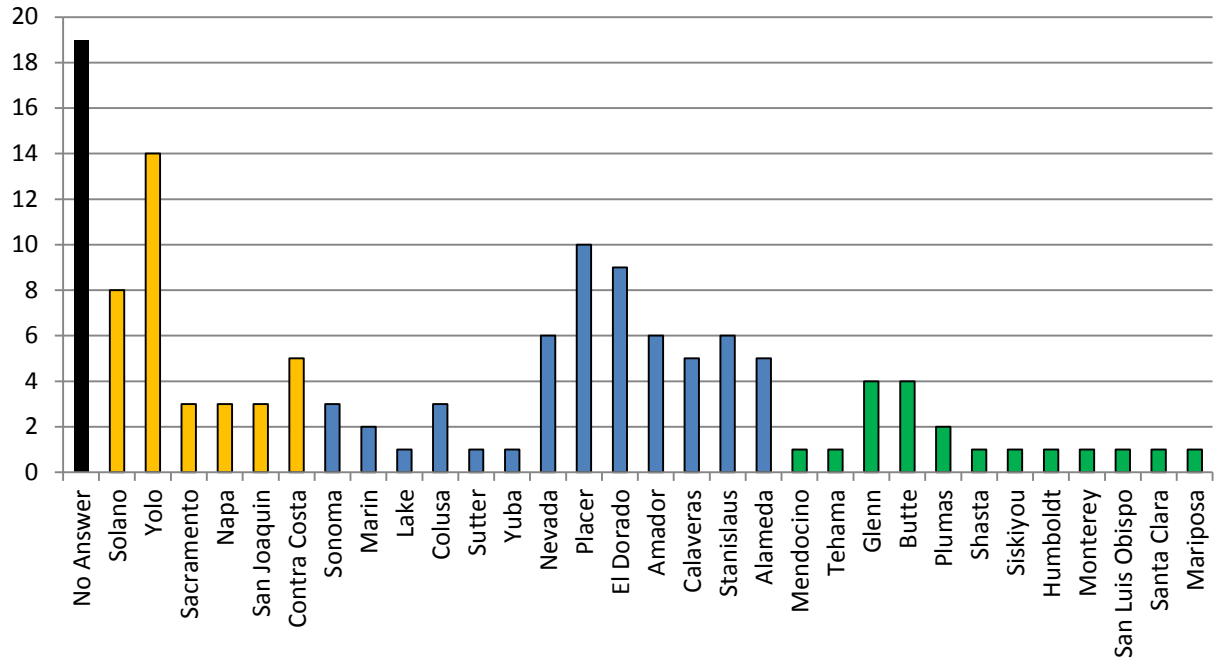
Survey Results

Geographic Range of Survey Respondents

A total of 132 completed surveys were received by the end of September 2011. Of that total, 83 of the completed surveys were returned as paper copies and 49 were completed online. We received surveys from at least 31 different counties in California, primarily from the counties within and surrounding the southern-Sacramento Valley and northern San Joaquin Valley, and some from as far as Siskiyou and San Luis Obispo counties.

Figure 1 shows the distribution by county of the survey respondents. The first six counties in the figure (yellow bars; tier 1) represent the counties directly bordering the home county of Company A. The next tier (blue bars; tier 2) represent those counties bordering the first tier counties and then all other counties (green bars; tier 3) from which we received surveys.

Figure 1. Number of survey respondents from each county*.

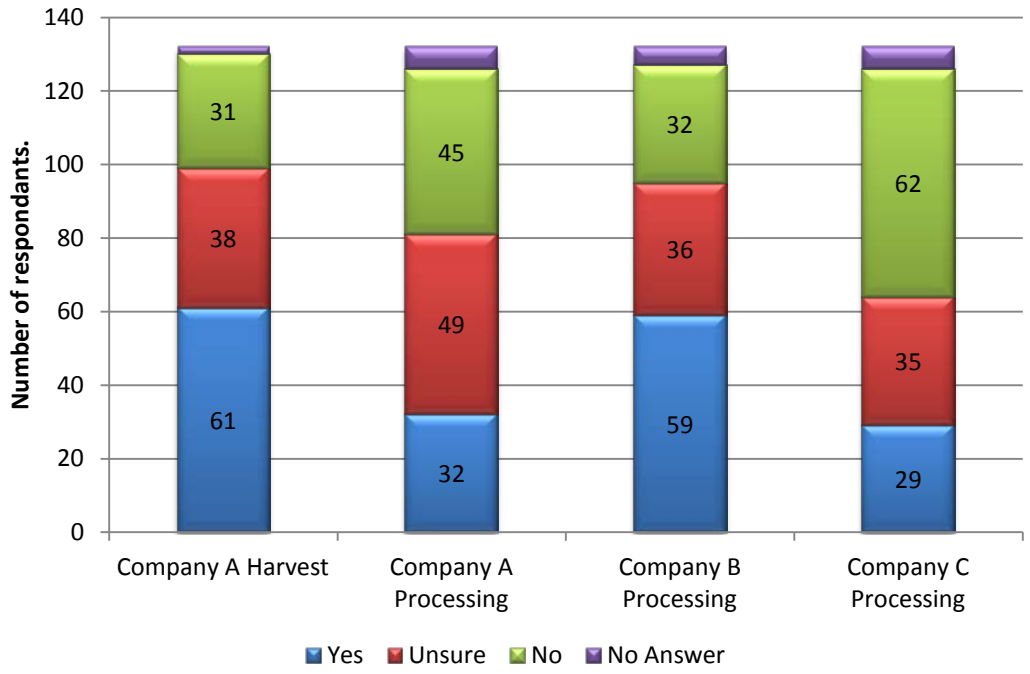


*Yellow bars = tier 1 counties, blue bars = tier 2 counties, green bars = tier 3 counties

Interest in Utilizing Facilities

Survey participants were asked to indicate whether or not they would use each facility for specific services or if they were unsure of their choice. The results of this question are presented in Figure 2. The greatest amount of interest was to use Company A for harvest (slaughter) service (Yes=46%; Unsure=29%; No=23%) and Company B for processing (Yes=45%; Unsure=27%; No=24%). Interest in using Company A for processing services was much more uncertain with 37% unsure and 24% answering "yes." Almost half of the respondents indicated that they would use or were unsure about using Company C for processing services.

Figure 2. Number of survey respondents indicating interest in using specific facilities (n=132).



Interest in Beef Slaughter Service

In order to quantify the potential demand for beef slaughter service from Company A survey participants were asked to estimate the number of beef animals they would send to Company A over a 2.5 year period of time, in two-month increments (Table 1.). Respondents indicated relatively low demand for slaughter services in the latter half of 2011 followed by generally increased demand in 2012-2013. Demand cycles were apparent with the January – April time period showing much lower levels of demand, most likely due to availability of market weight animals that is dependent on animal age and forage resources.

Table 1. Number of beef animals respondents would send to Company A for slaughter, partitioned by the respondents' indicating "Yes" or "Unsure" regarding their use of Company A.

	2011			2012						2013					
	Jul Aug	Sep Oct	Nov Dec	Jan Feb	Mar Apr	May Jun	Jul Aug	Sep Oct	Nov Dec	Jan Feb	Mar Apr	May Jun	Jul Aug	Sep Oct	Nov Dec
Yes	164	172	129	550	88	798	189	816	767	46	48	470	341	505	473
Unsure	80	83	70	35	32	131	218	92	76	45	53	171	277	100	77
Total	244	255	199	585	120	929	407	908	843	91	101	641	618	605	550
							Total 2012 = 3,792							Total 2013 = 2,606	

The survey was designed to collect information regarding producers' willingness to use the three facilities, the degree of certainty in sending beef animals to Company A for slaughter and the counties where producers raise beef livestock. This information can be used to partition other survey information such as the number of beef animals they will send for slaughter (Figures 3, 4 & 5). Two graphs are used to display the information in Figures 3, 4 & 5 to demonstrate the effect of one outlier survey return. The outlier survey respondent indicated a desire to use Company A for slaughter and a high likelihood of sending 2,000 beef animals to Company A in 2012 and zero animals in 2013. This was the only survey participant indicating a desire to send above 620 beef animals in 2012, which created erratic jumps in the number of beef animals for the time periods of Jan-Feb, May-Jun, Sep-Oct and Nov-Dec 2012. While this one survey is a significant contribution to the total number of animals, a better understanding of the trends can be seen by removing this one outlier from the graphed data. Figure 6 shows the distribution of the 67 survey respondents who are willing to send beef animals to Company A for slaughter in 2012. Of the 67 respondents, 63 or 94% will send less than 125 beef animals each (total=895; average=14), 2 will send between 125 and 250 beef animals (total=294; average=147), one will send 620 animals and one will send 2,000. While the outlier survey respondent indicated that they are very likely to send 2,000 animals to Company A in 2012, it is prudent to understand the risk of basing demand projections and corresponding capital improvements on data in which one beef producer is supplying 52% of the beef animals to Company A for slaughter.

Removing the outlier survey data (see Figures 3b, 4b & 5b) shows increasing numbers of beef animals going to Company A for slaughter from 2011 to 2013 with seasonal periods of low numbers between January and April. A large majority of respondents willing to send beef animals to Company A are quite certain that they will use the facility (Figure 3) and are very likely to send the indicated number of animals (Figure 4).

The geographic distribution of beef producers willing to send animals to Company A for slaughter shows that the Tier 1, 2 and 3 counties (see Figure 1 for counties in each Tier) will supply 17%, 68% and 14% of the total number of beef animals respectively, with the outlier removed (Figure 5b). The outlier survey respondent did not indicate the county of operation, but in a phone conversation the respondent indicated that beef animals would be sourced from multiple locations.

Figure 3a. Number of beef animals producers would send for slaughter at Company A, partitioned by willingness to use the facility (with outlier).

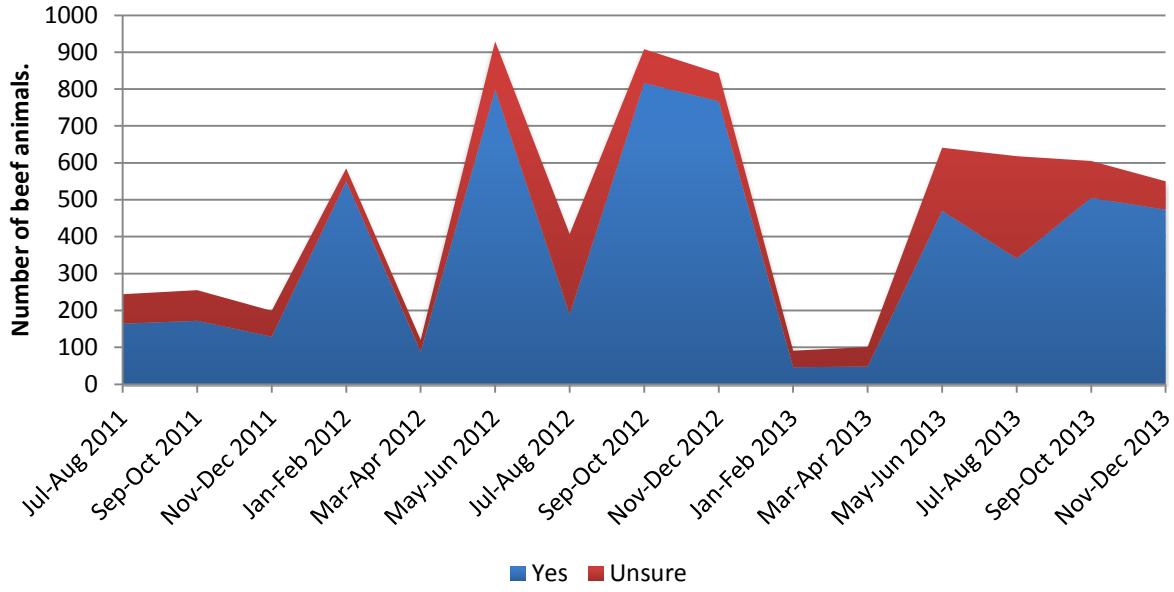


Figure 3b. Number of beef animals producers would send for slaughter at Company A, partitioned by willingness to use the facility (without outlier).

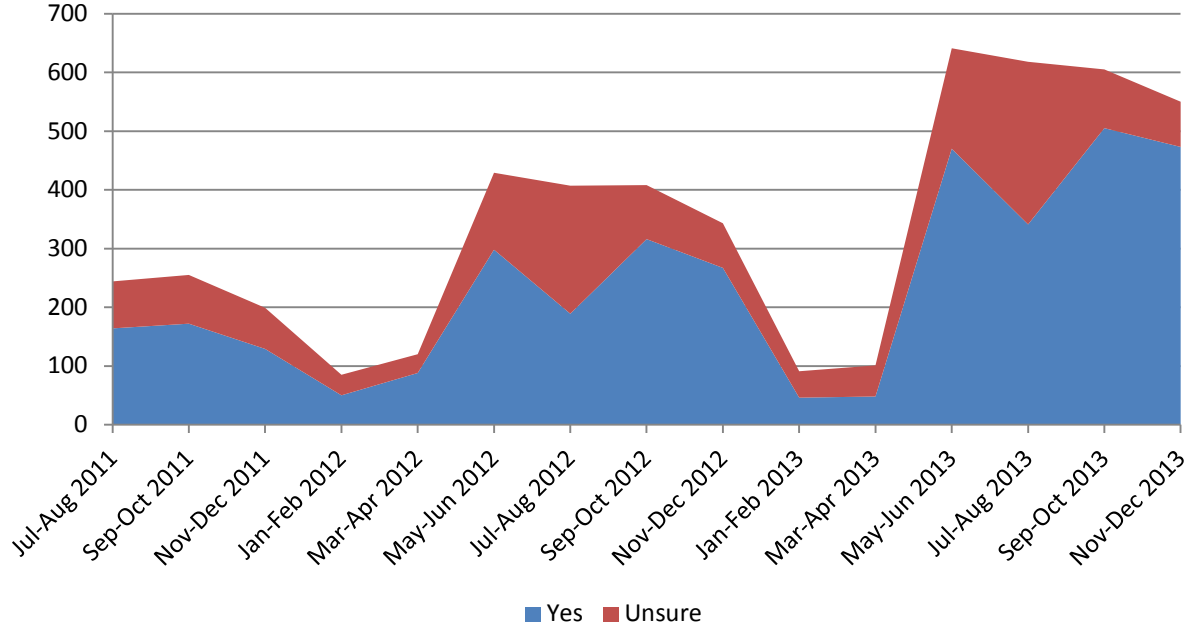


Figure 4a. Number of beef animals producers would send for slaughter at Company A, partitioned by likelihood of sending the indicated number of animals (with outlier).

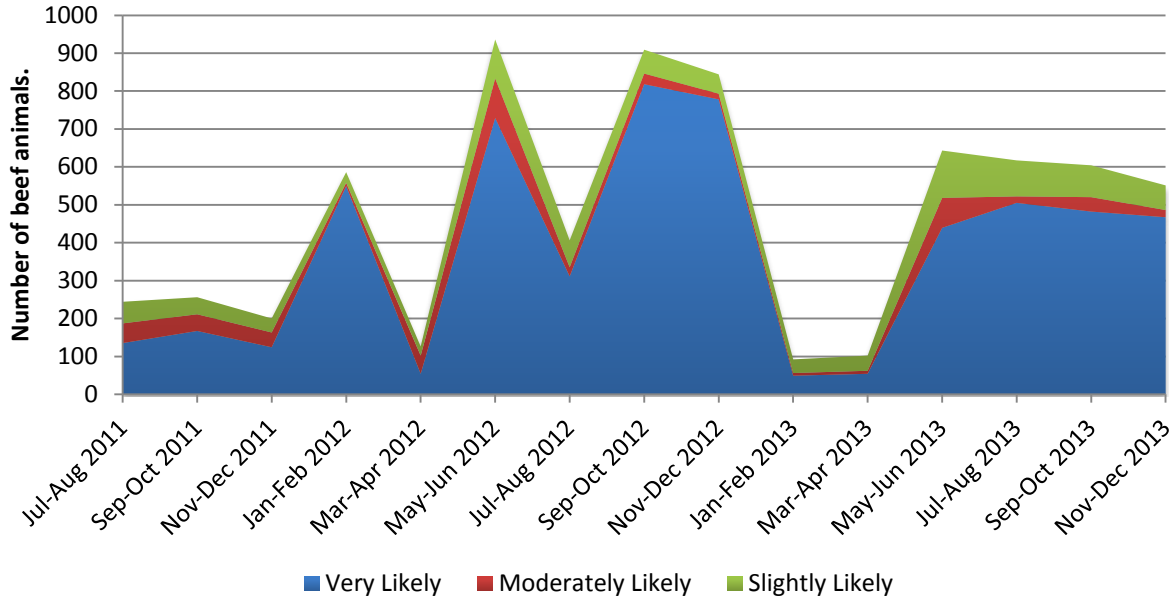


Figure 4b. Number of beef animals producers would send for slaughter at Company A, partitioned by likelihood of sending the indicated number of animals (without outlier).

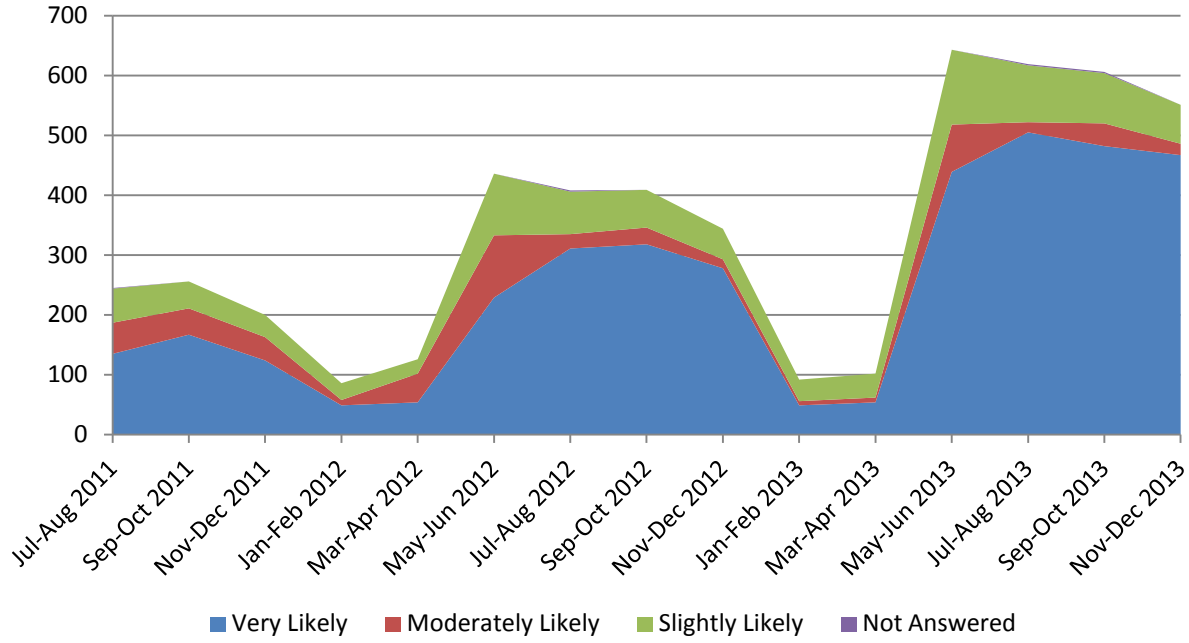


Figure 5a. Number of beef animals producers would send for slaughter at Company A, partitioned by geographic regions as described in Figure 1 (with outlier).

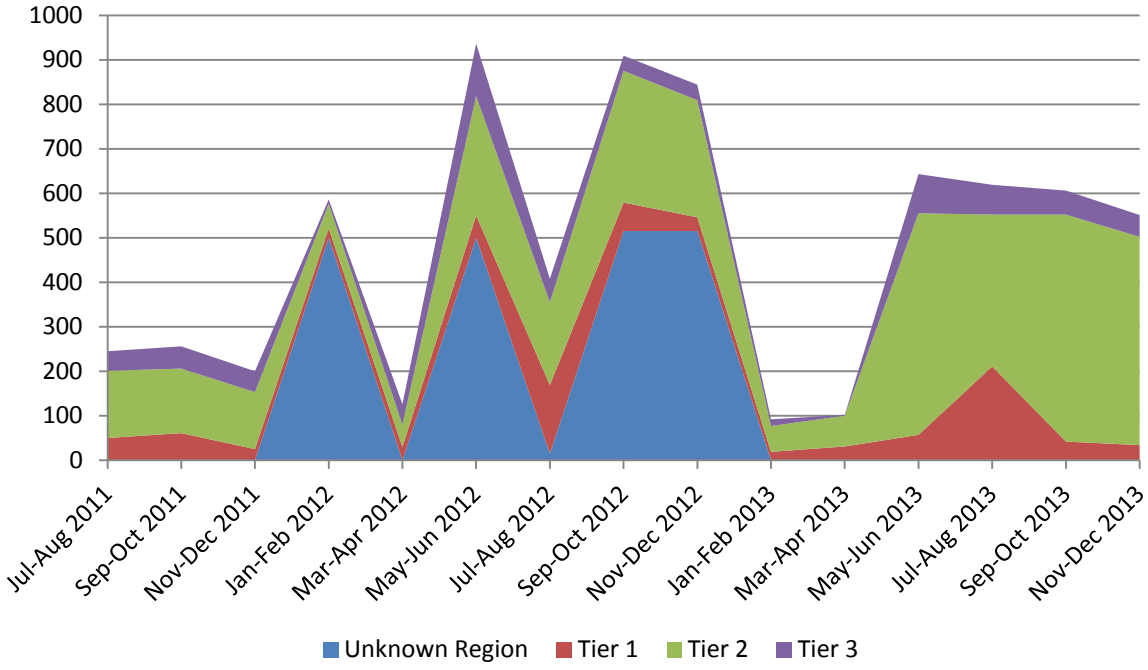


Figure 5b. Number of beef animals producers would send for slaughter at Company A, partitioned by geographic regions, as described in Figure 1 (without outlier).

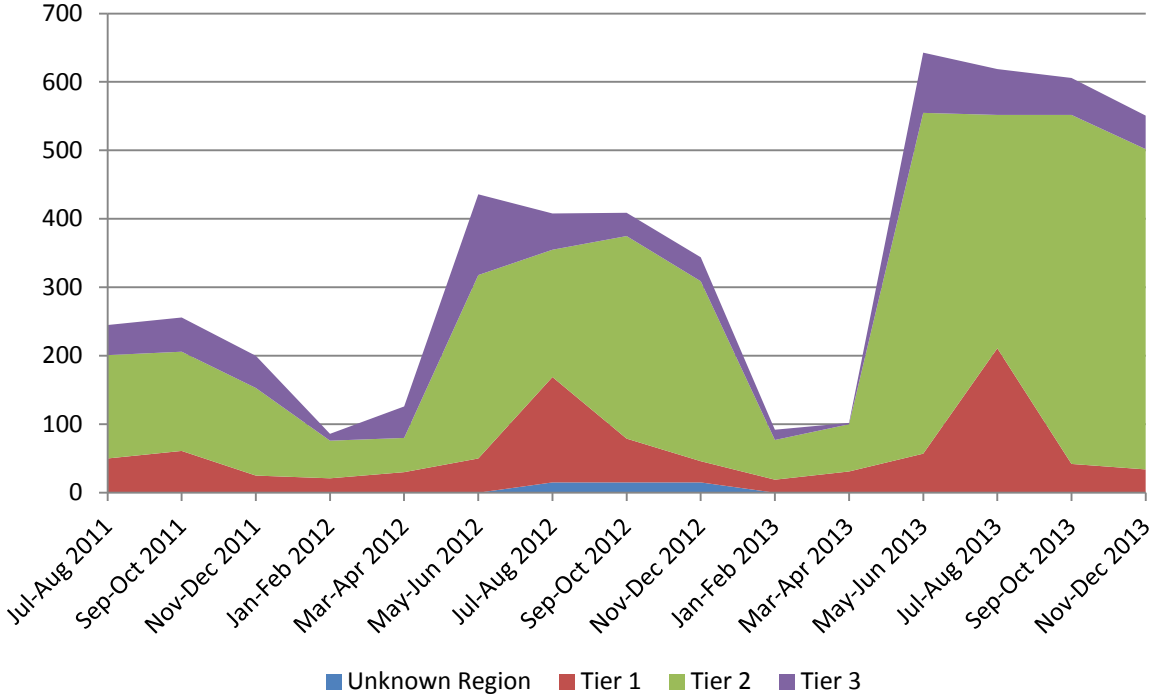
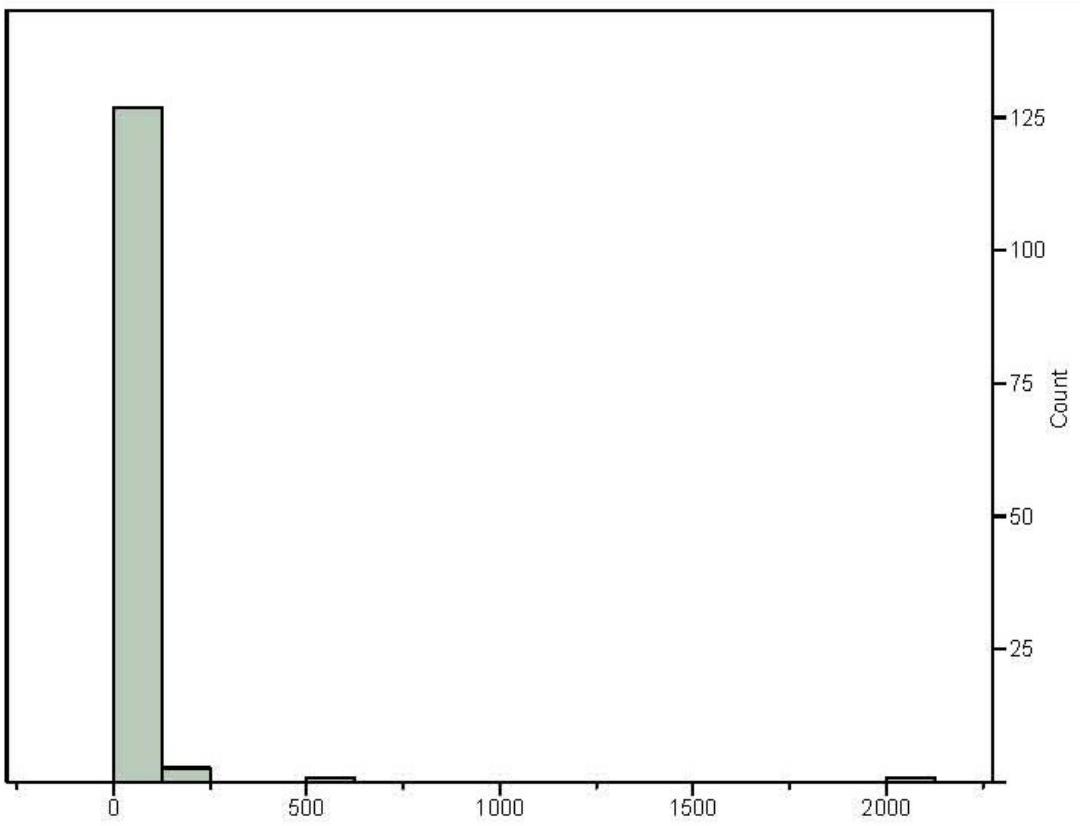


Figure 6. Distribution of respondents separated by the total number of animals they are willing to send to Company A in 2012.

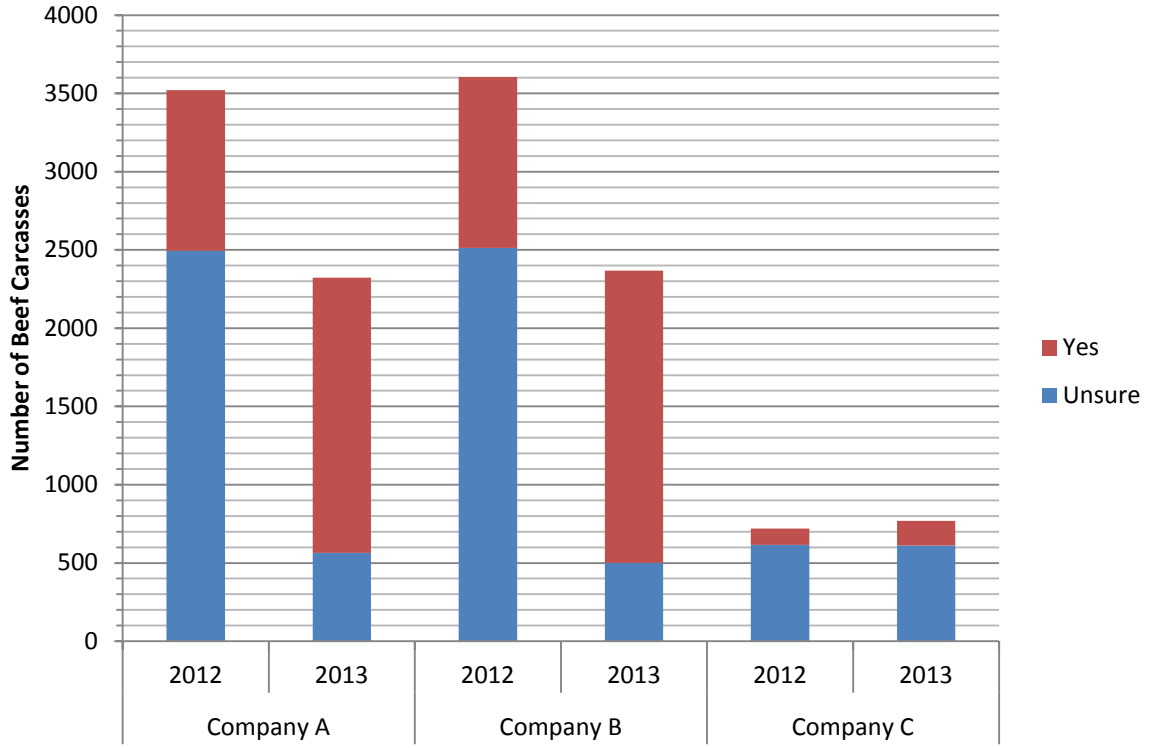


Number of animals.

Interest in Beef Processing Service

The survey data did not allow a direct determination of the number of beef carcasses that producers would send to Companies A, B and C for USDA-inspected processing, since that question was not asked in order to keep the survey brief and focused on demand for slaughter services. The potential number of beef carcasses producers would send to Companies A, B and C was estimated based on the respondents' answer as to whether they would use a particular company for processing (question 1) and the number of beef animals they would like to have slaughtered at Company A (question 3). For example, if a respondent answered "Yes" or "Unsure" to processing at Company B and indicated they will have 20 beef animals slaughtered at Company A, all 20 carcasses go to Company B for processing, assuming that the producer will use only one company for processing. This assumption is flawed since the producer may choose to use more than one processor, but at a minimum this shows the potential number of animals producers may choose to have processed at each facility. Figures 7 shows the potential number of beef carcasses in 2012 and 2013 that producers might be willing to have processed at Company A, B and C.

Figure 7. Potential number of beef carcasses for processing in 2012 and 2013 at Company A, B and C. The number of carcasses reflects the number animals producers indicated to have slaughtered at Company A and answered "Yes" or "Unsure" to utilize Company A, B or C for processing.



A closer review of the number of beef carcasses expressed for each company in Figure 7 shows that the sum of carcasses for all companies for both years (13,302 carcasses) far exceeds the total number of beef animals respondents are willing to send to Company A for slaughter in 2012 and 2013 (6,398 beef animals), as expressed in Table 1. The large discrepancy is due to respondents indicating that they will use more than one facility for processing causing the same animals to be included in more than one company for processing. This explains the reason why Figure 7 only shows the potential number of carcasses for each company.

Ratings of Additional Services

In order to help beef slaughter and processing businesses understand the needs livestock producers have for specific services related to beef slaughter and processing, survey participants were asked to rate the importance of nine services ranging from livestock pick up to the delivery of carcass quarters or meat cuts. Respondents rated each service as one that they "Must Have," or "May Use, But Not Necessary," or "Do Not Need." The specific services and survey responses are shown in Table 2. Meat grinding was the highest rated service with 78% of respondents rating this as "Must Have." Although the preservation of individual animal identification of ground meat was not included in the survey, many beef producers participating in niche meat markets at a small scale have indicated, through personal conversations, a strong desire to maintain animal identification of ground meat. Providing an extended carcass hanging time also rated high with 54% or respondents saying they must have this service and 35% saying they may use it. Dry aging was the next highest rated service, but some respondents may have confused dry aging with extended carcass hanging time. Dry aging refers to primal cuts and not carcass halves or quarters, but this differentiation was not clearly identified in the survey. Many producers (38%) indicated that they must have their label placed on meat packages and 27% rated the delivery of meat cuts or carcass quarters as a service they must have. Smoking and curing of meat was a service that many producers may use (48%), while organic and Kosher services and animal pick up were not highly rated.

Table 2. Survey respondent ratings of beef slaughter and processing related services.

Service	Number of Responses and Percent of Total Responses				
	Must Have	May Use	Do Not Need	Total	No Answer
Meat grinding	83 78%	17 16%	6 6%	106 100%	26
Extended carcass hanging time	55 54%	35 35%	11 11%	101 100%	31
Dry Aging	34 35%	45 46%	18 19%	97 100%	35
Placing your label on meat packages	38 37%	34 33%	31 30%	103 100%	29
Delivery of meat/carcass to next destination	27 27%	39 38%	36 35%	102 100%	30
Smoking and curing	15 16%	46 48%	35 36%	96 100%	36
Organic slaughter & processing	9 9%	35 35%	57 56%	101 100%	31
Animal pick up for transport to slaughter	5 5%	28 27%	70 68%	103 100%	29
Kosher slaughter	3 3%	21 22%	71 75%	95 100%	37

This survey was conducted by UC Cooperative Extension in Solano County with funding from a USDA Rural Business Enterprise Grant (RBEG). The High Sierra Resource Conservation and Development District provided grant administration and organized a committee of interested stakeholders to serve as advisors on this and other RBEG grant sub-projects. Many thanks go to Sarah O'Neill for her diligent efforts in mailing the survey and data compilation.

V. Producer Coordination Report

Facilitation between Existing USDA Inspected Processor and Niche Meat Producers for Improved Communication and Collaboration

Roger Ingram, UC Cooperative Extension County Director and Farm Advisor
Placer and Nevada Counties

Activities

Sustainable Agriculture Workshop – Quincy, CA
I presented on poultry processing and participated on a niche meat-marketing panel. After the panel, I conducted a survey with the livestock and poultry participants in the audience. The following is a summary of the 21 responses.

Issue	No Problem	Slight Problem	Moderate Problem	Big Problem
Lack USDA inspected processing facilities for red meat	4.8%	4.8%	23.8%	66.7%
Lack of USDA inspected poultry processing facilities	0.0%	4.8%	52.4%	42.9%
Too few animals going to the processor on most loads	0.0%	14.3%	76.2%	9.5%
Meat pick-up and distribution	0.0%	13.6%	54.5%	31.8%
Carcass and Retail Cut data from the processor	10.5%	15.8%	26.3%	47.4%
Maintaining product identity from live animal delivery to meat pick-up	11.1%	33.3%	27.8%	27.8%
Development of cutting instructions	5.6%	50.0%	33.3%	11.1%
Processing scheduling has to be booked 30 days or more to estimate harvest date.	10.0%	15.0%	10.0%	65.0%
Seasonal production with low need for processing during winter or longer.	0.0%	13.3%	53.3%	33.3%

Interest	Not Interested	Somewhat Interested	Very Interested
Please rate your interest to coordinate with other niche producers in your area for live-animal delivery to insure a full trailer load of animals going to the processor.	26.7%	26.7%	46.7%
Please rate your interest to coordinate with other niche producers in your area for meat pick-up and delivery.	33.3%	27.8%	38.9%
Please rate your interest to coordinate with other niche producers/processors in your area for more standardized cutting instructions	73.7%	26.3%	0.0%

What months do you take animals to the processor?	Number of Responses
January	10
February	3
March	8
April	7
May	6
June	9
July	8
August	11
September	10
October	0
November	0
December	0

What is your biggest barrier regarding niche meat production?	Number of Responses
Seasonal Production	3
Access to USDA Inspected Processing	4
Marketing and Sales	1
Transportation and Distribution	5
Knowing Your Numbers	16

How many animals a year do you either niche meat market or wholesale a year that must be harvested and processed at a USDA inspected facility??	Number of Responses
Less than 10 head	9
11-50 head	2
51-75 head	2
76-100 head	1
Greater than 100 head	1

Comments on Results

The three biggest issues identified from the survey included:

1. Lack of USDA inspected processing facilities for red meat.
2. Processing Scheduling has to b booked out 30 days or more.
3. Getting carcass and retail cut data from the processor.

There was some interest in producers working together to coordinate live animal delivery and meat pick-up. There was not a lot of interest in standardizing cutting instructions. Survey participants were from the Quincy – Sierra Valley – Reno area. This explains why no animals were available to send to the processor from October – November as the grass growing season has ended in that area. There were a surprising number of responses for January, March, and April as more rapid growth o grass would not start to grow in the area until April at the earliest.

Sixteen respondents identified knowing your numbers as the biggest barrier regarding niche meat production. This suggests some basic economic training would be helpful. The majority of participants were marketing less than 10 head annually. It was encouraging to see that every category of number of head marketed annually was represented in the survey.

Update on College of Agriculture, Biotechnology and Natural Resources (CABNR) regarding Wolfpack Meats and the Main Station Farm

There were 5 big issues discussed (in no particular order) - the major themes: flood control and development.

1. The Southeast Commuter highway or road or whatever it is will impact 60 acres on the southeast side of the farm. While not right where Wolfpack Meat is located, it affect the farm for sure and maybe Wolfpack.

2. The farm is a major drain for flooding. The Army Corps of Engineering has discussed 2 options for a floodway along the Truckee River. One option is above Clearwater Way and would allow Wolfpack Meats to stay - perhaps with a berm around it. Option 2 goes to Clearwater Way (at least as I read the map that was passed out) and would mean that Wolfpack would have to move as it could not stay in its current location.

3. There is a PUD (planned urban development) of 104 acres just south of Wolfpack that runs along McCarron Rd. A zoning change request has been submitted and a Planning Commission public hearing is scheduled for November 2nd. The development could have agriculture on it - but most likely (my opinion) would be sold to the highest bidder for money that could be used to pay off debt.

4. Wolfpack currently has no research or education connection to the University. They were not able to fill Dr. Tom Ringkob's position (former Meat Science Professor). Given all of the cuts, hard to see how this connection happens in a short period of time. Cooperative Extension did receive a beginning farmer rancher grant. There was some discussion of an agricultural conservation easement.

5. Towards the end of the meeting, the competition with private industry concern was brought up. This led to discussion on the possibility of perhaps a private entity or producer group either purchasing or leasing. This might be able to work, but food safety and liability concerns were raised - meaning lawyer time to hammer out who would be responsible if a problem occurred.

There were around 60 people there today and they heard a lot of feedback from producers and supporters of local food.

VI. Lamb Fabrication Workshop Report

Lamb Carcass Fabrication Workshop Report
March 27, 2012
Chico State Meats Lab
8:30 AM – 3:30 PM
Roger Ingram, UC Cooperative Extension County Director and Farm Advisor
Placer and Nevada Counties

The Lamb Carcass Fabrication Workshop was held on March 27, 2012. There were 19 people who attended the workshop from Butte, Nevada, Yolo, Sacramento, and Tehama Counties. The morning workshop session was conducted by Dr. Patrick Doyle of the Chico State Meats Lab.

The following was covered during the morning:

- Lamb carcass characteristics including: quality and yield grades, flank streaking, break joint to determine lamb or mutton, conformation, and primal cuts.
- Retail cuts of lamb from the shoulder, rib, loin, leg, front and flank
- Demonstration of how to cut up a lamb and the different options for fabricating certain cuts.
- Hands-on experience for participants on fabricating a lamb.

UC Cooperative Extension County Director and Farm Advisor Roger Ingram led the afternoon session. Presentations were given on:

- Legalities of selling lamb and the need for USDA inspection on both slaughter and processing.
- Status of current locations of USDA inspected facilities in Northern California and Nevada (Reno).
- Economic overview of the costs for building a new USDA inspected slaughter and processing facility. Participants were able to see that costs for a new facility can run up to $2-3 million and that does not include any permit or grant of inspection costs.
- Status of the Mobile Livestock Harvest Unit in Paso Robles. This included showing photos of the unit, the need for the unit to be linked up with a specific processing facility, and the ranch requirement for having their facility meet Standard Sanitary Operating Procedures for the mobile harvest unit.
- Sample cutting instructions from Flying Mule Farm were discussed as part of the need for giving USDA inspected processors clear cutting instructions.
- Permit requirements on storing meat

Roger Ingram facilitated a discussion of information needs from the participants. They identified the following:

- More information on retail carcass yield and appropriate pricing strategies.
- Development of pricing spreadsheets with retail cut yields.
- Grazing sheep and goats in orchards
- Need for a “Small Farming for Dummies” publication on niche meat.
- Advocacy on regulations
- Advocacy to enable more flexibility for small farmers instead of one size fits all.
- Working with local health departments on poultry processing.

Everyone indicated that they got a lot out of the workshop. Participants indicated a desire for a similar workshop with beef fabrication.

VII. Producer Value Added Meat Economic Analysis Template

Livestock producers who are considering direct marketing their meat products to consumers must evaluate the economics of this marketing option carefully. By definition, a value-added product must actually add value – that is, direct marketing meat must have an economic advantage over conventional live animal marketing opportunities. We have developed an Excel spreadsheet that is designed to help livestock producers evaluate value-added economics.

To properly evaluate whether direct marketing is a viable opportunity, this economic analysis requires a producer's "meat business" to purchase finished animals from his/her "livestock business." This allows a producer to objectively analyze whether the added expense of processing and direct marketing increases the value of the product.

The following tables provide examples for beef and lamb production. The template is available at http://ucanr.org/sites/placernevadasmallfarms/.

Instructions

Producer Economic Analysis Instructions

Overview

Livestock producers who are considering direct marketing their meat products to consumers must evaluate the economics of this marketing option carefully. By definition, a value-added product must actually add value – that is, direct marketing meat must have an economic advantage over conventional live animal marketing opportunities. This Excel spreadsheet is designed to help livestock producers evaluate value-added economics. To properly analyze whether direct marketing is a viable opportunity, this economic analysis requires a producer's "meat business" to purchase finished animals from his/her "livestock business." This analysis does not account for the cost of producing a live animal; rather, the analysis assumes that the livestock business is profitable in selling a live animal at current market price.

To complete this analysis, add your numbers to the yellow cells. The white cells in the spreadsheet are calculated automatically. Please note that the numbers currently in the yellow cells are realistic examples. Your actual numbers may vary from these examples.

Several issues for producers to note:

1. Direct expenses are those costs that vary directly with the number of animals marketed. Overhead expenses are costs that are incurred regardless of the number of animals marketed. Obviously, overhead costs like marketing and storage will vary somewhat by volume, but they are still included as overheads.
2. Dressing percentages (that is, the ratio of the hot carcass weight to live weight) for the four species analyzed are in the following ranges:
    a. Lamb: 48-50%
    b. Beef: 56-60%
    c. Pork: 65-70%
    d. Goat: 45-48%

    Actual dressing percentages may vary slightly from these guidelines.
3. Retail yield will vary depending on the product fabricated (that is, whether products are bone-in or boned, ground, etc.). Generally, retail yields will be 30-33%.
4. Transportation costs (for live animals and processed meat) are a significant factor in determining profitability. In general, it is not profitable for producers to process one or two animals at a time. Transportation expenses are calculated at the current IRS mileage reimbursement rate, which includes fuel and wear-and-tear on your vehicle. An alternative way to analyze this cost is to plug in a commercial haul rate for contract livestock hauling.
5. Marketing expenses should include fees (such as farmers' market membership fees, stall fees, advertising, etc.).
6. Labor includes charges for the time required transporting animals (which is calculated based on an average speed of 50 miles per hour to include loading and unloading time). Labor also includes marketing time. Producers should estimate the hours required to market and sell <u>all</u> products from a single animal. Obviously there are trade-offs relative to marketing labor – it may take less time to sell a whole animal to a restaurant than through a farmers' market, but the wholesale price will be less than the retail price.

Note: On the next page, the yellow cells in the Excel version spreadsheets can be filled in by the producer.

UCCE has also recently completed a cost study for grass-fed beef production. The cost study is available at http://coststudies.ucdavis.edu/files/2012/BeefSV2012.pdf.

BEEF – Assumptions	
Live Animal Finish Weight	1150
Live Animal Price (per lb)	$1.28
Dressing Percentage	56%
Retail Product Yield (% of live wt)	30%
Average Retail Price (per lb)	$7.00
Roundtrip Mileage to Processor	220
Mileage Rate ($/mile)	$0.57
Number of Animals	5
Live Animal Value	$1,472.00
Retail Value	$2,415.00
Hot Carcass Weight	644
Retail Product Weight	345
Hourly Labor Rate	$10.00
Marketing Hours/Head	10
Transportation Hours	8.8
Slaughter Charge (per head)	$85.00
Processing Charge (per lb HCW)	$0.85
Loads	1

Gross Product – Beef	
Meat Sales	$12,075.00
Total Gross Product	*$12,075.00*
Direct Costs – Beef	
Live Animal Purchase	$7,360.00
Slaughter Fee	$425.00
Processing Fee	$2,737.00
Total Direct Costs	*$10,522.00*
Gross Margin	*$1,553.00*
Overhead – Beef	
Live Animal Transportation	$124.30
Product Transportation	$124.30
Storage	$250.00
Marketing Expenses	$250.00
Labor (Marketing/Transportation)	$188.00
Total Overhead	*$1,436.60*
Beef Net Profit (Loss)	*$616.40*
Beef Net Profit (Loss)/head	*$123.28*

LAMB – Assumptions	
Live Animal Finish Weight	100
Live Animal Price (per lb)	$1.20
Dressing Percentage	50%
Retail Product Yield (% of live wt)	31%
Average Retail Price (per lb)	$10.00
Roundtrip Mileage to Processor	130
Mileage Rate ($/mile)	$0.57
Number of Animals	10
Live Animal Value	$120.00
Retail Value	$310.00
Hot Carcass Weight	50
Retail Product Weight	31
Hourly Labor Rate	$10.00
Marketing Hours/Head	6.0
Transportation Hours	5.2
Slaughter Charge (per head)	$25.00
Processing Charge (per head)	$55.00
Loads	1

Gross Product – Lamb	
Meat Sales	$3,100.00
Total Gross Product	*$3,100.00*
Direct Costs – Lamb	
Live Animal Purchase	$1,200.00
Slaughter Fee	$250.00
Processing Fee	$550.00
Total Direct Costs	*$2,000.00*
Gross Margin	*$1,100.00*
Overhead – Lamb	
Live Animal Transportation	$73.45
Product Transportation	$73.45
Storage	$125.00
Marketing Expenses	$100.00
Labor (Marketing/Transportation)	$112.00
Total Overhead	*$483.90*
Lamb Net Profit (Loss)	*$616.10*
Lamb Net Profit (Loss)/head	*$61.61*

Final Link:
GETTING LIVESTOCK FROM FARM TO FORK

A Rural Business Enterprise Grant

Funded by USDA Rural Development
Administered by CalaverasGROWN
Published September 2012

Purpose

Throughout California and the United States, ranchers are noticing a new market demand: the demand for locally produced, direct-marketed meat products. This market offers the potential for higher profits for ranches of all sizes through value-added products, yet currently the market demands are not being met.

While many ranchers are interested in breaking into this market, several hurdles exist. The most notable hurdle is the lack of infrastructure to provide for small ranchers looking to sell their product to restaurants, grocers, or customers.

In 2010, El Dorado, Amador, Calaveras, Tuolumne, and Mariposa counties sold 70,000 cattle[1], the vast majority at livestock auctions from which cattle are sent to feedlots, often in the Midwest. Capturing just a small percentage (less than 5 percent) of this market would provide 3,000 cattle each year to the local markets, helping to fill a need for grass-fed or natural meat that is currently mostly being filled with meat from Australia and New Zealand.[2]

CalaverasGROWN, a county-wide nonprofit which focuses on local food support and advocacy, was chosen to administer a Rural Business Enterprise Grant which funded a project called: Final Link: Getting Livestock from Farm to Fork. The project sought to address the lack of infrastructure and begin the process of building a vibrant microenterprise network for delivering local meats within and beyond the identified California Foothills region. The region identified for this project is El Dorado, Amador, Calaveras, Tuolumne, Mariposa, and Merced counties.

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1 From 2010 crop reports by county

2 Market research done by previous RBEG grant into current grocery store and restaurant offerings

Goals of the Project

Task 1: Designate advisory committee through outreach; Press Releases, Newspaper Articles, Meetings (RCD's, Local Food Organization, Farm Bureau's etc.)

- Collaborators: Coordinator, CARC&DC, Center for Regional Change, UC Davis

Task 2: Identify potential regional harvesting locations with or without cut and wrap facilities

- Collaborators: Coordinator, Advisory Committee, Center for Regional Change, UC Davis

Task 3: Identify possible centralized processed distribution hubs.

- Collaborators: Coordinator, Advisory Committee, Center for Regional Change, UC Davis

Task 4: Identify distribution locations and transportation

- Collaborators: Coordinator, Advisory Committee, Center for Regional Change, UC Davis

Task 5: Inventory current harvesting/cut and wrap facilities studies, assess for costs, evaluate for accuracy and for California use.

- Collaborators: Coordinator, Advisory Committee, Center for ED, CSU Chico , Center for Regional Change, UC Davis

Task 6: Develop processing models with costs and potential regulatory restrictions.

- Collaborators: Coordinator, Advisory Committee, Community Colleges, Center of Excellence, Center for Regional Change, UC Davis

Task 7: Evaluate regional job opportunities and educational program to support processing, distribution, transportation, models.

- Collaborators: Coordinator, Advisory Committee, Merced County EDC Alliance for Workforce Development, Inc., Center for Regional Change, UC Davis

Task 8: Develop regional leadership marketing group for delivering a regional economic prosperity message.

- Collaborators: Coordinator, Advisory Committee, BALLE

Task 9: Develop business plan based on selected location(s), model, production, spatial statistics, and message.

- Collaborators: Coordinator, Advisory Committee, Pacific Community Ventures

Task 10: Develop funding opportunities/options for selected location.

- Collaborators: Coordinator, Advisory Committee, RSF Social Finance

Task 11: Develop a repository/website and resource guide, including flow charts, templates and models, identifying steps for development of new and/or existing niche meat harvesting/cut and wrap facilities.

- Collaborators: Coordinator, Advisory Committee, Center for ED, CSU Chico, Center for Regional Change, UC Davis

Acknowledgments

First and foremost, the advisory committee, CalaverasGROWN, and the Project coordinator thanks USDA Rural Development and its state director, Glenda Humiston, for funding and supporting this project. Without these funds, this valuable regional project could not have happened.

Thank you also to those who put in the most time, passion, and patience, the advisory committee, who tirelessly analyzed options for the region to determine what would be best and most feasible to get our local meat system up and running.

The CalaverasGROWN board of directors have also lent their support in words, encouragement, resources, publicity, and even potlucks throughout the process - thank you.

Special thanks goes to all the processors that are already out there who shared their knowledge without hesitation. These include: Wolf Pack Meats (Reno, NV), Cal Poly San Luis Obispo, Chase's Chop Shop (Madera, CA), Tollhouse High School, Tracy High School, and the new Yreka facility.

We would like to recognize those involved in the High Sierra RBEG grant that came directly prior to ours - your foundation helped immensly in leading us in the right direction.

Aaron Bausted and Keith DeHaan of Food and Livestock Planning, Inc, were an incredible help in compiling numbers and the common threads between facilities that succeed and facilities that fail.

A huge thanks goes to one of our most valuable resources - the Niche Meat Processors Assistance Network (NMPAN) - for providing a forum of support for all those struggling through the niche meat markets and specifically for supplying free webinars, business plans, and other resources which we found invaluable.

And to the producers, consumers, local food advocates, and experts who are too many to name but held a great role in getting accurate information about the local and regional meat markets - thank you.

We have made a number of key findings that we believe are important to share with anyone considering a similar process in their region or community.

by Felicity Lyons

1. **Project Facilitator**. Hiring a project facilitator with funds from USDA-RBEG has been critical to our progress. Without a paid facilitator, the volunteer committee members would have trouble keeping project momentum when more pressing obligations take priority.

2. **Facility Scale**. Developing anything smaller than a fully functional slaughter and cut and wrap facility is not likely to be profit generating. This means that we've ruled out a mobile unit as an option. Instead, we are looking at ways to maximize the capacity of the facility, especially through the production of value-added goods such as sausage, beef jerky, and pet treats.

3. **Challenges of a Slaughter Facility**. While slaughter is the most fundamental step in livestock processing, it is also the least likely to generate a profit and brings the most potential for community opposition.

4. **Common Barriers**. In the feasibility studies conducted elsewhere in California, the largest barriers to moving forward with facility development were ranchers' aversion to risk as well as the difficulty in attracting qualified facility managers.

5. **Committing Animals to a New Facility.** It is hard for ranchers to commit to a certain number of animals that they will have slaughtered at a new facility. This is partly due to the high price that ranchers can get at auction for animals, especially beef, compared to the unknown demand and value of direct marketed products (those sold directly to consumers from farms or at farmers' markets). Ranchers also can't commit if they don't know the price or the quality of the work of the yet-to-be-built facility.

6. **Competition**. There are other existing or new processors that could potentially compete with a new facility if developed. If we build a facility, we fear that we may not be able to keep costs as low as other processors outside of the region.

7. **Relationships**. Strong relationships have been key to gathering information and support. Various committee members have important relationships with elected officials, farmers' market managers, other larger ranchers from outside the region, animal transport providers, and of course, with processors.

8. **Local Officials**. Part of what makes our region distinct from a more urban region, and a good place to do business, is the support we have from local officials. Because of the small population, there is also a sentiment that officials are more responsive than their counterparts in urban areas.

9. **Regionalism**. Acting as a region is seen as a benefit among the advisory committee members. It is important for this project to serve the region as a whole, rather than focus on one community or county alone.

10. **Community acceptance**. Whatever site is chosen for the facility, the opinion of the community will play an essential role in ensuring its success. Providing education about the potential benefits to the economy is a way of encouraging support. However, it will be important not to exaggerate the benefits. For example, it is unlikely that a livestock processing facility will be a big jobs generator, and the community should know this, so that they are not surprised or disappointed once it is built and running.

11. **Demand**. The market for direct marketed meats is increasing steadily. Ranchers in our region that sell their product to Farmer's Markets have experienced tremendous growth in their business size in the last two years, and they struggle to keep adequate supply to satisfy their customers.

12. **Common Narrative**. Finally, a community or region's economic traits alone cannot explain its well-being. In fact, the creation of a "social infrastructure", that is, building relationships of community members within the organizations or institutions to which they belong, is actually the precursor to creating physical infrastructure. An integral part of our creation of this social infrastructure has been the development of a common narrative, or way of telling the story about the potential of this facility. This narrative binds the group together and continues to motivate us when we have disputes or when the project seems infeasible. Despite the committee's diversity in ideological backgrounds and varied reasons for being involved in the process of determining feasibility of developing a regional livestock processing facility, there are three common themes in our individual and group narratives.

- A livestock processing facility in our region can be a way to honor the practices of past generations.
- A livestock processing facility in our region can create opportunities for meaningful work for future generations.
- A livestock processing facility can reinvigorate the local rural economy through adding value to what the land produces, rather than relying on industrial or urban economic models.

With this common idea of success, we've started to create a vision to work toward, creating more opportunities for regional economic development and prosperity.