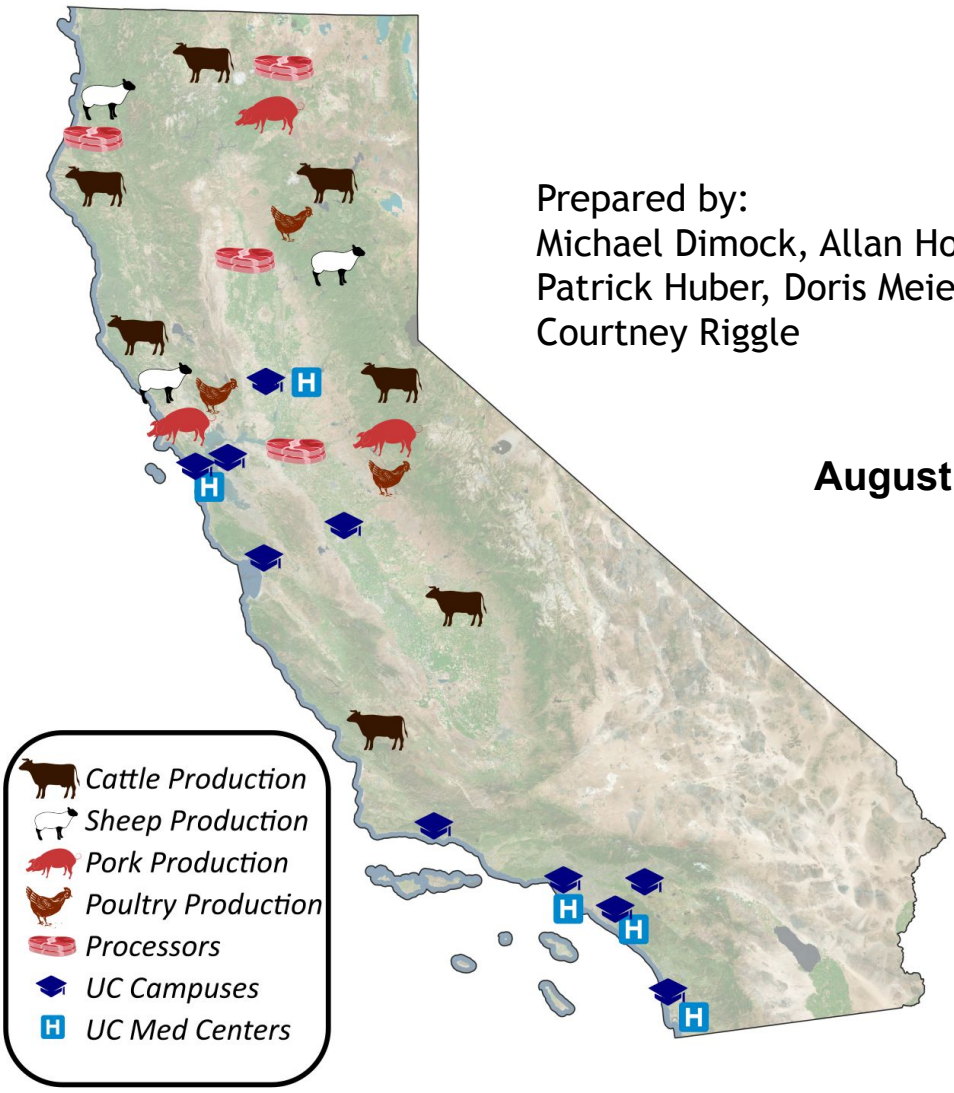
REPORT & RECOMMENDATIONS

2023 Northern California Regional Regenerative Meat Summit



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Roots of Change

Food Systems Lab
Research, Education, Assessment, and Policy

UC Davis Institute of the Environment

CONTENTS

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Executive Summary

In the spring of 2020, with funds provided by TomKat Trust, Roots of Change and the UC Davis Food Systems Lab joined forces to write a white paper on the longstanding challenges in the meat supply chain that had been exacerbated by the COVID-19 pandemic and the ransomware attack on JBS, the world's largest meat processor. The paper led to funding from a USDA AMS Regional Food Systems Partnership Grant to develop high value markets for mid and small-scale meat producers in Northern California who use regenerative, organic and grassfed production systems. The work began with nine months of research interviews and presentations involving 200 meat producers, processors, University of California Cooperative Extension Livestock Advisors and organic, sustainable and regional food system advocates, chefs, and certifiers of organic and regenerative practices. These engagements led to agreement among stakeholders to pursue creation of a regenerative meat supply chain for the University of California's (UC) ten campuses and five medical systems. This goal would build upon the multi-year Beef2Institution pilot created by a collaborative of advocates, ranchers and processors providing grassfed beef to UC Davis Medical Center and two campuses.

On June 28, 2023, 100 stakeholders from across the proposed supply chain, including four UC Procurement officials from the Office of the President, met to begin addressing challenges. The Regional Regenerative Meat Summit was held in Sacramento at Mulvaney's B&L, a noted farm to table restaurant. The Summit began with two context-setting panels featuring eight presenters that indicated the time is ripe for a bold action that would scale up the existing pilot. The panels were followed with three 30-minute brainstorming sessions addressing the following: 1) *Solutions for Efficiently and Affordably Aggregating and Transporting Animals*; 2) *Solutions for Ensuring Timely Processing of Animal and Affordable Storage of Resulting Meat Products*; 3) *Defining Regenerative Production and Regional Identity*. Thirteen tables of stakeholders captured their brainstorming ideas. Each stakeholder was assigned to one of the tables based on their locations within economic development regions as defined by the Community Economic Resilience Fund (CERF). CERF is an unprecedented state-funded initiative that could provide groundbreaking revitalization of rural communities by providing large amounts of public capital to be matched with private investment.

The UC Davis, Roots of Change, and IC-FOODS project team organized, analyzed and wrote up a synthesis of the brainstormed content. The synthesis outlined four basic approaches to implementing formation of the proposed supply chain. The project advisors vetted the project team's draft synthesis and its proposed recommendations for next steps.

Participating supply chain stakeholders offered many diverse perspectives, with four basic approaches to launching the supply chain emerging. **The first approach** most often articulated by stakeholders is for producers to leverage existing brands and/or processing and distribution infrastructure capable of delivering the quantities required by the UC system that feeds approximately 600,000 per day during the academic year. **The second approach** is for each region to create meat hubs as the foundation for creating efficient aggregation, shipping and processing. A meat hub could be the regional link to the first approach and would be needed for the third and fourth approaches and could generally serve the producers in each region. **The**

third approach would be for producers at either the regional or multi-region scale to create a new enterprise to supply UC using an LLC or some other corporate structure that would allow outside investors to participate in the enterprise. This approach can address the often-seen challenge of under capitalization at start up. **The fourth approach** is similar to the third, except that it would be formed as a cooperative owned by the producers. It is the opinion of the project team and advisors that the second, third and fourth approaches would require more time and entail more risk than the first.

The project team believes the first approach is the least risky and would be the quickest path to sales, and could be used to develop one or more of the longer term options if desired. Speed to formation of a UC supply is essential because of upcoming contracting timelines faced by the UC Office of the President Procurement team. Thus close collaboration with that team is essential.

Concurrent with the project work described above, there have been several recent important developments in the California grassfed, regenerative and organic beef sector. **First**, Five Dot Ranch, which is based in Susanville, California and sells its product online, in restaurants, and retail, has shut down its consumer brand. **Second**, the Panorama Organic beef brand, founded two decades ago in California and bought by Perdue Farms in 2019, is being discontinued and Perdue has ended its purchase of California organic grassfed beef. **Third**, in 2022, SunFed Ranch, a longstanding success story in the sector, merged with Teton Waters Ranch of Colorado to form Sun Fed Foods LLC. More recently, the founders of SunFed Ranch have changed their business focus back to solely cattle production. Sun Fed Foods LLC will continue, but (although unconfirmed) may be moving to purchase its cattle from the lowest cost suppliers, including offshore sources. Discussions with existing brand representatives indicate that these consolidations are related to the historic high prices for live cattle, high interest rates for borrowed capital and high costs of energy and labor. This perfect storm is forcing hard decisions by many in the grassfed and organic beef sector.

Finally, a new company is forming called Public Good Provisions. It is led by Gina Nagel and Zachary Angelini, veterans of the meat and fashion industries. The venture is seeking to aggregate supply and demand on the West Coast to achieve the economies of scale needed for efficient processing, carcass utilization and distribution, which will enable the servicing of large-scale purchasing contracts such as those from the UC system. Public Good Provisions is developing the legal structure to be a Public Benefit Corporation based on hyper-collaboration and mutually beneficial economic incentives in service of the public good.

All of this late breaking news indicates to the project team and advisors that there is a need to achieve a higher level of collaboration if we seek to maintain and expand the regenerative meat industry on the West Coast. **Thus, the project team's key recommendation is that producers seeking to sell into a UC supply chain join an existing system or brand participating in that supply chain. We recommend this because by ensuring timely sales of grind meats, producers are freed to use that revenue to expand sales of more valuable cuts through sales channels providing higher margins.**

Next Steps

The team has included (page 14) four recommendations emerging from the research and Summit that seek to provide producers access to a market for pooled grinds, stew and braising meats, public investment in needed infrastructure and new or expanded markets for the highest value cuts. We have also identified a set of next steps for the project.

- **First**, we will continue to work with those interested in formation of a UC system supply chain by facilitating communication and organization among existing processors and brands with farms and ranches wanting to join forces.
- **Second**, we will also begin to link the CSU system and suppliers of sports venues throughout the state.
- **Third**, (and concurrently), we will organize meetings to link ranches with businesses and other institutions that provide free or low cost resources for expanding direct sales to consumers and wholesale programs aimed at butchers and farm to table restaurants seeking whole animals or boxed primals.
- **Fourth**, we will work with the California Labor and Workforce Development Agency to ensure meat processing is fully included in the CERF process because it provides an unprecedented opportunity for investment in infrastructures needed by California regenerative meat producers.

In addition, the project team is beginning its implementation of the five-year Growing GRASS initiative, funded by the USDA Climate Smart Commodities Partnership grant program. Growing GRASS involves collaboration with Other Half Processing and twelve additional science and technology firms working to create markets for beef and bison producers wanting to increase income through premium sales of certified hides and other by-products. This program will provide participants with funds for certifications and other expenses associated with market development. This means there is a long runway to continue supporting the goal of high value market development for California's farmers and ranchers producing meat using regenerative practices.

Background

Until very recently American agriculture policy has been degrading a once rich fabric of local meat sources. Since 1967, 7,000 meat processing plants have closed. Only 3,000 remain, many of which are small and mid-scaled independent plants that are on the verge of financial collapse. Today three multinational industrial meat companies control over 80% of the US meat supply. These near monopolies force down prices paid to farmers and ranchers and force up prices paid by chefs, food service and meat eaters. The droughts and wildfires of the last twenty-five years have exacerbated the challenges. Then the COVID-19 pandemic forced policy makers and consumers to finally face the fact: our meat supply chain is too concentrated, unfair and brittle for the 21st century.

In the spring of 2020 during the pandemic, with funds provided by TomKat Trust, Roots of Change and the UC Davis Food Systems Lab joined forces to write a white paper on the challenges in the meat supply chain. Plants closed as workers became infected and died from COVID-19. The breakdown intensified on May 30th with the cyber ransomware attack on JBS, the largest meat processor and marketer in the world. Grocery meat sections emptied, prices skyrocketed.

Our white paper clarified that California lacks regionally available processing that serves mid- and small-scale producers and outdated regulations impede access to multiple market channels. Our findings emerged from approximately 100 interviews with beef, poultry, lamb and pork producers, processors, and advocates. The paper led to funding from a USDA AMS Regional Food Systems Partnership Grant to develop high value markets for mid and small-scale meat producers who use regenerative, organic and grassfed production systems. With these funds we met with 200 farmers, ranchers and processors between September 2022 and May 2023. Early meetings confirmed that producers often can sell most of their high value cuts (steaks, ribs and chops), but are often left with accumulations of grinding, stew and braising cuts. These accumulating products are just the cuts sought by food service institutions like the University of California (UC). The two UC presidents since 2016 have committed to purchase sustainable foods for their food service programs. The current president, Dr. Michael Drake, has committed to sourcing products from regenerative production systems that deliver an array of ecological services and social benefits.

One of the advisors to the project is Santana Diaz, UC Davis Medical Centers Executive Chef and Culinary Director. Chef Diaz shared his grassfed meat purchasing experience as part of the Beef2Institution program involving Health Care Without Harm, Community Alliance of Family Farmers, Cream Co Meats, TomKat Ranch and Richards Grass Fed Beef. Based on his experience and early findings on producer needs, we sought feedback from farmers and ranchers regarding an idea of creating a much larger supply chain for all ten campuses and five medical centers that comprise the UC system, which feeds 600,000 people per day during the academic year. The feedback indicated we should proceed.

Our project team reached out to Chef Patrick Mulvaney with a request to co-host a regional regenerative meat summit followed by a celebratory dinner. He readily embraced the idea. Planning began with his team, Chef Diaz and Cream Co. Meat. As the planning progressed, we informed UC President Dr. Michael Drake. Dr. Drake promptly connected us with his procurement and sustainability teams within the Office of the President. Talks with these teams confirmed that a proposed summit meeting to connect all links in the supply chain should be executed.

The moment for expansion of the University of California (UC) supply chain could not be better given:

1. **UC's commitment** and large footprint (10 universities and 5 medical centers across California) for serving public interest by sourcing healthy meat coming from ecologically proactive producers.
2. **California's commitment** to rural economic development and resilient, climate smart production and working lands as a mitigation strategy for ending species loss, drought and climate impacts.
3. **Federal commitment** through USDA to increase supply chain resilience through expansion of regional food systems, with particular focus on meat, added momentum.

With this backdrop, and considering the currently high prices paid for cattle that might motivate many to forgo development of new markets, it seemed important to inspire producer commitment to the collaboration required for such a system by revealing the full spectrum of reasons our team sees this as the moment to act boldly. The Summit was designed to meet this need.

Detailed Summit Results

The Opening Panels

Following welcoming remarks and appreciations from Chef Patrick Mulvaney and the project's principal investigator Dr. Patrick Huber, the Summit meeting began with two panels of presenters designed to set the context by revealing the moment of opportunity for bold thinking and action. The first panel included four high ranking government officials, one federal and three from the state of California.

The first presenter was **Jennifer Lester Moffitt**, Under Secretary of Agriculture for Marketing and Regulatory Programs. Ms. Moffitt heads the Department's work related to expansion and development of regional food systems including all the USDA investments in mid and small-scale meat processing. She began by acknowledging that USDA was catching up with the innovators like those in the room who have been working to create regional supply chains for a long time. She listed the many Farm Bill and federal investments being made in regional food systems and the USDA's emphasis on meat systems and fair markets. She highlighted that the day's conversations were just the type needed to energize rural communities and develop regional food system capacity.

Following Ms. Moffitt's presentation, three Newsom Administration officials shared their perspectives. **Karen Ross**, Secretary of the California Department of Food and Agriculture (CDFA), voiced the state's commitment to creating an agricultural system that works for farmers who face substantial costs relative to other states and nations. She described the First Partner Jennifer Siebel Newsom's campaign to position small and mid-scale producers as food sources for California's K-12 educational system and CDFA's awareness of the need to fill the infrastructure gaps at the scales needed to meet market demands and to serve small and mid-scale producers.

Wade Crowfoot, Secretary of the California Natural Resources Agency, highlighted the state's recognition of the stewardship of farmers and ranchers and their critical role in achieving the climate, species, water and nutrition goals of the state (such as those found in the ambitious 30x30 initiative) and the work to fund stewardship programs related to these goals.

Finally, **Derek Kirk,** Deputy Secretary of the Labor and Workforce Development Agency, described the Community Economic Resilience Fund (CERF) that is providing $500 million for economic development, the largest investment ever by a California Governor. Kirk revealed that he had grown up in Tulare County and the Secretary of Labor, Stewart Knox, grew up in Tehama County and they both know the realities of rural regions. He stressed that rural communities, which depend on agriculture and food production, are very much in the Administration's focus and the funds have been authorized with maximum flexibility to ensure they can be used for the infrastructures that rural communities define as critical.

The second panel also included two perspectives: UC's and that of a livestock producer. **Mark Biedlingmaier**, the product of both UC undergraduate and graduate degrees (UCLA and UC Berkeley respectively) began the panel. He was also a UC Office of the President Global Food Systems Fellow researching and advising on food procurement that aligns with the values and goals of his generation. His primary message: the most pressing issue students see ahead is climate change. He described a dining site at UCLA that has lines of students out the door wanting the food there because "Chef Joey" is focused on health and the environment through his menus. He pointed out the climate focus of UC procurement staff combined with the knowledge in the room should be enough to help achieve UC President Drake's regenerative food procurement goals.

UC Vice President of Agriculture and Natural Resources, **Dr. Glenda Humiston** described the numerous investments UC ANR has made in new UC Cooperative Extension staff that are experts in rangeland, regional, local, organic and urban agriculture systems and the UC commitment to rural economic prosperity and technical assistance for those developing food hubs, aggregation systems and other enterprises. Dr. Humiston placed in context how critical livestock is to mitigating fire risk and to creating food from land that cannot be used for any other type of agriculture. She made it clear that UC ANR and UC's procurement offices are major allies in the development of regional regenerative supply chains.

Marilyn Biscotti, the Strategic Procurement Manager for UC, reflected the reality of the challenge by describing the need for clarity around definitions of local and regenerative and the complexity of meeting the diverse needs of ten campuses and five medical centers. Despite the challenges she stressed the commitment of UC to surpass its sustainable purchasing goal of 30% by 2030 because she and her colleagues know the "kids" and the environment need it to be done. She closed by applauding the attendees for setting out to create a regenerative meat supply chain.

Connor Hackett, a lamb and beef producer from Ferndale Farms in Humboldt County, described the challenges, needs and aspirations of his community. He urged attendees to remember that regenerative agriculture must include sustainable profits in perpetuity as well as the environmental needs. He framed his personal and family goals as creating a profitable business in an economically vibrant community that creates jobs for young people wanting to become producers. He stressed the value and efficacy of working from a regional approach to collaboration as he believes it will be most effective. He described the new "Six Rivers Initiative," which is building a coalition of land stewards in the North Coast committed to working-lands conservation and market identity. He ended by urging the attendees to think out of the box to avoid creating something that falls back into the same supply chain patterns that have driven prices down to producers and excluded small producers and new entrepreneurs seeking to enter the business.

Brainstorming Results

Following the context setting panels, the attendees undertook three brainstorming sessions to answer critical questions that will determine how a regional regenerative meat supply chain will work.

Process

The Summit room included thirteen tables that encompassed the six CERF regions included in the project's geographic footprint. The attending regions were: **Bay Area**; **Capital Region**; **Eastern Sierra**, which we combined with **North San Joaquin Valley** in order to fill two tables; **North State**; and **Redwood Coast**. Each attendee was assigned to a table based upon the CERF region in which their farm or ranch operates. This was done for two reasons. First, the team sought to connect those who could collaborate to aggregate supply from their region. Second, as Deputy Secretary Derek Kirk recommended, the team wished to connect potential advocates for CERF investments in meat processing infrastructure needs in their regions. Note takers at each table recorded the ideas and concepts during each brainstorm. Each brainstorm lasted 30 minutes. Following is the project team's synthesis of what was captured in the notes. We seek to highlight the areas reflecting the greatest level of perceivable consensus while balancing the need to think out of the box.

Brainstorm 1: Solutions for Efficiently and Affordably Aggregating and Transporting Animals

The notes from the thirteen tables reveal clear agreement on the need for "coordination" and "collaboration" in order to pool enough animals to create efficient transport to either slaughter or

finishing facilities. As we also found in the other two brainstorms, many noted the need to "utilize" or "lean into" existing brands and their established infrastructures. There was agreement that a central location for aggregating animals would be helpful. Ideas offered for these sites included fairgrounds, auction yards and ranches. There was mention of the need of a point person or "wrangler" to coordinate deliveries to the aggregation point. The concept of cooperatives for aggregating animals was noted.

Because of the agreement on the value of a central aggregation point, there seemed a preference for achieving full truckloads for transport. However, some voices stated full loads would not be required, but would be ideal. A "cooperative" approach to pick up and delivery of animals was mentioned as a solution.

Notable Challenges
Some discussion focused on the potential need to alter breeding schedules to ensure year-round harvesting of animals. Others spoke to the consistent supply of cull animals which are appropriate for grind-based products. Still others stated that freezing meat is a solution, with notes reflecting the belief that freezing meat would keep harvest within the natural grass cycle of the point of origin. See Brainstorm 2 for related comments.

Regarding the challenge of finishing animals for markets seeking grassfed meats, the desire for more public land grazing was voiced. The example of East Bay Municipal Utility District (EBMUD)'s contracts for grazers was mentioned along with the need for more access to state parks that face fire risk. It was clear from the notes that more coordination may be needed to increase the supply of grassfed animals. The notes reflected a belief there could be coordination among those with cow-calf operations and those with properties capable of finishing animals efficiently.

The need to aggregate for transport and the potential need to collaborate to finish cattle raised the concern about how to protect animals from spreading disease and ensuring producers receive the correct compensation linked to their own animals. Identification systems for each animal (ear tags) and software were mentioned as solutions. The idea of separate producer pens within the aggregation point was also mentioned. The challenge of pooling animals flowing from operations with diverse certification systems was raised. One solution could be having different aggregation days for each type of certification.

Brainstorm 2: Solutions for Ensuring Timely Processing of Animals and Affordable Storage of Resulting Meat
Coordination to schedule large processing runs in USDA slaughter facilities followed the theme of coordinating aggregation of animals. This would indicate a need to create a relationship and agreement with a processor committing a specific number of animals on specific dates. The concept also implies delivery of full cattle truck loads as referenced in Brainstorm 1.

Three other ideas emerged related to obtaining affordable and timely slaughter. First, some suggested conversion of state licensed slaughter plants to USDA inspected plants to increase

easily accessible slaughter capacity. Second, others would like access to UC and CSU campus based slaughter facilities that are believed to be underutilized. A third and truly out of the box idea is that UC build/expand its sourcing from its own slaughter facility. There was again mention of fairgrounds with specific reference as sites for mobile processing. Finally, there was again mention of using existing brands that have relationships and agreements with processors.

The majority of the comments captured in Brainstorm 2 centered on storage, which relates to harvest times. Notes from this brainstorm reveal that the words “frozen” or “freeze” were dominant. Recorded comments seemed to indicate a desire for the UC supply chain to accept frozen meat. This would allow the typical fall harvest pattern and it would also require considerable storage capacity to ensure continuous flow of product year-round. However, as has been noted, supply could be supplemented by cull animals that are slaughtered throughout the year.

Notable Challenges
Two challenges were voiced. First, there is a lack of storage capacity serving small and mid-scale producers whether or not the bulk of harvest occurs at one time of year. Second, there is also a dearth of slaughter and fabrication workers available in the state. As the project team noted in our 2021 white paper, this shortage requires attention.

Brainstorm 3: Defining Regenerative Production and Regional Identity
There was wide consensus on the general definition of regenerative agriculture: soil building to maximize water and carbon capture and soil fertility along with corollary benefits related to species recovery and protection, community resilience and humane animal husbandry. There was also strong support for use of existing certification systems, some that center on carbon farming plans, and the need for technical support to aid producers to achieve certification and potentially financial support for the associated expenses. At the same time, it was recognized that CDFA is undertaking a process to define in code the meaning of “regenerative.” This process may provide a simple solution to the need. No matter the definition, many participants recognized the need for metrics that could be verified to confirm claims. **A critical question raised: Would UC allow an array of certifications or approaches to be included in what it considers regenerative agriculture?**

Some spoke of regional coordination to come to agreement on what a region would define as regenerative and local. Overall, Brainstorm 3 rendered the fewest lines of notes captured. It is unclear whether this indicates fairly firm consensus or attendees were fatigued at this point in the process.

Notable Challenges
The key challenge voiced in defining “regenerative” livestock production practices can be summarized by noting that regenerative practices and metrics may differ depending on location, which may have micro-climates and diverse soils, and that it will be important to design standards that can accurately measure across systems.

The full set of notes generated during the summit can be accessed here, or by scanning this QR code:

Crosscutting Concepts and Potential Business Approaches

As the team reviewed the 440 individual captured ideas, we saw cross cutting ideas linking all three brainstorms and believe some could be described as potential ways of organizing the business of supply chain development. As with all new ventures, each approach possesses a level of risk. Any and all approaches would benefit from high levels of trust based on clear principles of organization and management. Each approach requires some time and other resources from the producers, but some much more than others. All will take time to organize and commence operation, but the more independent the producers seek to be, the more time it is likely to require to begin operation. One important point made in every region and at almost all tables, was the need for a commitment from UC to buy what is produced. The greater the perceived risk by producers, the more critical it will be for them to believe there is a very high level of commitment from UC.

It must also be noted that the currently low numbers of the US herd, which has created high prices for live cattle, may impede the flow of animals into any regionally organized UC supply chain. Selling stocker cattle to feeders is the least risky path to revenue. It also provides primary producers the least power in the market, limits the ability to expand economic development, and so does not contribute to new jobs and broadly shared wealth creation in a rural region. It may be only a matter of time until prices fall again, which would reflect the historically volatile nature of the livestock markets.

Finally, it is possible to mix and match the approaches below, opening possibilities to sequence steps strategically and to seize emerging opportunities. For example, each region could decide to organize and manage the aggregation and its solution to definitions for regenerative at the local level as an informal association or a cooperative and at the same time join forces with a brand or enter into an LLC with outside investors with demonstrated skills and a track record

operating one or more meat supply chains to handle slaughter, fabrication, contract negotiations and distribution.

We do want to emphasize that there is a need to involve producers in the CERF planning processes underway in order to clarify each region's infrastructure needs and the proposed projects that will answer those needs. We will include this issue in our coming facilitation processes with the regions.

Below we offer what emerged for us and some of the pros and cons we perceive as associated with each approach.

Approach One: Leverage existing brands & infrastructure
The producers from all regions would join an existing brand and/or processor that would act as the aggregator, transporter, processor and distributor. In short, producers would begin selling animals or portions of animals to existing brands or processing systems that are currently (or will be) supplying meat to the UC system.

Pros

- As stated in the Brainstorm, this approach "leans in" and "leverages" existing and proven infrastructure and systems.
- Simplest and quickest way to build up supply and logistics capable of meeting a larger portion of UC's demand.
- Lessens time and upfront costs of producers.
- Lowest risk approach.

Cons

- Increases processor or brand control over producers, which could lower prices paid.
- Increases risk of single point of business failure for the system.
- Impedes ability of producers to create their own brands if that is their goal.
- May impede the flow of critical information from buyers to producers, weakening their ability to influence the marketplace or specific negotiations with UC related to prices and definitions.

Approach Two: Building Meat Hubs
Each region develops a nonprofit or informal regenerative meat supply chain hub that could include some or all of the infrastructure needs: aggregation point, slaughter and fabrication facility, cold or frozen storage and transport site.

Pros

- Increases control of process for the regional producers and would likely increase capacity for the meat industry in the region over the longer-term.
- Increases economic development impact for the region.
- Might increase the amount of retained revenue from sales paid to producers.
- Could take lessons from operating and documented food hub operations in California and around the nation.

Cons

- Increases organization and coordination time of producers depending on the chosen level of integration with existing brands or processors.
- Might lead to uneven development between the regions.
- Increases potential financial burdens on producers depending on the available infrastructure.
- Would probably require UC to negotiate with more entities than it would like to develop its meat supply chain.
- Human complexity and challenges among collaborators from the region would need careful attention and skilled management.
- May be too slow a process to win a contract with UC in the near-term.

Approach Three: Develop New Business Structure(s), LLC or Similar

Committed participants from all regions combined form an LLC or similar hybrid partnership that would operate the supply chain business and provide equity to producers and investors.

Pros

- Maximizes likelihood that the supply chain would possess enough working capital to develop infrastructures needed to make a system work.
- Draws upon skills and resources from participants in all the regions.
- Combines skills and talents of business of supply management with livestock production.
- Can take lessons from successful currently operating models.
- Could build equity for producers.

Cons

- Typically involves investors whose primary concern is return on investment not regional economic expansion or maximum returns to producers.
- Need to find trusted investors.
- Producers may have less control than with other approaches.
- May be too slow a process to win a contract with UC in the nearterm.

Approach Four: Form Meat Cooperative(s)

The committed producers from one or more regions form a cooperative that would hold and operate the business enterprise and provide maximum equity to the producers.

Pros

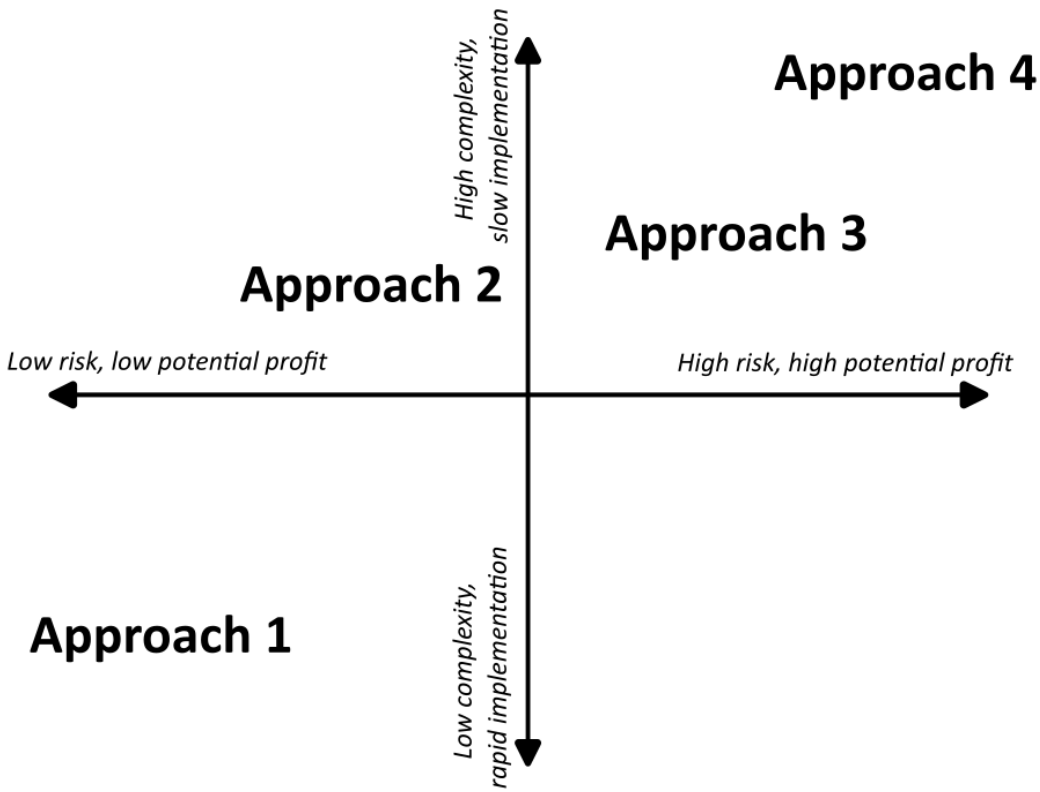
- Producers would have maximum control and retain maximum revenue and profits.
- UC ANR has extension agents available to facilitate creation of the cooperative.
- Well documented lessons can be taken from both failed and successful cooperatives.

Cons

- There is among many producers an aversion to coop participation due to past failures.
- Human complexity and challenges among collaborators from the region would need careful attention and skilled management.
- May be too slow a process to win a contract with UC in the near-term.

Caveat: All of these approaches have the potential to succeed if a committed champion(s) emerges to lead the process.

Below is a diagram illustrating the risk to rewards ratio as perceived by the project team:



Project Team Recommendations

We recommend

1. Approach 1 offers the best option for producers at this time. Working with existing brands and processors who have infrastructure and systems for slaughter, fabrication and distribution at volumes required by the UC system and other large buyers lowers the burdens and risks for participating producers. By ensuring timely sales of grind meats, producers are freed to use that revenue to expand sales of more valuable cuts through sales channels providing higher margins.
2. Producers participate in the project's collective efforts to enhance direct sales to consumers and/or wholesale channels serving high-end butchers and farm to table restaurants willing to pay premiums.
3. Regional collaboration to form hub-like structures that enhance aggregation and transport systems that can serve the community of producers in each region for many approaches that might be undertaken. Such collaboration would require the ability to maintain animal source identity despite aggregation.
4. Representatives from the meat sector in each region join the CERF process to ensure the needs of meat producers are funded when implementation begins.

Acknowledgments

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Loren Poncia, Stemple Creek Ranch
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Roger Ingram, UCCE Placer & Nevada Counties (retired)
Sheila Barry, UCCE San Francisco Bay Area
Vince Trotter, UCCE Marin County

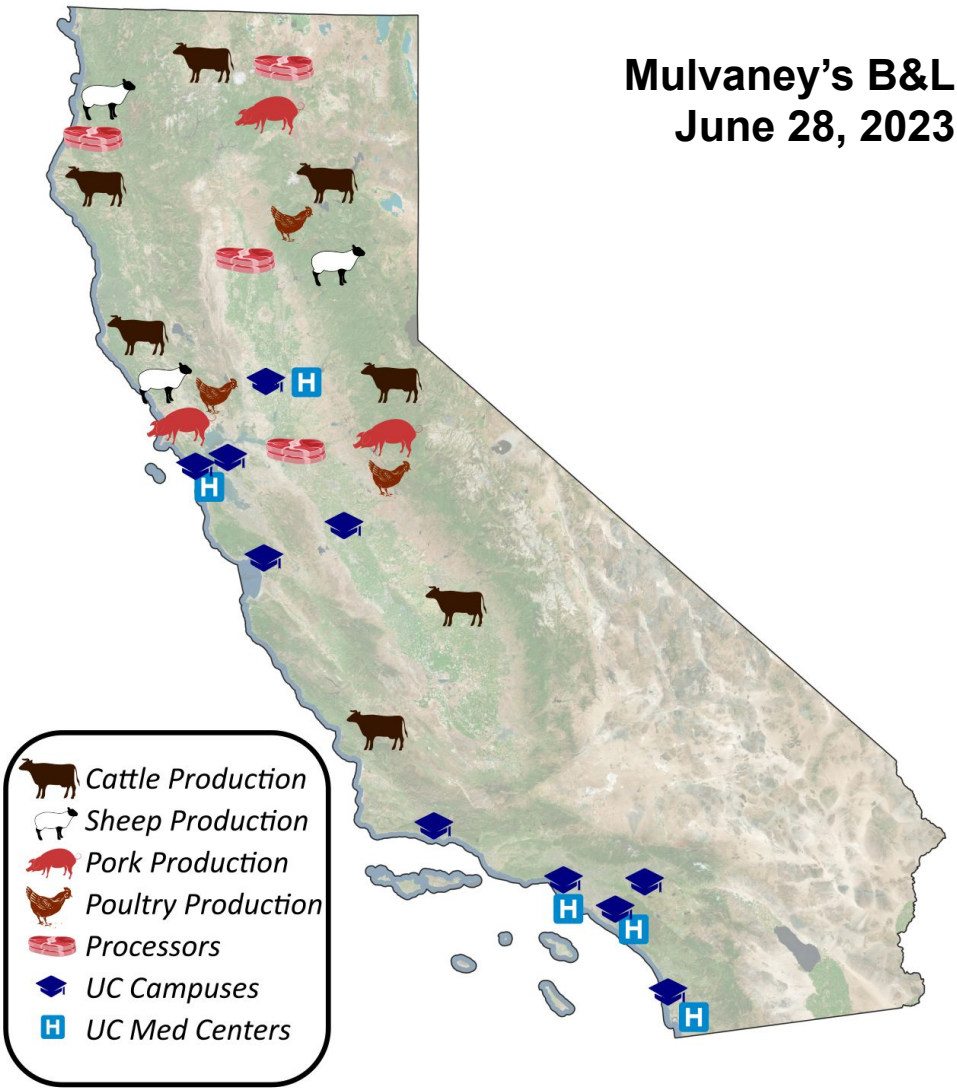
Appendices

A. Summit Agenda
B. Summit Participants

Regional Regenerative Meat Summit

Expanding University of California Sourcing from Small & Midscale Producers

Mulvaney's B&L
June 28, 2023



Roots of Change

Food Systems Lab
Research, Education, Assessment, and Policy

CREAM CO. MEATS

UC Davis Institute of the Environment

Summit Agenda

3:10 PM **Welcome & Ice Breaker**
Chef Patrick Mulvaney, Mulvaney's B&L
Dr. Patrick Huber, UC Davis Institute of the Environment and Food Systems Lab

Panel Discussions Revealing Alignment of Goals -- *Moderator: Michael Dimock, Roots of Change*

3:25 PM **Panel 1: California and USDA Goals re: Working Lands and Rural Economies**
Jennifer Lester Moffitt, Under Secretary, United States Department of Agriculture
Karen Ross, Secretary, California Department of Food & Agriculture
Wade Crowfoot, Secretary, California Natural Resources Agency
Derek Kirk, Deputy Secretary, Labor & Workforce Development Agency

3:55 PM **Panel 2: UC System, UC Student & Meat Producer Goals**
Dr. Glenda Humiston, Vice President, Agriculture & Natural Resources at University of California
Marilyn Biscotti, Strategic Sourcing, University of California
Mark Biedlingmaier, Food, Labor, Procurement Graduate Student Fellow
Conner Hackett, Producer, Ferndale Farms

4:25 PM **How a Proposed Regional Supply Chain Might Work**
Courtney Riggle, IC-FOODS

4:35 PM ***Small Group Brainstorming to Build An Efficient Supply Chain***
Introduction by Michael Dimock, Roots of Change

4:40 PM **Brainstorm 1) Scenarios for Aggregating and Transporting Animals**
Questions to consider:

- What is the most efficient way to pool supply?
- Can each region achieve required pools of animals?
- Do we need local wranglers to coordinate producer delivery of animals to ensure full truck loads?
- Do we need full loads to ensure processing access? What is the preferred load size for key processors?
- How would you identify a meeting point? Could existing auction yards be gathering points?
- What working models for the above questions are out there?

5:10 PM **Brainstorm 2) Scenarios to Assure Timely Processing and Storage**
Questions to consider:

- How do we efficiently slaughter, process and package to supply a large university system?
- Do we have enough slaughter capacity in our CERF region(s)? If not, what will we do?
- How do we ensure USDA slaughter, fabricators and cut and wrap facilities will fit us in for timely processing?
- Can we use additional cooling/freezing capacity to help? Do we have enough cooling/storage capacity?
- Can we rework our harvest schedules to deliver year-round?
- Would altering harvest schedules require restructured systems for collaborative grazing to finish animals?

5:40 PM **Brainstorm 3: Scenarios to Define Regenerative Production and Regional Identity**
Questions to consider:

- Is regional identity/source important to the UC procurement system?
- What production practices would UC consider to be regenerative? Is a certification required?
- If certification is required, should we allow producers to select from a menu of systems accepted by UC procurement?

6:10 PM **Next steps and closing**

6:15 PM **Reception with sliders and cash bar**

7:00 PM **California Feast Celebrating Our Partners in Regenerative Meat**
(separate ticket required)

Proposed Next Steps

1. Each CERF region launches a work group to hone Summit ideas to coordinate supply side from producers, (July-September 2023--facilitated by project team).
2. UC Procurement works with processor(s)/supplier(s) to define product lines and specifications, volumes and pricing, (July-September 2023--facilitated by project team).
3. Processor(s)/supplier(s) work with regional team reps to define parameters based on procurement proposals to confirm what deals can be done, (September-December 2023--facilitated by project team).
4. Project team organizes Zoom seminars for producers related to direct sales systems and field days related to regenerative production, (November 2023-January 2024).
5. Project team undertakes outreach to chefs and butcher buyers, (September-October 2023).
6. Project team reports chef and butcher findings to each CERF region work group to ascertain level of interest and next steps. If producers are interested, team will organize a ***Chefs and Butchers Summit*** in Bay Area, (February 2024).
7. Design/implement follow up steps for *Chefs and Butchers Summit,* (March-June 2024).
8. If producers affirm need, project team pursues CSU system and stadiums, (February-September 2024).
9. Project wrap up and final report, (October 2024).

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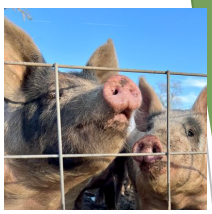
&
Chef Patrick Mulvaney & the Mulvaney's B&L Team
Chef Santana Diaz, UC Davis Medical Center
Cliff Pollard and Sam Bookin, Cream Co. Meats
Keith Nantz, Nexus Beef
Ned Taylor, PT Ranch
Rebecca Thistlethwaite, Niche Meat Processing Assistance Network
Dan Macon, UCCE, Placer & Nevada Counties
Grace Woodmansee, UCCE Siskiyou County
Flavie Audoin, UCCE Central Sierra
Jeffrey Stackhouse, UCCE Humboldt County
Kerry McGrath, UCCE Sonoma County
Morgan Doran, UCCE Sacramento County
Roger Ingram, UCCE Placer & Nevada Counties (retired)
Sheila Barry, UCCE San Francisco Bay Area
Vince Trotter, UCCE Marin County

Resources


Meat system white paper, UC Davis et al
https://escholarship.org/uc/item/4r723374

Community Economic Resilience Fund (CERF)
https://opr.ca.gov/economic-development/

Audubon Conservation Ranching Program (ACR)
https://www.audubon.org/conservation/ranching

American Grassfed Association Certification
https://www.americangrassfed.org/become-a-certified-producer/

Savory Ecological Outcome Verification (EOV)
https://www.landtomarket.com/eov

A Greener World Regenerative Certification (AGW)
https://agreenerworld.org/certifications/certified-regenerative/

Global Animal Partnership Certification (GAP)
Certification programs
https://www.globalanimalpartnership.org/certified-gap

USDA Local Meat Capacity Grant Program
https://www.ams.usda.gov/services/grants/localmcap

Regen Score
https://regenscore.org/

USDA AMS Regional Food System
Partnerships Program
https://www.ams.usda.gov/services/grants/rfsp

Project overview
https://vimeo.com/682085466

Project producer survey data summary
https://shorturl.at/EIY29

PROJECT TEAM

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Regional Regenerative Meat Summit Participant List - June 28, 2023

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Karen Ross, Secretary, CA Dept. of Food & Agriculture
Wade Crowfoot, Secretary, CA Natural Resources Agency
Dr. Glenda Humiston, Vice President, UC College of Ag & Natural Resources
Josh Eddy, Executive Director, CA State Board of Food and Agriculture
Rachel O'Brien, Deputy Secretary, CA Dept. of Food & Agriculture
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Moyra Barsotti, Producer, Capay Organics
Thad Benshoof, Producer, EelRiver Organic Beef
Khalid Berny, Producer, S&H Farms
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Rebecca Elliott, Producer, Elliott Ranch
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Eric Finley, Producer
Julie Golden, Producer, Golden Vineyards
Connor Hackett, Producer, Ferndale Farms
Jill Hackett, Producer, Ferndale Farms
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Roger Ingram, Producer
Rick Leonardt, Producer, Leonhardt Ranch
Jenny Lundine, Producer
Danielle McDonald, Producer, EelRiver Organic Beef
Rob McKenzie, Producer, Beffa Springs Ranch

PRODUCERS (*Continued*)

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Sean McNamara, Producer, Sierra Orchards
Daniel McQueeney, Producer
Liz McQueeney, Producer
Kristin Mehrten, Producer, Allied Ranch, Sloughouse
Sarah Mora, Producer, Humboldt Grassfed Beef
Carrie Richards, Producer & Beef2Institution, Richards Grassfed
Noelle Richards, Producer, Richards Grassfed
Tom Richards, Producer, Richards Grassfed
Mandy Schmidt, Producer, Tomales Haven Ranch
Megan Shahan, Producer, TomKat Ranch
Ciara Shapiro, Producer, AM Ranch
Michael Shapiro, Producer, AM Ranch
Christine Shepherd, Producer, Beffa Springs Ranch
Brydie Stewart, Producer, Black Pig Meat Co
Scott Stone, Producer, Yolo Land & Cattle
Karen Stone, Producer, Yolo Land & Cattle
Paul Strojan, Producer
Elizabeth Strong, Producer, Nevada County Free Range Beef
Grant Strong, Producer, Nevada County Free Range Beef
Clint Victorine, Producer, EelRiver Organic Beef
Kathy Webster, Producer & Beef2Institutio,n TomKat Ranch

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Ellie Holmes, Inside Sales Manager, Cream Co. Meats
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Cliff Pollard, CEO - Project Advisor, Cream Co. Meats
Ned Taylor, Co-founder, PT Ranch

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Spencer Smith, Consultant & EOV Land to Market Certifier, Regenerative Agriculture and Soil Health
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