



# 4-H YOUTH DEVELOPMENT PROGRAM

## Program Highlights

### 4-H Youth Members:

Placer: 729

Nevada: 454

### 4-H Adult Volunteers:

Placer: 219

Nevada: 154

### Youth Enrolled in Group and Short-Term Activities:

Placer: 4,646

Nevada: 253

### 4-H Community Clubs:

Placer: 14

Nevada: 8

*Ensuring youth have the opportunity to develop into thriving, healthy adults is foundational to their future involvement in their community and overall success in life. Many youth today struggle to develop the necessary skills to reach their fullest potential. The 4-H Youth Development Program provides youth the opportunity to engage in a variety of activities that helps launch youth, regardless of their background, into leading healthy and productive lives.*

*The 4-H Program supports the efforts of families and schools by providing out-of-school-time activities that promote positive youth development. The 4-H Program fosters a welcoming environment where youth feel safe as they explore a variety of educational activities, interact with their peers and with caring adults, and develop knowledge and skills. Research indicates youth who participate in the 4-H Program are 25% more likely to contribute positively to their families, themselves, and their communities, and are 41% less likely to engage in risky and problematic behaviors.*

*As identified through research, the four essential elements grounding successful youth development programs include:*

- *Belonging*
- *Mastery*
- *Independence*
- *Generosity*

*The essential elements of the 4-H Youth Development Program are delivered in the context of:*

- *Citizenship*
- *Leadership*
- *Life Skills*





# PLACER COUNTY 4-H

## EMBRYOLOGY



*Newly hatched chicks rest in the incubator before being moved to the brooder. Embryology is the biggest 4-H outreach project for the year.*



*Primary youth engage in hands-on learning activities*

### ISSUE

The most recent data indicates that California ranks 49<sup>th</sup> out of all 50 states in 8<sup>th</sup> grade science literacy. Youth are struggling to develop the scientific knowledge and skills that will launch them into effectively preparing for the workforce and critically thinking through various science and consumer information.

### WHAT WAS DONE

The 4-H Embryology Program provides a hands-on opportunity for youth to engage in animal science. An in-person training was held for educators to learn more about embryology and how to use the tools and equipment to hatch chicks or ducklings. Reservations for incubators and fertilized eggs were conducted through an on-line system in order to supply classrooms, afterschool, preschool, and homeschool educators with the means to conduct the project. The webpage also offered video clips and answers to frequently asked questions. Locally developed “4-H Embryology...An EGGciting Adventure” curriculum provided numerous opportunities for youth to learn through observation and hands-on activities.

### IMPACT

The 4-H Embryology project successfully reached 192 classrooms, which surmounts to 4,560 youth in Placer County. A total of 143 incubators were rented by educators to engage youth in learning. Two hundred and sixty-one dozen fertile eggs were sold for hatching of chicks and ducklings. Results from the program indicate increases in science literacy among youth, as well as development of life skills such as critical thinking, managing, caring, and teamwork. All educators indicated that they were very likely to recommend this program to other educators. One educator shared “the Embryology Program is a wonderful program that enables students to actually experience the development of life. They learn about chickens and we continue the comparison with other life. Terrific program!” Another educator shared that “aside from the biology aspects of the activity, it also helps teach patience, respect for living things, attention to detail, and wisdom...” to students.



# PLACER COUNTY 4-H ROBOTICS PROJECT

## ISSUE

Currently scientific literacy in the United States is adversely low. In California, only 21% of high school seniors are considered proficient in science. The California 4-H Science, Engineering, and Technology (SET) Initiative emphasizes goals to improve youth science literacy through educational programming. Within the 4-H Youth Development Program, youth have opportunities to engage in a wide range of SET projects, including Robotics.

## WHAT WAS DONE

The Countywide 4-H Robotics Project began its second year, with youth participating in building a robot and competing with other robotics teams across the state. Team members spent six weeks building their robot to meet specifications to participate in the Recycle Rush challenge for the regional competition held at the University of California, Davis.

## IMPACT

The Placer County 4-H Robotics Project grew to 24 youth members this year. Five adult volunteers serve as mentors, assisting the youth with project management, engineering, and programming. After completing the building of the robot, the youth participated in a regional competition against other robotics teams from the western region, including teams from Alaska and Texas. The Placer County 4-H team placed 19<sup>th</sup> out of a field of 55 teams.



*Robotics members participated in a regional competition. Placing 19th out of a field of 55 teams.*



# PLACER COUNTY 4-H COMMUNITY CLUBS



*Dry Creek 4-H'ers created a Garden Project at the Placer County Fair. All produce harvested from the garden was donated to the Placer County Food Bank.*



*4-H youth participating at County-wide Presentation Day*



*Two Flatlands 4-H youth getting ready for the You Make It Craft Expo*

## ISSUE

Youth are in need of positive youth development opportunities to engage with peers and adults. The 4-H Community Clubs Program provides these opportunities for youth.

## WHAT WAS DONE

4-H Community Clubs provide youth the venue to develop skills and competencies, as well as confidence, through community-based learning. Youth participate in projects, activities, and events that promote leadership, citizenship, community service, and other life skills, all while being supported by caring adults.

## IMPACT

- 729 youth participated in the 4-H Program, partaking in a wide range of projects such as citizenship, rocketry, shooting sports, marine biology, animal science, cooking, and public speaking, among many others
- 120 youth served as club officers, presiding over meetings and performing the monthly duties of the club
- 219 adult volunteers providing more than 18,000 combined hours of mentoring and support to 4-H youth, and involvement in 4-H projects, activities, and events



# PLACER COUNTY 4-H SUMMER CAMP



*The traditional sign greets 4-H'ers as they enter camp.*



*Safety first! Youth getting ready for the zip line course.*



*Camp youth participate in tribe activities.*

## ISSUE

Every summer millions of youth across the world participate in some type of camp setting. High-quality, educational outdoor adventure programs provide a setting for positive youth development experiences during out-of-school time.

## WHAT WAS DONE

Placer County 4-H held a weeklong Summer Camp Program in the Tahoe National Forest. Twenty-seven highly trained 4-H senior youth members organize and implement the camp program, with support from 25 adult volunteers. Over 100 campers participated in activities such as astronomy, hiking, kayaking, high ropes course, and photography. For many campers this is their first experience with the 4-H Youth Development Program. Summer camp has shown to be a great way to introduce and recruit youth to participate in other delivery modes of 4-H, such as the 4-H Club Program. The 4-H Summer Camp provides an affordable outdoor experience for campers, allowing them to develop fond memories and friendships.

## IMPACT

The majority of youth who attended camp reported they learned how to do new things and explored new activities they did not realize they enjoyed. Camp counselors showed improvement in leadership skills and decision-making.



# NEVADA COUNTY 4-H COMMUNITY CLUBS

## ISSUE

Positive youth development occurs from an intentional process that promotes thriving components for young people. 4-H helps young people reach their full potential as competent, caring, confident leaders of character who contribute and are connected to their communities. The 4-H unique learn-by-doing model teaches essential skills that youth will use throughout their lives.

## WHAT WAS DONE

The Nevada County 4-H Program has 8 Community Clubs. These clubs offer projects that provide youth with hands-on learning opportunities designed to promote citizenship, leadership, and life skills, within a structure that is developmentally appropriate and planned. Adult volunteer leaders work with youth members in many project areas, including Clothing and Textiles, Foods and Nutrition, Computer Technology, Animal Science, and Citizenship.

Opportunities for youth leadership development are offered through club officer leadership, committee involvement, event planning, All Star Ambassadors, Junior and Teen Leader project leadership, and the Camp Counselor program. Youth and adult partnerships encourage cooperation and mentorship, and give youth leadership roles within their projects, clubs, and county.

## IMPACT

- 454 youth participated in the program.
- 154 adult volunteers provided many hours of support and mentoring.
- 51 youth served as club officers and 60 youth participated as junior or teen leaders sharing their project expertise with other youth.
- 15 County 4-H events were held.
- Projects and Clubs organized and participated in many community service activities.
- The 4-H Youth Development Program builds self-esteem and helps youth realize that they can make a positive difference in their communities.



*Members of the Chicago Park 4-H Club organize the annual New Year's Day Resolve 2 Run 5K-10K race that takes place in Chicago Park.*



*The Nevada County 4-H All Star Ambassadors serve as representatives of 4-H and leaders within the county.*



# NEVADA COUNTY 4-H SUMMER CAMP

## ISSUE

High-quality camp and outdoor adventure programs are beneficial in providing positive youth development experiences during out of school hours.

## WHAT WAS DONE

Nevada County 4-H held a five-day Summer Camp Program. Highly trained 4-H senior youth counselors organize and implement the camp program and activities with the support and guidance of adult volunteers.

Nature hikes, swimming, kayaking, high ropes course, first aid, archery, arts and crafts, team-building games, and astronomy were just a few of the fun and educational activities for youth.

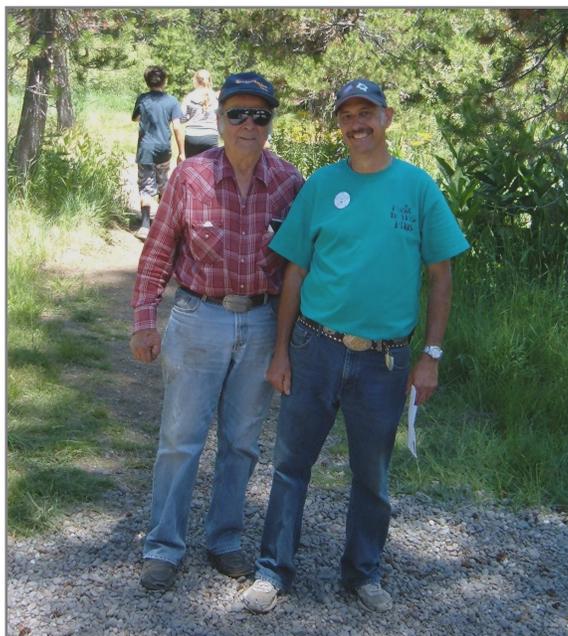
Camp provides a safe environment for hands-on experiential learning, as well as developing citizenship, leadership, and life skills.

## IMPACT

In Nevada County, 142 campers, including 27 youth camp counselors, and 18 adult volunteers attended camp. Camp counselors showed significant gains in leadership development and decision-making. Youth campers had fun, made friends, developed an affinity for nature, learned responsibility, and gained confidence. Adult volunteer leaders provided guidance, a safe environment, nutritious and tasty meals, and facility improvements. The Nevada County 4-H Youth Development Program provides an affordable educational experience for youth campers.



*Teen camp counselors provide leadership for campers and camp activities.*



*Adult volunteers from Placer and Nevada counties work together to prepare for camp.*



*For more than 70 years, Woodchuck Flat 4-H Camp has been creating memories and enriching lives in Nevada County.*



# NEVADA COUNTY 4-H PROJECT WORK

## ISSUE

Youth benefit from meaningful experiences in learning and the unique hands-on educational activities and intentional youth development the 4-H Youth Development Program provides.

## WHAT WAS DONE

Nevada County 4-H offers many projects that are led by adult volunteers, ranging from animal science projects to food science, horticulture, citizenship, arts, and community service projects. The Citizenship Program is a project for teens who learn about state and federal government and travel to the State Capitol and Washington D.C. The County-wide Horse project is another favorite where members learn horse care and skills like trail riding. The County-wide Sport Shooting and Archery projects are also popular offerings that provide Nevada County 4-H youth with safety training and skill development.

## IMPACT

The Nevada County 4-H Youth Development Program offers projects for youth members in an array of subject areas.

- 120 projects were offered in a wide range of subjects and activities.
- There were 154 adult volunteer leaders who provided many hours of volunteer time mentoring and guiding their project members.
- 60 junior and teen leaders shared their knowledge with other members.
- More than 200 Nevada County youth participated in Archery and Sport Shooting.



*The Citizenship Project worked to help make improvements at the Nevada County Narrow Gauge Railroad Museum in Nevada City.*



*4-H members provide animal demonstrations at community events, sharing their knowledge and encouraging compassion and affinity for animals.*



# YOUTH CARCASS CONTEST EDUCATIONAL PROGRAMS

## ISSUE

Youth development programs such as 4-H and FFA are able to provide youth with the experience of raising livestock for showing at the Placer, Nevada, and Gold Country Fairs. The Tahoe Cattlemen's Association and Gold County Fair felt it was important to provide youth exhibiting beef and sheep at the Fair with carcass data to help them better understand the product they were producing, improve genetic selection, and produce a more consistent product for those buying at the auction.

## WHAT WAS DONE

UCCE worked collaboratively with Tahoe Cattlemen's Association and Gold Country Fair to compile carcass results, provide an educational program, and present awards to the youth members with superior carcass characteristics. UCCE compiles the results from all three fairs and develops the educational programs. Tahoe Cattlemen's Association and Gold Country Fair provides the meal and the awards at each of the events.



*2014 Beef Carcass Award Winners.  
The carcass contest dinner had over 130 people in attendance.*

## IMPACT

- Over 130 youth and adults attended the Beef Carcass Awards Dinner.
- Over 70 youth and adults attended the Sheep Carcass Awards Dinner.
- TCA Beef Ambassador Teen youth gave the carcass presentations prepared by UCCE at each awards dinner.
- Each awards dinner presented belt buckles to the youth who had the top carcasses at the Placer, Nevada, and Gold Country Fairs.
- 18 beef carcasses met the Carcass of Merit Criteria
- Tahoe Cattlemen's Association supported these awards along with three belt buckles for a total of over \$2,000.
- 26 lambs met the Gold criteria.
- The educational efforts and awards have resulted in more consistency with the beef and sheep carcasses.



*Over 70 people attended the 2014 Sheep Carcass Awards Dinner*



# EATING HEALTY FROM FARM TO FORK

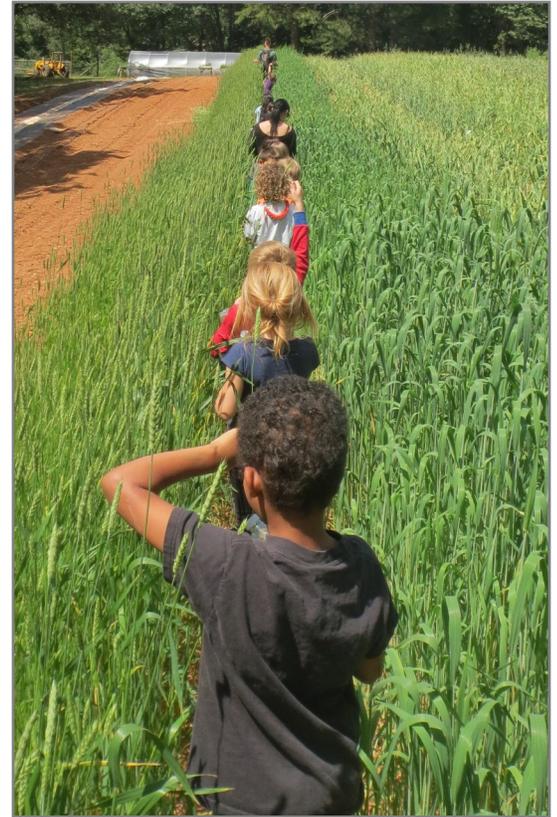
## 4-H CYFAR PROJECT: FARM FIELD TRIPS

### ISSUE

Many children do not know where their food comes from. There is a disconnect between what they eat and how it is produced.

### WHAT WAS DONE

An integral part of the CYFAR program is reconnecting kids with where their food comes from. In 2014-2015 children grades K-4 were sent on field trips to local farms. Approximately 125 children at Bell Hill Academy and Margaret Scotten Elementary attended a fall and spring farm tour. This both supported a local farmer and gave the children a direct connection to where and how food is grown. On the field trip they were taught hands-on lessons led by the farmers and volunteers. Children adventured through wheat and discussed the layers of whole grain, walked through green house propagation, tasted nectar and learned about pollination, helped spread soil amendments, ate sweet peppers, fed pigs, chickens and goats. During the summer the 4-H CYFAR program coordinated with the Master Gardeners and had two tours of their demonstration garden. Approximately 120 children in the Scotten and Bell Hill summer school programs were taught about beneficial insects and garden pests, listened to a book on gardening, learned about worm composting and toured the garden. All the lessons were taught by Master Gardener volunteers.



*Walking through a wheat field at the Dinner Bell Farm*

### IMPACT

245 children in the afterschool & summer school program went to where food is grown and participated in growing, eating and working on the farm and in the garden. Children learned through hands-on participation about food – where and how it is produced.



*Beneficial insects with Master Gardeners*



*Learning about wheat with Farmer Molly*



# EATING HEALTHY FROM FARM TO FORK

## 4-H CYFAR PROJECT: TEEN TEACHERS

### ISSUE

Obesity is epidemic in the United States and onset is occurring in children and teens at an alarming rate.

### WHAT WAS DONE

Over the course of the 2014-2015 school year 14 high school age youth were trained to teach Garden and Nutrition curriculum to elementary age students. Each teen volunteered 1 ½ hours per week for 10 weeks teaching 1<sup>st</sup> and 2<sup>nd</sup> grade students in the afterschool program at Margaret Scotten Elementary School. Six teens returned from previous sessions to participate in the 2015 Spring session. The teens volunteered additional time outside of the regular program hours to present nutrition activities at two afterschool events and attend field trips with the children. The children were taught using hands-on activities around MyPlate food groups, worm composting, plant parts, food safety, cooking and physical activity. Tasting fresh fruits and vegetables was an integral part of the program. Two teachers acted as mentors for the teens.



*Teens teaching Nutrition Lesson*

### IMPACT

Forty children in the afterschool program were taught weekly by teens through hands-on Nutrition curriculum. Children were engaged by teen teachers and eager for the weekly MyPlate lesson. Children and teens increased their knowledge of the curriculum materials. Teens learned teaching skills as well as expanded information on the nutritional value of foods in all the food groups. Teens were eager to take home fresh food after lessons, learned new cooking techniques and tried new foods. Five teens will be attending the 4-H State Leadership Conference in the summer of 2015.



*Teen teaching about sugar in drinks*



# EATING HEALTHY FROM FARM TO FORK

## 4-H CYFAR PROJECT: GARDEN CLUB



### ISSUE

Studies have shown that garden-based nutrition education can significantly increase children's knowledge of, preference for, and consumption of fresh fruits and vegetables. Garden based learning combined with nutrition education is more effective than nutrition education alone.

### WHAT WAS DONE

Children grades K-4 spent time weekly or bi-weekly in the school garden doing hands-on gardening activities. Approximately 71 children at Bell Hill Academy and 102 children at Margaret Scotten Elementary were taught hands-on lessons in the garden. Children weeded, found worms, planted seeds, transplanted, harvested and ate produce they grew.

The 3<sup>rd</sup> and 4<sup>th</sup> grade students experimented to great success using some fun tools to document the state of the garden – PH meters, soil thermometers, moisture meters, a rain gauge, a camera and a digital microscope! The students took hundreds of fantastic photos and video clips throughout the season. At the end of the year they enjoyed a slideshow of the photos they had taken in the garden.

### IMPACT

173 children in the afterschool program were taught through hands-on gardening curriculum. In the garden children practiced social skills, plant identification, tasting vegetables & fruit. Produce eaten by the kids in the garden included, radishes, sugar snap peas, lettuce, strawberries, tomatoes, tomatillos, peppers, eggplant, cucumbers, onion flowers and more! Children planted over 30 types of vegetables. They learned about growing their own food, succession planting, composting and played with goat kids from a local farm.