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The University of California working in cooperation with Shasta County and the USDA.

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Shasta & Inter Mountain 4-H Questions
Contact Erin Paradis at ecparadis@ucanr.edu
Message from the County Director

The University of California Cooperative Extension (UCCE) is the public service and applied research division of the University of California. UCCE is a cooperatively supported effort between county and federal government, and the University of California. The University of California provides program staff while Shasta County provides support services (vehicles, office, support staff, utilities, etc.). At UCCE, we conduct applied research on issues pertinent to Shasta County Division of Agriculture, Natural and Human Resources. This partnership enables the intellectual resources of the University of California to address critical issues such as rangeland and forest production, water quality, food safety, childhood obesity, wildfire, oak woodland management and youth development.

Our statewide networks of agriculture, natural resources and human resource staff are dedicated to conducting research and extending results to farmers, ranchers, forest land owners, students, teachers and interested citizens. For more on the University of California Division of Agriculture and Natural Resources, visit http://ucanr.edu/.

This has been a year of unprecedented change. For nine months, we have operated under US Center for Disease Control (CDC) guidelines requiring meetings and personal contacts to be handled in a completely different fashion. We were fortunate that even under COVID-19 guidelines we could participate in the 6th annual “Farm Camp” program. This partnership with City of Redding Parks and Recreation and with Shasta Union High School provided respite from the pandemic for both parents and youth. I also enjoyed collaborating with Nate Caeton and Josh Davy on a peer reviewed study that unequivocally demonstrates the importance of 4-H Market Animal projects to the 4-H Youth Development program. Participation in these projects has a multiplicative effect on youth enrolling in the program. Nate’s work has continued on a program aimed at giving youth a better understanding about possible career choices and college. I gained new appreciation for Erin Paradis as she provided counsel for youth and parents from three counties (and four fairs) through the challenges of if and how market animal projects would be exhibited and sold in 2020. A group of volunteers, fair managers and their staff worked tirelessly with leadership at both the County and State levels to develop guidelines allowing for the exhibition and sale of project animals at Shasta District and Intermountain Fairs. Rick Satomi continued to work on several important forestry related studies locally and collaborated with me on the development of a peer reviewed publication. Our work allows pond owners to develop their own depth capacity curve to help comply with CA State Water Resources Control Board diversion reporting requirements. This year, under the leadership of Shawnice Sellers, the CalFresh staff has provided lessons to over 5,168 youth and adults.

2020-21 Shasta County UCCE Staff

Larry Forero - County Director/Livestock/Natural Resources Advisor
Rick Satomi - Forestry/Natural Resources Advisor
Erin Paradis - Community Education Specialist II, 4-H Youth Development
Nate Caeton - 4-H Youth Development Advisor
Sara Jaimes - Executive Assistant-Confidential, Shasta County
Denice Doll - Typist Clerk III, Shasta County
Shawnice Sellers - Community Education Supervisor II, UC CalFresh Program
Chanelle Vincelli - Community Education Supervisor I, UC CalFresh Program
Lori Coker - Community Education Specialist II, UC CalFresh Program
Tami Sandeen - Community Education Specialist II UC CalFresh Program
Monique Bittner - Community Education Specialist II UC CalFresh Program

4-H Youth Development Program Statistics

<table>
<thead>
<tr>
<th>Shasta County 4-H Statistics</th>
<th>4-H Events: County</th>
<th>4-H Events: State &amp; Regional</th>
</tr>
</thead>
<tbody>
<tr>
<td>733 Youth Members</td>
<td>Livestock Judging Day</td>
<td>State Leadership Conference</td>
</tr>
<tr>
<td>141 Adult Volunteer Leaders</td>
<td>Favorite Foods Day</td>
<td>California 4-H Camping Conference</td>
</tr>
<tr>
<td>65 projects offered</td>
<td>Presentation Day</td>
<td>W.H.Y. Conference (Regional)</td>
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As we approach the new year, we are continuing to create a “hands on learning” atmosphere where our members can explore, share ideas, grow skills, and identify their spark. If you are interested in helping our youth “learn by doing” by sharing your expertise and experiences or have a youth who is interested in joining, please contact the Shasta County 4-H office at (530) 224-4900.

UCCE Shasta Master Gardener Program

The Shasta County Master Gardener is a joint program of Shasta College and UCCE. Shasta College provides training and organizes projects, while UCCE provides consistent programming across the state and administrative support. The UCCE Master Gardener program is an internationally recognized program for individuals who wish to increase their science-based knowledge of gardening and the environment and then return that knowledge to their community as a volunteer. Shasta County currently has 38 active Master Gardeners and 21 new graduates from our fall training class.

This past year has been challenging as many of our volunteer projects with school gardening, in person workshops and information booths have been put on hold; but the Shasta County Master Gardeners still managed to contribute over 1,250 hours of volunteer community service dedicated to answering gardeners’ questions, increasing environmental awareness, replanting after the wildfires and providing educational opportunities for beginning gardeners. Master Gardeners work to provide current university research on garden and landscape related topics to the local community by writing a weekly advice column for the Redding Record Searchlight, staffing a gardener help line and providing online seminars and videos.

In the coming year volunteers will be working on many projects to keep our community healthy and growing. Some examples include:

- Providing educational kits to school children for science based learning related to botany and gardening.
- Propagating plants and giving them away to land owners who lost landscaping in the wildfires.
- Staffing our garden help line, keeping our Facebook and UCCE website updated with seasonally appropriate information and providing online trainings for both novice and experienced gardeners.

If you have garden or landscape related questions call the Master Gardener Helpline at (530) 242-2219 or e-mail mastergardener@shastacollege.edu
4-H Youth Development Program

Nate Caeton is the 4-H Youth Development Advisor for Shasta, Tehama and Trinity counties. Nate conducts extension education programs focused on strengthening and expanding 4-H, both locally and statewide. His background is in instructional science, learning technologies, and informal learning. Current efforts focus on STEM Education and Scientific Literacy, outdoor and environmental education, civic and community engagement, College and Career Readiness, and Youth Emergency Preparedness. Additionally, Nate chairs on two statewide 4-H committees; the Camping Advisory Committee and the Shooting Sports Advisory Committee.

Although the COVID-19 pandemic continues to present challenges for delivery, 4-H programming is resilient and adaptable. With the Implementation of Center for Disease Control safety measures for in-person activities and the addition of virtual formats, the 4-H program continues to serve local families.

Highlights for this past year:

- Continued work on the Pathways to Your Future college and career exploration program. This year a new partnership with Martin Luther King, Jr. Center was developed. While COVID -19 interrupted delivery in the Spring, the Fall session is nearing completion. Participants have engaged with a panel of current college students via Zoom and will be taking virtual “campus tours” with a virtual reality headset.
- 2020 marked the 7th Farm Camp held in partnership with Redding Parks and Recreation. This camp engages local youth in agriculture with hands on learning experiences. A highlight of the camp is the piloting of the 4-H program’s D JI Phantom drone by the participants.
- Selected activities from Project Learning Tree and Project WILD were delivered throughout 2020 as two unique Zoom efforts. End are underway to create a virtual offering of Livestock Judging Day, Presentation Day, and Field Day.

Erin Paradis is the 4-H Community Education Specialist for Shasta, Trinity and Tehama counties. She is responsible for the day-to-day operation of the 4-H program, provides training and support to the volunteers and club leaders, and promotes the 4-H program through a variety of outreach methods and collaboration within the local community. Outside of Erin’s county duties, she has participated in a curriculum pilot testing of “Exploring Goat Health and Husbandry” and is serving on two statewide committees; CA 4-H Policy and Enrollment for Virtual Programming and the Cross County Pilot for the CA Groundswell 4-H Debit Card.

Highlights for this past year:

- At the beginning of the year Erin worked closely with the Shasta County 4-H Ambassadors. She also helped them to set learning goals and activities for the year, after which, They planned and implemented a successful “leadership lock-in” that taught leadership skills to other youth. They also participated in countywide events and activities. Annually, the ambassador team plans and implements at least one service-learning project. COVID-19 restrictions required that they adjust their service-learning project. They saw a need to keep the members engaged during this difficult time and developed a video series of project lesson/activities for the members.
- Participated in Farm Camp with our 4-H members and their goat friends. Campers learned about the goat project and washed, trimmed hoofs, and tattooed the goats.

Shasta CalFresh Healthy Living, University of California Cooperative Extension

The CalFresh Healthy Living, University of California Cooperative Extension (CFHL, UCCE) program aims to inspire and empower underserved Shasta county residents to improve their health and the health of our communities by promoting awareness, education and community change through diverse partnerships that result in healthy eating and active living.

This program delivers research and evidence-based comprehensive programming to youth and adults with a focus on direct education to improve the diet and nutrition related skills of CalFresh recipients and their families. Shawnice Sellers supervises this dynamic USDA grant funded program. Chanelle Vincielli supervises staff and programming.

Last Federal Fiscal Year (Oct. 1, 2019– Sept. 30, 2020), the CalFresh Healthy Living, UCCE Program provided food, nutrition, garden and health education in Shasta county to:

- Over 4,800 children in 33 schools or preschools
- 368 adults and families in 17 non-profit organizations and agencies

This program collaborates with key partners to address local nutrition and health problems, including the Healthy Shasta Movement, Shasta County Growers Association and the cities of Redding, Anderson and many schools and organizations.

Program efforts provide essential knowledge and skills that hope to increase consumption of healthy foods and beverages, increase food resource management, improve food security and support access to physical activity which will lead to healthy lifestyles.

Although the pandemic has changed the way the program looks and operates, the staff has adapted to meet the needs of students, families and community. The team spent the last several months adapting curricula and creating lesson videos to meet the demand for distance learning and online instruction. All the approved curricula now has lessons and PowerPoints that can be delivered via online learning platforms additionally, the staff collaborated with partners to create interactive videos for physical activity lessons, garden lessons as well as traditional nutrition education lessons.

Staff continue to deliver traditional “Lesson Kits” with teachers that include lesson materials, handouts and other resources that enable teachers to deliver lessons safely to their students, while an educator can consult and support via teleconferencing.
Livestock & Natural Resources

Larry Forero is the Livestock/Natural Resources Advisor for Shasta County. He is trained as an animal and range scientist. His applied research and extension activities addresses issues associated with ranch economics, beef cattle, rangeland and irrigated pasture.

The University of California Livestock/Natural Resource Program in Shasta County has been developed to identify and fix major issues impacting local producers. Projects generally fall into one of two major areas: Natural Resources and Livestock Production.

Natural Resources
- Long term range monitoring project that evaluates forage across time
- Continuation of irrigated pasture water efficiency project
- Continuing the groundwater measurement project in the Fall River Valley
- Summer dormant perennial fleche fescue grazing project that is evaluating the possibility of establishing a summer dormant perennial in the valley region of California
- Completed common range and pasture plant identification guide
- Development of online publication and calculator for land owners to self-calculate depth capacity curves for their ponds with Shasta UCCE Forester, Rick Satomi

Livestock Production
- Researching efficacy of using eye patches to treat cattle with pink eye
- Initiated research to fine tune mineral mix that meets animal needs and optimizes consumption of ionophore
- Developing a study to assess the importance of worming cow-calf pairs on irrigated pasture
- Ranch-to-Rail program with University of California, Davis
- Wrote a general publication outlining the basic tenants of cow-calf economics and grazing for a public audience

These projects address important issues that livestock industry will contend with locally and across the state. The results of this work are extended through the free newsletter, Northern California Ranch Update, as well as periodic workshops, seminars and field days. You can subscribe to this newsletter electronically on our website http://ceshasta.ucanr.edu.

This past year we offered the AB-589 Water Measurement trainings in California in a virtual environment. While this wasn’t as much fun as holding the meeting face-to-face, it did help water rights owners comply with statutory regulations.

Forestry Program

Rick Satomi is the Forestry and Natural Resources advisor for Shasta, Trinity and Siskiyou County. In this role, Rick seeks to address major issues of concern for local forest landowners and land managers. Over the past year, the program has tackled projects to improve our forest management capacity and natural resource education opportunities. Like forest ecosystems, the Shasta Office has been busy adapting to the challenges of this year.

Forest Management

The Redding Forest Stewardship Workshop was hosted in collaboration with Shasta College in early 2020. This provided participants with the technical training necessary to develop fire risk and forest health management strategies for their property. Workshop participants worked with forestry professionals to prepare individualized management plans and incorporate personal goals with the ecological, silvicultural, and economic constraints of their forest landscape. The initial sessions of this program were held prior to COVID-19 restrictions and pivoted to a virtual format to ensure participant safety. Despite the challenges, the workshop was successful with 23 landowners completing their California Cooperative Management Plan.

The Sierra Nevada Adaptive Management Experiment continues to make progress with the first phase of treatments completed at the Shasta County study site. LaTour State Demonstration Forest is one of the three primary locations experimenting with new management techniques. The goal it to identify which forest structures can persist in the face of the ever increasing forest disturbances throughout the north state. Phase 2 of the project involves testing for improved tree growth under future climate conditions.

Seedlings with genetic variability from across the latitudinal range of mixed conifers forests are currently being prepared for planting in Spring of 2021. With good weather, we hope to plant over 12,000 seedlings and identify genetically superior trees for Shasta County.

Ensuring the economic sustainability of our forestry infrastructure is crucial if we are to increase the pace and scale of fuels treatments. UC provides an annual resource for policymakers and project developers looking to establish new processing facilities. Despite the ongoing pandemic, UC and local industry partners were able to work together and safely conduct a series of mill visits to review how changing log and lumber demands have impacted our ability to process woody fuels at low cost.

Natural Resources Education

COVID-19 restrictions made it impossible to hold the Forestry Institute for Teachers (FIT) K-12 educator training program in 2020. Typically, this program brings forest specialists together with teachers from rural and urban schools to deliver natural resource education in classrooms across the state. At present, the 2021 FIT session is planned to move ahead as normal. Teachers participating in the program are then equipped to teach forestry/natural resource curriculum in their classes.

Rick continues to be involved with youth education efforts at the Sierra Cascade Logging Conference and Forestry Challenge, cultivating the next generation of forest management professionals.