

2018 ACTIVITIES OF THE FOOD SYSTEMS EXTENSION PROGRAM

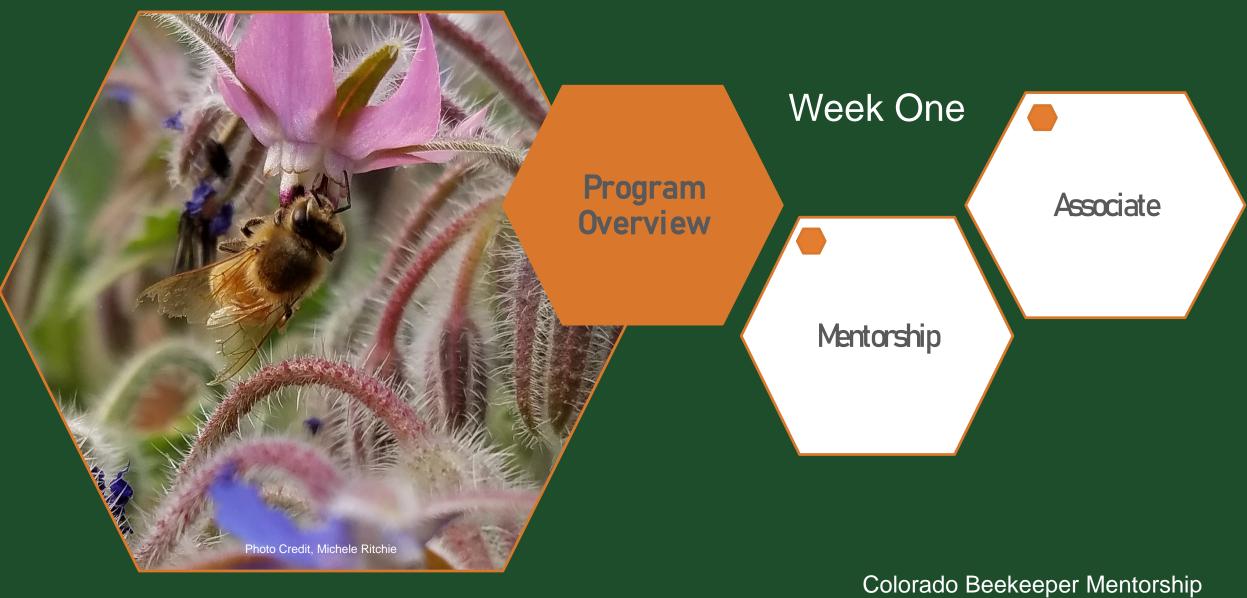


Beekeeper Professional Development

Kurt and Michele

Colorado Beekeeper Mentorship Program





Program





Colorado Beekeeper Mentorship





Week Two

Beekeeping equipment

Colorado Beekeeper Mentorship

Obtaining and

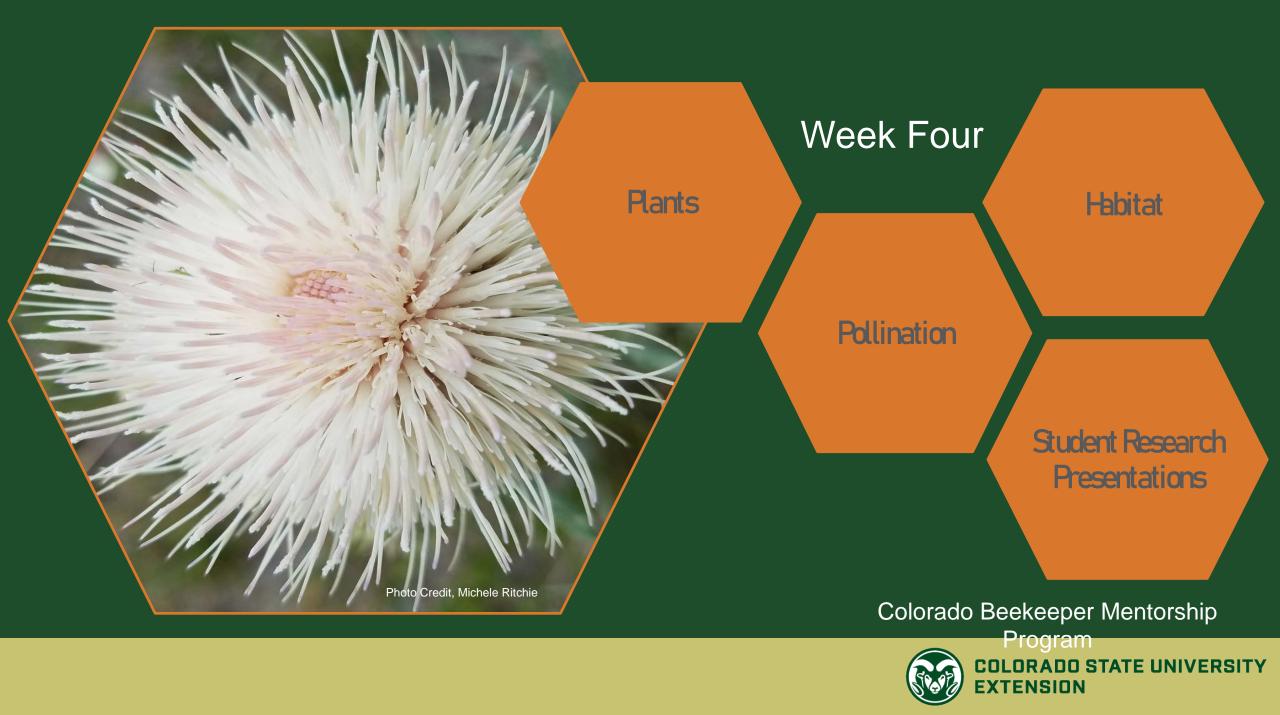
preparing for bees

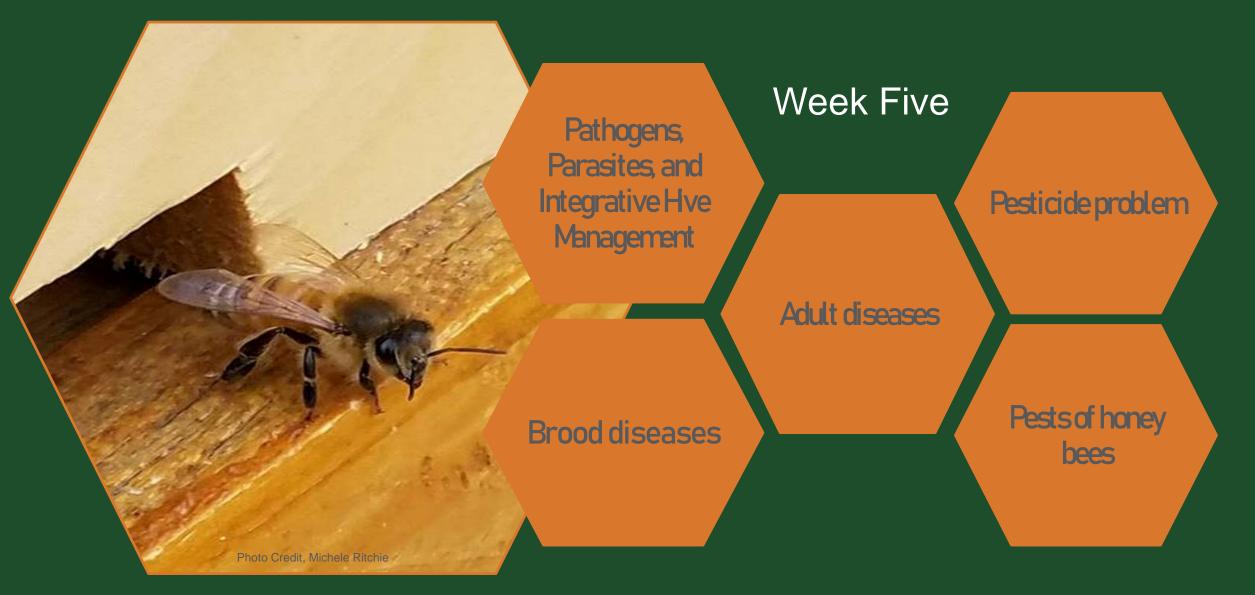




Colorado Beekeeper Mentorship







Colorado Beekeeper Mentorship







Week Seven

Mentor volunteer and development

Colorado Beekeeper Mentorship





Week Eight (Optional)

Cottage Food Certification Class

Colorado Beekeeper Mentorship

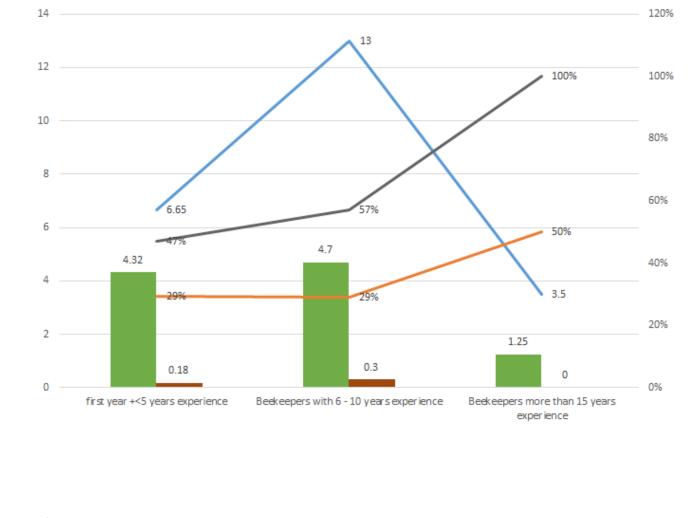




Colorado Beekeeper Mentorship



Comparison Amoung Beekeeper Groups - 2018 Baseline Data



CO CDA



Adams County Extension Bee Yard Located on Open Space Property Showing Six Different Hive Designs

Types of Hives We Are Evaluating



- Apimaye Hive
- Warre Hive
- Langstroth Hive
- Long Langstroth Hive
- Top-Bar Hive
- Flow Hive



Apimaye Hive



Long (bar) Langstroth Hive



Warre Hive



Flow Hive



Langstroth Hive



Top Bar Hive

Just Some of the People Involved in Adams County Extension Beekeeping Which Includes Six Extension Staff Members































Programing

- 8 programs in Chaffee County to date.
 - More than 115 people participated in beekeeping educational programs offered by CSU Extension in Chaffee County in 2016, and an additional 102 were trained in 2017.
- 2018 programs:
 - Golden Plains area (Wray?) Linda Angelo
 - Archuleta County Robin Young
 - Adams County Thad Gourd
 - El Paso County (tentative) Michele Ritchie
- Late in 2019, Kurt will be looking for 4 new counties to offer the program. Finally, Kurt will have funding in 2020 for 4 additional counties.



Evaluations of the CBMP

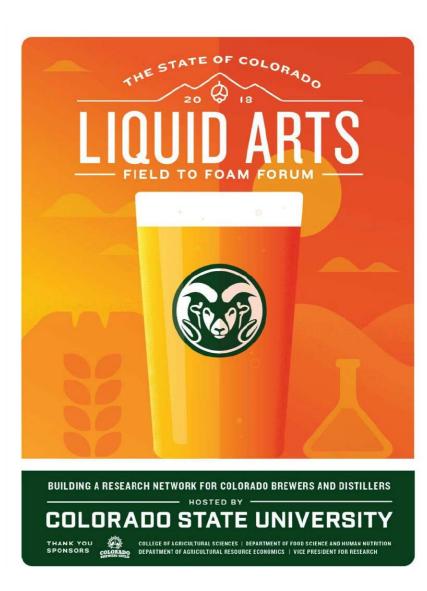
- Significant knowledge gained in the areas of:
 - honeybee development,
 - colony establishment,
 - bee nutritional needs,
 - high altitude plants,
 - adult bee diseases,
 - brood diseases,
 - varroa mite management,
 - and queen management.
- Other topics showing knowledge gained (but not as significant) were equipment needs for novice beekeepers, colony activities, and apiary site evaluation. This is not surprising as each of the volunteers accepted in the CBMP were experienced beekeepers and came to the course with a lot of knowledge in these areas.



Liquid Arts

Dawn and Tim







Field to Foam: New Linkages with the Beverage Industry



A State of Beef & Beer



Value of production of beef cattle = \$2.4 billion All animal slaughter and meat packing = **\$3.2 billion**

Beer brewing = **\$3.5 billion**



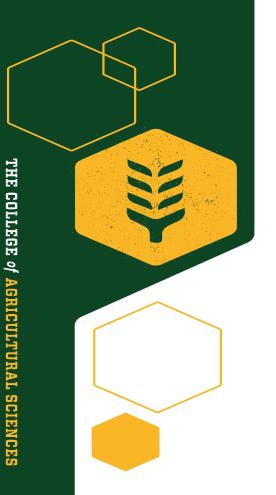






During Blueprint Process, held Industry Session, May 2017 Collaborating with CSU Fermentation Program, **Colorado Wine & Balistreri Winery**

Colorado Brewers Guild Inland Island Yeast Laboratories Summit Hard Cider and Perry Co, Summit Mobile Juicing, **New Belgium Brewing Company CSU Online - CO Beer and Brewing Online Program** Horse & Dragon Brewing Company **Birko Corporation** Mancan **Denver Museum of Nature & Science Regis University Craft Beer Program**, **Inland Island Yeast Laboratories** Gilded Goat Brewing Company Stranahan's Colorado Whiskey **Old Elk Distillery**

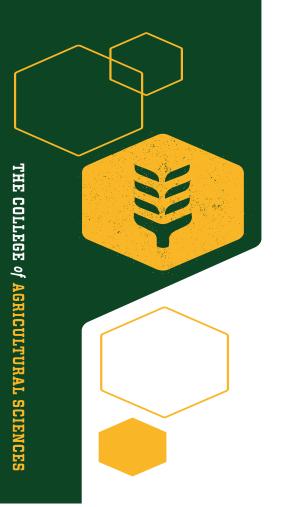


May 2018, Field to Foam Conference: Topics and Interest

Table 1: Attendance and votes* cast for each breakout session topic

Торіс	% attendance	Votes		
		Academic	Industry	Overall
Breakout session I (73 participants)				
Building the Colorado Brand	34%	61	97	158
Sustainability	25%	30	104	134
Quality control	27%	33	114	147
Navigating federal, state, and local regulation	14%	15	59	74
Breakout session II (59 participants)				
Bringing craft beer to grocery and convenience stores	19%	25	48	73
Ingredients and raw materials	39%	30	125	155
Equipment and engineering	19%	26	82	108
Industry specific continuing education	23%	32	96	128

*Includes initial and plenary votes



New Federal-State Marketing Improvement Program Grant:

Emerging market opportunities for Colorado craft beverages: How will access to grocery and convenience stores influence consumer choices, marketing strategies and supply chains?

Commences Fall 2018, for 3 years, with annual industry meetings

Led by Marco Costanigro and Dawn Thilmany Colorado Brewers Guild, Brewers Association CSU Fermentation Science and Technology Program Linkages to CSU Business Faculty

Funding PhD work of Nathan Palardy









Emerging market opportunities for Colorado craft beverages: How will access to grocery and convenience stores influence consumer choices, marketing strategies and supply chains?

Understanding the Colorado distribution chain.

<u>Identify viable strategic options.</u> Identify a set of viable marketing practices to support craft brewers under the new regulatory regime. This may include considering the coordination of craft brewers in joint marketing efforts.

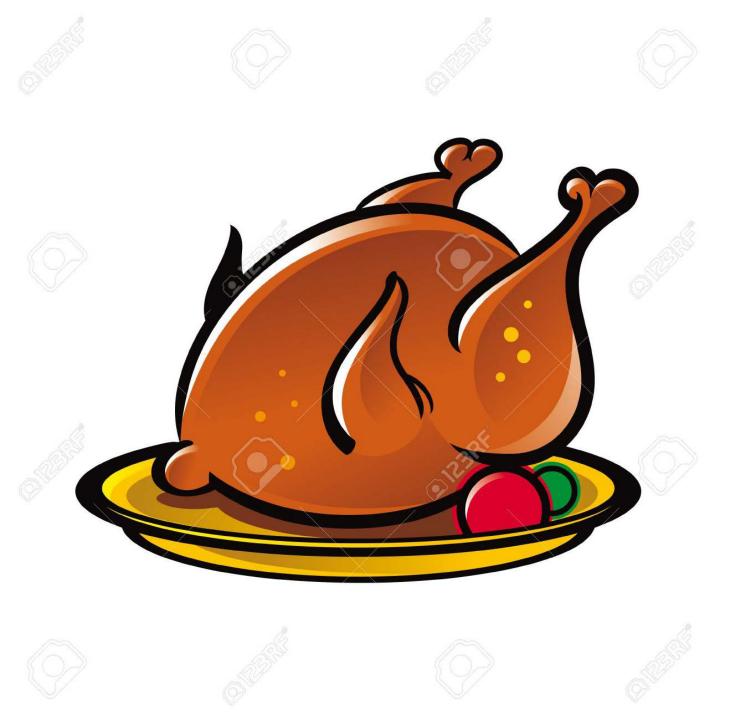
<u>Communicate with stakeholders</u>. Three annual workshops (Fall 2019; Summer 2020 and 2021) will be organized in partnership with the Colorado Brewers guild to disseminate findings, engage industry stakeholders and receive feedback, and support any industry-driven collective strategies.

<u>Collect data for more generalizable academic research</u>.



Poultry and Meat Processing

Ragan and Becca



Update on Colorado State Small Scale Poultry Processing Regulations

Processing < 1000 birds annually: See <u>CDA-CSU Small Flock Poultry</u> <u>Processing</u> at

https://www.colorado.go v/pacific/aginspection/m eat-custom-processing

Processing < 20K birds annually and selling directly to retail food handling establishments: proposed regulations have been postponed until April 2019

Connecting and Strengthening Livestock Supply Chain Nodes: Managing Risk and **Assessing New Market Opportunities for Small to** Mid-Sized Livestock Production and Processing in Colorado





AGRICULTURAL AND RESOURCE ECONOMICS COLORADO STATE UNIVERSITY

Miles Rollison Daniel Mooney

Agricultural and Resource Economics Colorado State University

Martha Sullins Agriculture & Business Management Extension

Project goals

Develop educational materials and tools that enable producers to:

- 1. assess how these options complement **current** financial and marketing risk management strategies, and
- 2. manage **new** financial and marketing risks that could arise from the uncertainty of understanding and meeting new buyer requirements for meat quality, quantity and packaging.







Key project steps

- 1. Processor survey already distributed to custom and USDAinspected facilities throughout Colorado. Asks about existing capacity and willingness to invest in infrastructure so producers can expand market opportunities (using new certification programs or selling new value-added products).
- 2. Producer interviews instruments being tested to identify resource and information constraints, as well as desired market opportunities. Conducted through focus groups. You can help facilitate one to increase capacity in your community!







Project outcomes focusing on connections & communications

- 1. Compilation of educational materials for processors and producers
- 2. Workshop(s) that will expand conversations, partnerships and joint market opportunities for small- to mid-sized livestock processors and producers
- 3. Specific tools will include:
 - Budgets for equipment purchases
 - Model feasibility studies for plant construction/ modification
 - Consumer-facing information templates

Survey Summary

 Processors source 'raw material' (animals or meat) from a variety of sources

	N	Mean
Wild game (1=yes, 0=no)	13	0.69
Livestock - Custom process (1=yes, 0=no)	13	0.92
Livestock - Purchased (1=yes, 0=no)	13	0.54
Sourced meat (1=yes, 0=no)	13	0.69

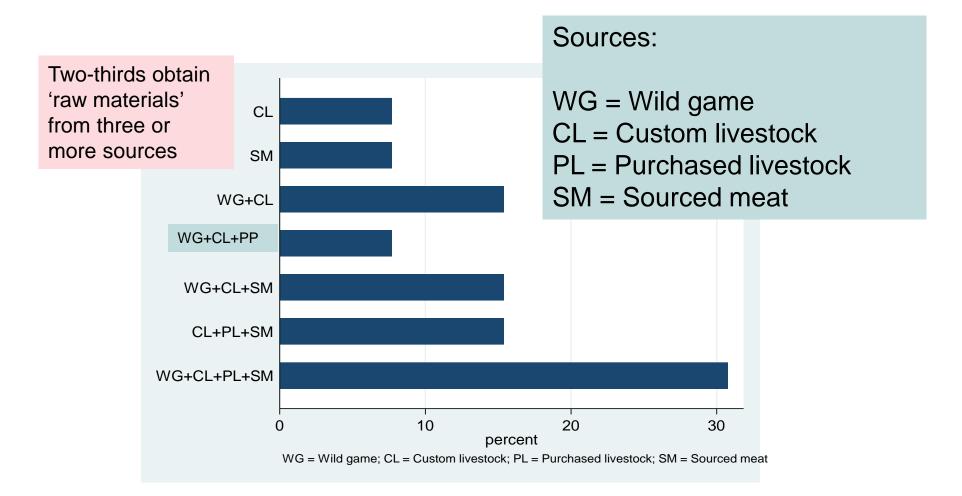
Reached out to 120 processors so far. 23 have responded *18 with complete information

- Note: Regressions use 48 observations from 16 processors (3 scenarios per processor)
- First set of summary slides only use 13 observations

Survey Summary

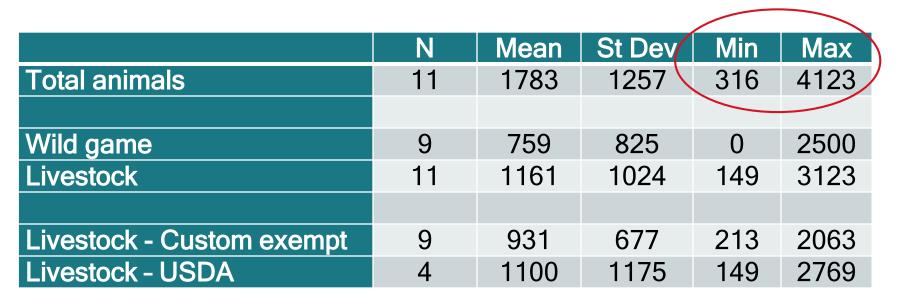


Most processors are diversified in the sources they use



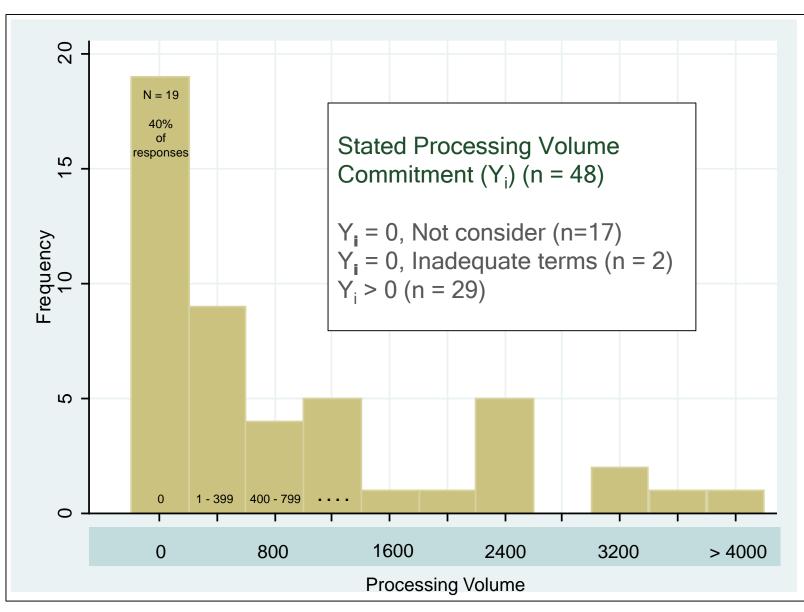
Survey Summary - Annual Volume 2017

- Smaller operations process in the hundreds
- Larger operations process in the thousands





Willingness to accept new business commitments





Survey Summary - A Few Findings



- Two-thirds operate at full capacity year-round
- Average 'days in advance' to schedule livestock processing in busy season = 54 days
- 15% have plans to expand in 5 years
- 23% have plans to exit in 5 years
- 'Increase profits' and 'Increase personal free time' were the top two business goals
- Preliminary research findings show processors' willingness to allocate capacity to new business commitments is very responsive to price

Takeaways (Very preliminary)

- Caveat: Small sample size
- Processors who already slaughter domestic livestock are very likely to look for new business commitment
 - Non-slaughter processors face significant costs and uncertainty
- Effects of specialization (vs diversification) are nuanced
 - Specialized processors less likely to consider new business commitments
 - But -- given that they do 'consider' appear to commit to a higher volume
- Volume commitments are price responsive
 - But competition with existing clients could offset this somewhat





Business Development and Cottage Food

Danielle, Sheila, Mary, and Libby

Goal from 6/2017 Food Systems PRU Retreat: Create a curriculum for those seeking to expand food or ag business.

During 2018, the Food System PRU took two major actions towards this goal:**1. Business Development Survey**.

- Goal: Survey Colorado Food Manufactures and Cottage Food Producers to inform future business development programming and assess the impact cottage food production has had on their lives.
- Timing: Begun early October will close on November 15th
- 2. From Kitchen to Commercial A Food Business Development Seminar
 - Goal: Develop and implement a training including workshops, panels, and keynote presentations to existing and aspiring food businesses in Colorado.
 - Timing: November 12th 9 to 5PM Arapahoe County Fairgrounds



WHAT: From Kitchen to Commercial - A food business development seminar

WHEN: November 12, 2018 from 9 a.m. - 5 p.m. Lunch is included

WHERE: Arapahoe County Fairgrounds and Park, 25690 E. Quincy Ave. Aurora, CO 80016

REGISTER: http://foodsystems.colostate.edu/food-and-ag-training/

DETAILS: CSU Extension is hosting a one-day training designed to improve business development skills for food entrepreneurs. Aspiring and early stage food businesses along with support organizations are encouraged to attend.

Participants will learn business plan and marketing fundamentals as well as have the opportunity to network with other entrepreneurs and service providers.



FOOD SYSTEMS COLORADO STATE UNIVERSITY EXTENSION



Requests for PRU Team Members

- Encourage all Cottage Food Producers and food manufacturers in your community to complete the Business Development survey: http://colostate.az1.qualtrics.com/jfe/form/SV_5jPYqSa5Gkof7RH
- 2. Register to attend the seminar and share with community members: https://www.eventbrite.com/e/from-kitchen-to-commercial-a-food-business-development-seminar-tickets-49091503007



Next Steps

- 1. Interpret survey results
- 2. Review participant evaluations from seminar
- 3. Develop programming for business development training field agents



BUILDING FARMERS COLORADO STATE UNIVERSITY

EXTENSION

Beginning farmers

Adrian, Dan and Karen

Upcoming Beginning Farmer Training Programs



- Larimer County- Principles course starting October 2nd November 19th 2018
- Boulder County- Vision Course November 10th, 2018
- Chaffee County- looking into principles course for Jan/Feb 2019
- El Paso County
 - Agritourism, Grant Writing, Farm Tax, and High Tunnel production workshops in 2018.
 - This coming winter and spring will have a Produce Safety Overview class, to include a beginning "Getting Started With Produce Safety On Your Farm" Certification, Produce Safety Grower's Training, Colorado Building Farmers – Principles Class, and Colorado Beekeeper Mentorship Program classes (6-7 week series)
- Arapahoe County- held a Vision Course in March 2018 and is planning another in spring 2019
- Jefferson County held a principles course in spring 2018
- Denver County held a Beginning Market Farming Certificate Series in partnership with the Denver Botanic Gardens in 2018

What is CSU Extension and DBG Market Farming Program?

- Curriculum developed in cooperation with DBG
- 7 core lecture based 3 hour classes
- 5 hands on workshop days
- 4 optional electives
 - Students must attend 2 to get certificate
- Cost is \$475
 - Priced to cover food, paying some teachers and to provide scholarships







2018 CSU Extension and DBG Beginning Market Farming

- 18 Students signed up
- Students came from Breckenridge to Byers, Fort Collins to Buena Vista
- 14 students completed the core curriculum

BEGINNING MARKET FARMING CERTIFICATE SERIES

Are you interested in growing and selling vegetables but don't know where to start? Denver Botanic Gardens and Colorado State University Extension have partnered to develop a certificate program that will introduce you to the ins and outs of becoming a successful market farmer on five acres or less.

By participating in this program, you will attend seven core curriculum lectures that will cover everything from planning your farm to selling at market. You will also apply what you have learned in the classroom on working farms during five hands-on workshops. Finally, you will have the opportunity to chaose up to four advanced, elective classes that cover innovative topics such as seed saving and season extension. Lecture classes and workshops will take place on Fridays, 9 a.m. – noon and electives will take place in the evening.

Staff from our program will work with you to help find handson experiences at local forms. This may take the form of a regular volunteer shift, an internship or an apprenticeship. If you have your own farm already up and running, the Gardens or CSU Extension staff can work with you over the growing season on any issues or questions that arise.

To complete the certificate, you must:

- Attend all seven (7) Core Curriculum & five (5) Hands:On Workshops (1 absence allowed)
- Attend a minimum of two (2) Elective courses (four (4) offered in late summer 2019, register individually)
- Complete all courses within the 2018-2019 calendar year

All **Core Curriculum lectures** take place at Colorado State University Denver Extension, 888 E. Iliff Avenue, Denver, CO 80210

All Hands-On Workshops take place at TBD local farms. Directions and locations will be communicated with students the week before class. All Elective courses take place at Denver Botanic Gardens, 909 Yank SL, Denver, CO 80206

GARBENS

For registration questions please contact: adult.programs@botanicgardens.org For program inquiries including specific dates and program content, please contact: Brien.Darby@botanicgardens.org











Next Steps

- 2018/2019 class start Friday!
- We could use help peer reviewing curriculum
- Putting it online
- Take it to your community!









Cottage food and food safety training

Marisa and Anne



Transition and succession planning

Martha, Robin and Todd

Farm Transition @ CSU Extension

Background

- CSU Extension and the Dept of Ag and Resource Economics have been engaged in farm transition planning for a number of years.
- Initial team of Norm Dalsted, Jeff Tranel and Rod Sharp developed a Leaving a Lasting Legacy training that helps families plan estate transition and management succession based on the Four Pillars of a Lasting Legacy.

Four Pillars of a Lasting Legacy

- Passing on one's values and life lessons
- Personal possessions of emotional value
- Final wishes and instructions
- Real estate and financial assets

Family communication is the foundation for the four pillars, but is often hampered by underlying issues and history amongst family members. Having an unbiased facilitator available to help the family manage initial conversations is one way to help families through the estate and succession process.

Building Extension's capacity

- In March 2014, Adrian Card, Robin Young, Todd Hagenbuch and Martha Sullins participated in the IFTN Farm Succession Coordinator Certification program.
- In May 2014, the team convened a roomful of professionals to start a conversation about the lack of farm succession resources in Colorado.
- Since mid-2014, the team has participated in 3 trainings on engaging with families, tax issues and farm finance assessment, all led by Jeff Tranel.

Impacts (transition is a long process, so some impacts are realized over a number of years!)

- Robin, Todd and Martha have been working with ranch families throughout the state to help them develop plans to transition financially viable ag operations to the next generation
 - Family ranch in Larimer County is transitioning from commodity production to grassfed operation, creating a business for 2 younger cousins, and allowing 2 owners to retire. Conservation easement may be placed on the ranch. Family members state communication has improved, and they are moving forward in a positive and collaborative way.
 - Family transitioning from leased ranch in Moffat County to Jackson County, using the opportunity to develop business and succession plans. Long-term lease includes hunting and recreation leases, and family better understands roles of individuals.
 - A centennial ranch in Custer County is successioning from two brothers and their wives to the 14 adult children within their blended families. The changeover includes keeping a smaller cattle operation and hay production to adding agritourism (fishing, hunting and working dude ranch).

Upcoming education and outreach

- Series of family-based Leaving a Lasting Legacy workshops are scheduled around the state:
 - ► Longmont, Nov. 13
 - Delta, Nov. 28
 - Craig, Nov. 29
 - ► Alamosa, Dec. 12
 - Pueblo, Jan. 14
 - Las Animas, Jan. 15
 - Cortez, Feb. 7
- Session at the CFVGA conference in February 2019
- Continuing education for succession coordinators



Food security initiatives

Ann, Darrin and Greg













Good Food Collective

- General mission: "The Good Food Collective exists to strengthen our regional food system through efforts to address food security, food justice & equity, and our regional food economy."
- We work with other regional organizations and distribution centers but our primary outlets are organizations who serve food insecure populations, including food banks, soup kitchens, churches, schools, preschools, and hospitals.
- As of right now, we have gleaned/redistributed over 65,000 lbs. of food.

Good Food Collective

Harvest & Distribution:

- Total harvest:133,514 lbs (and still counting!)
- Lbs Distributed to agencies providing food to underserved or food insecure populations: 34586 lbs
- Farmer Support: 3158 lbs
- Local Restaurants: 450 lbs
- Local Cidery: 78,400 lbs
- Value Added: 4005 lbs (including Apple Days)
- Culled apples distributed for animal feed: 4930lbs
- Compost: 480

Community Alliance for Hunger Relief and Education

Amanda McQuade (Ag Experiment Station) and Ann Duncan, MS, RDN (Extension)



COLORADO STATE UNIVERSITY

About Us

- **Purpose:** To increase the amount of high-quality fruits and vegetables available to those facing food insecurity in Mesa County and throughout Colorado.
- **How:** All orchard fruit currently growing on nine acres at the CSU Western Colorado Research Center at Orchard Mesa will be directed to hunger relief.
- **Community Impact:** The Community Alliance is initiating four projects: community orchard harvests, vegetable production, K-12 STEM enrichment & service learning, and nutrition education.





Partnerships

- This program would not be possible without the joint efforts of the Orchard Mesa CSU Agricultural
 Experiment Station and Tri- River Area CSU Extension.
- Additional valuable community partners include:
 - Western Colorado Community College
 - School District 51
 - Food Bank of the Rockies
 - John McConnel Math and Science Center
 - Goodwin Foundation,
 - Bacon Family Foundation
 - Colorado Trust





Community Feedback

- Food Bank of the Rockies
 - https://www.youtube.com/watch?v=KruJj3rNr3g#action=share
- **Grand Junction Daily Sentinel**
 - https://www.gjsentinel.com/news/western_colorado/csu-helps-busy-activist-feed-hungry/article_1b9cd59c-81a6-11e8-8c1f-10604b9f7e7c.html
- **Colorado Blueprint to End Hunger**
 - https://www.endhungerco.org/people-blog/2018/1/3/one-west-slope-county-is-aiming-to-end-child-hunger-one-fruitand-veggie-at-a-time





Two Year Summary

- Total Produce Distributed: 173,472 pounds
- Volunteer Engagement: 1,315 hours
- Student Engagement: 6,206 hours
- K-12 Student Service Learning: 3,982 hours
- Nutrition Education:
 - Created 12 produce labels/nutrition education cards
 - Held multiple camps including topics of cooking, food systems, nutrition and preservation
 - Supporting schools and students through Problem Based Learning (PBL), educational resources, and hands on programs.
 - Engaged over 800 students in the classroom in 2018
- Hand-On Internships: 3,000 paid hours for 7 interns





More Information

- Visit our website at
 <u>http://communityalliance.extension.colostate.edu/</u>
- Contact us at:
 - Amanda McQuade

Community Alliance Program Coordinator Colorado State University Western Colorado Research Center 970-462-2113 Amanda.McQuade@colostate.edu

– Ann Duncan MS, RDN

CSU Extension Tri River Area Family and Consumer Science Agent 970-249-3935 (Montrose) Ann.Duncan@colostate.edu



Thank you

