

FORESTRY CHALLENGE



2016 Annual Report
Presented by
Forestry Educators Incorporated
a Non-Profit 501(c)3 Corporation

Message from the Executive Director



As I look back at the past year, and think about what made it unique, one thing comes to mind – 2016 was the year of refinement. With the five California events firmly in place, and growth from 2015 at only 6%, we were able to catch our collective breath and focus on making our operation more efficient. While our core staff of three remained constant, we added seasonal help both behind the scenes and at events. We organized our tools and supplies so they are easy to access. And, with solid support from our sponsors and grants from the US Forest Service, we made long term investments in equipment such as a golf cart, computers, and projectors.

These behind the scene improvements, coupled with a new website that is visually pleasing and mobile device friendly, puts us in position to reach our maximum capacity in California and be ready to expand out of state if the opportunity presents itself. With that possibility in mind, we have revised the logo and name. Now, we are simply “Forestry Challenge”. Calm, cool, and collected, we are focused on maintaining the high quality of the existing program while being open minded to new opportunities to educate our youth about science-based forest management.

A handwritten signature in cursive script that reads "Diane".

Diane Dealey Neill
Executive Director

Forestry Educators Incorporated

A Non-Profit 501c3 Corporation

Tim Cary, President
Jill Engelmann, Secretary
Rich Wade, Treasurer

2016 BUDGET

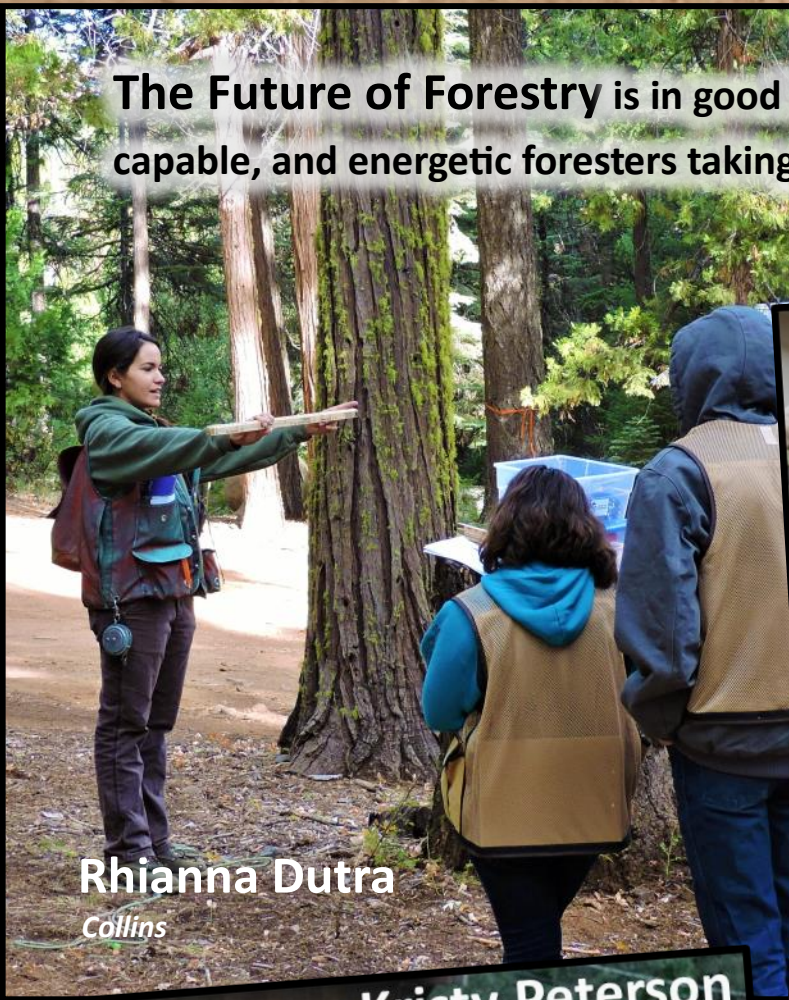
Funding Source	
Federal Grants	\$ 97,977
Sponsor Contributions	\$ 73,617
Registration Income	\$ 37,445
Total Funding	\$ 209,039
Expenses	
Events	
Facilities and Food	\$ 76,144
T-Shirts	\$ 6,850
Substitutes and School Transportation	\$ 5,783
Awards	\$ 470
Personnel	
Wages and Payroll Taxes	\$ 71,434
Employee and Volunteer Mileage	\$ 9,060
Overhead	
Office Supplies, Printing and Postage	\$ 5,474
Insurance	\$ 2,009
Professional Services and Website	\$ 1,708
Outreach	
Airfaire, Rental Car, Hotels	\$ 1,799
Conference Registrations	\$ 465
Total Expenses	\$ 181,197
Carryover for Future Growth	\$ 27,842

Thank you to our Sponsors

2016 Totals: 415 Students and 84 Teachers from 56 Schools

Allison Melott	Mendocino Redwood Company
Amador-El Dorado Forest Forum	Pacific Forest Foundation
Amador Resource Conservation District	Papé Group
American AgCredit	Peter Johnson
Anderson Logging	PG&E Corporation Foundation
Associated California Loggers	Placer County RCD
Big Creek Lumber Company	Red River Forests
Bill Dennison	Redwood Empire Sawmill
Bordges Timber	Rich Wade
C.T.L. Forest Management	Robert Dalton
California Licensed Foresters Association	Robinson Enterprises
Collins Company	Roseburg Resources Company
Crane Mills	Santa Cruz County Office of Education
El Dorado County RCD	Shasta County Resource Advisory Committee
Emerson Logging	Shasta Forests Timberlands
Frank Losekoot	Sierra Cascade Logging Conference
Fruit Growers Supply Company	Sierra Forest Products
Georgetown Divide RCD	Sierra Nevada Conservancy
Hancock Forest Management	Sierra Pacific Foundation
Hardie Tatum Tree Management	Sierra Resource Management
Headrick Logging	Soper Wheeler Company
Humboldt Redwood Company	Stan Leach Timber
Inland Empire RCD	The Home Depot
J & R Logging	Tim Treichelt Giving Fund
Jared Tappero	Timothy M. Cary & Associates
Joe Dillard	Timber Products Company
Joe Thornton Logging	Tom Lannen
Kimberly Tiesen	Trinity River Lumber Company
Knox Garden Box	United Risk Solutions
March Conservation Fund	United Wholesale Lumber Company
Mark Crawford Logging	USFS – Forest Stewardship Program
Matt Waverly	Waratah Forestry Attachments
Mendo-Boldt Industries	Woolery Timber Management

The Future of Forestry is in good hands with these young, capable, and energetic foresters taking the lead.



Rhianna Dutra
Collins



Julie Dufresne
Big Creek Lumber



Kristy Peterson
Swanton Pacific Ranch

David Springe
Rayonier



Ariel Thomson
Blodgett Forest Research Station



Brandon Wingate
US Army Corps of Engineers



Chris Dow
Sierra Pacific Industries

Making Connections: Foresters and Schools



Tyler Hullquist with Weed High School

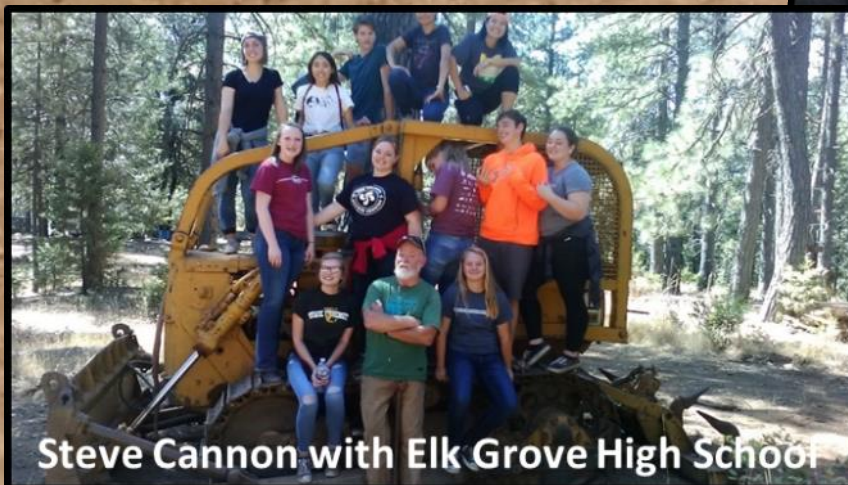
In a new effort for 2016, we asked teachers if they wanted a forester to work with their students prior to coming to a Forestry Challenge. Over 40 teachers said “yes”, and we were able to match most of those schools with a local forester. Many schools are forming lasting relationships with their forester and holding training sessions on campus, in city parks, or out in the forest.



Patrick McDaniel with Franklin High School



Chris Quirnbach with Golden Eagle Charter



Steve Cannon with Elk Grove High School

SHASTA

Mountain Meadows Camp, Sept 28 to Oct 1

15 schools with 85 students and 19 teachers

*Anderson Anderson New Tech Dunsmuir Feather River College
Golden Eagle Charter Greenville Mariposa Nevada Union
Northern Summit Academy Red Bluff Christian Shasta Charter
Academy Tulelake Weed Westwood Yreka*

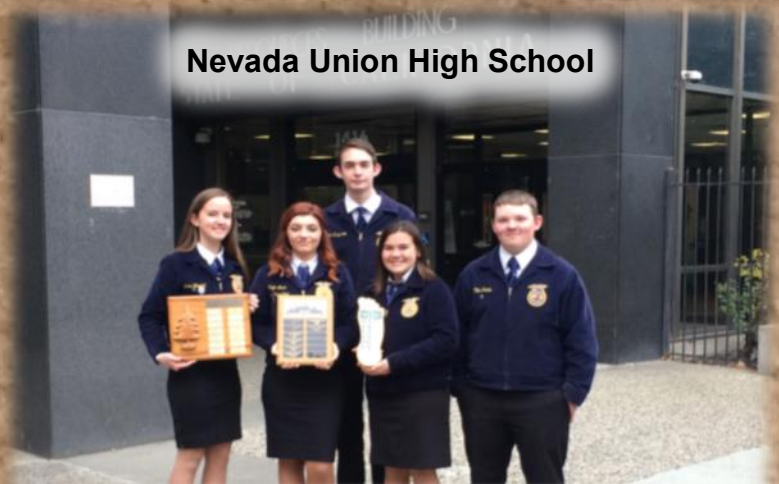


The Thatcher Ranch provided a beautiful backdrop for the Shasta focus topic, led by Len Lindstrand of W.M. Beaty & Associates. Students evaluated even-aged pine plantations on the property, assessing the condition of the plantations by collecting data on evenly-spaced plots. Using the compiled data, teams weighed in on how to manage the 38-year-old pine plantations on the Ranch over the next 10 years.



By the time testing begins, teams have mastered the basics and can complete the test with confidence.

Nevada Union High School



First Place and Highest Scoring Team
Statewide after their presentation to
the Board of Forestry

Each team was challenged to find their plot center and collect accurate data, with guidance from a forester.

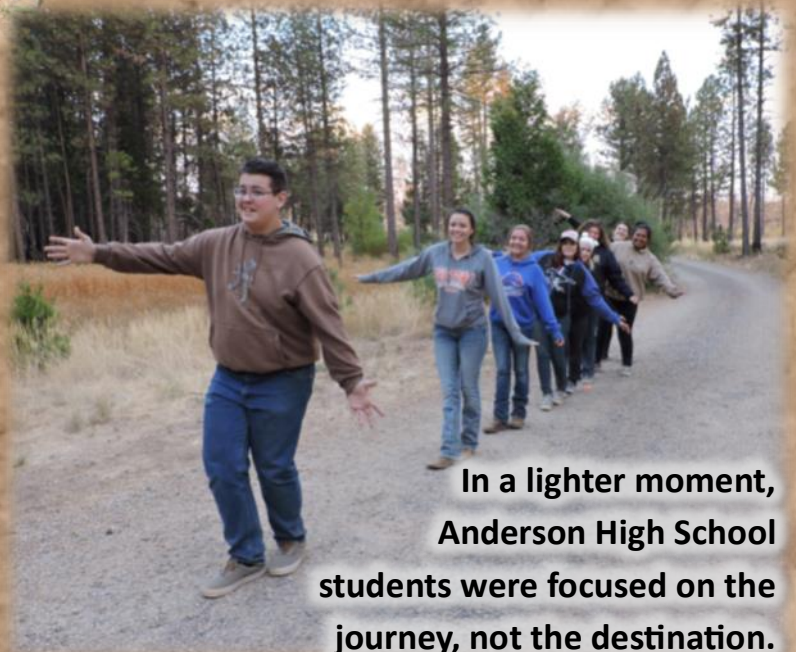


Yreka High School participated for the first time, and seemed to enjoy the fieldwork.

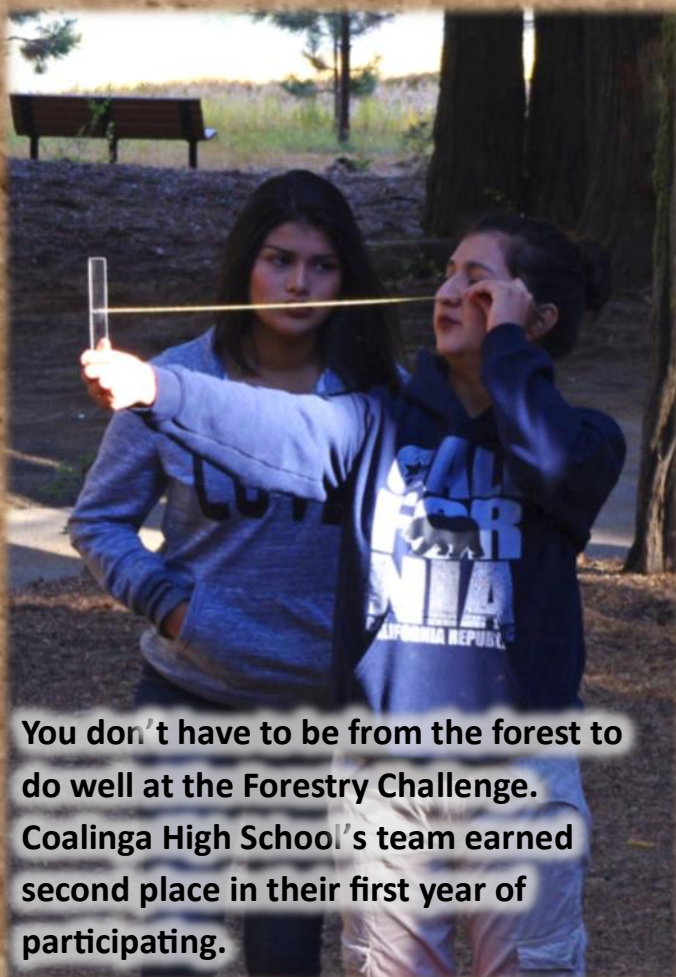
The Tom Eustis
Memorial
Award for
Teaching
Excellence



Randy Lund
Tulelake High School



In a lighter moment,
Anderson High School
students were focused on the
journey, not the destination.



You don't have to be from the forest to do well at the Forestry Challenge. Coalinga High School's team earned second place in their first year of participating.



SEQUOIA

Camp Sequoia Lake

7 schools with 56 students

Coalinga Delta Eleanor Roosevelt

Monache Reedley

The Sierra Nevada Conservancy is a strong supporter, providing both sponsorship dollars and support from staff, like Michael Pickard.



Camp Sequoia Lake, the site of the 2016 event, is in the heart of California's tree mortality epidemic, which jeopardizes the safety of Camp visitors and staff. To assist Camp managers with anticipating the next wave of mortality, students inventoried the live trees around the Camp's buildings and infrastructure, classifying them by species and size. They evaluated the health of these trees to predict the need for another hazard tree removal project in the future.

OIA

, October 12 - 15

ents and 9 teachers

r Roosevelt Littlerock

lley Sequoia



The focus topic fieldtrip included a hike around Sequoia Lake to reach the data collection plots.

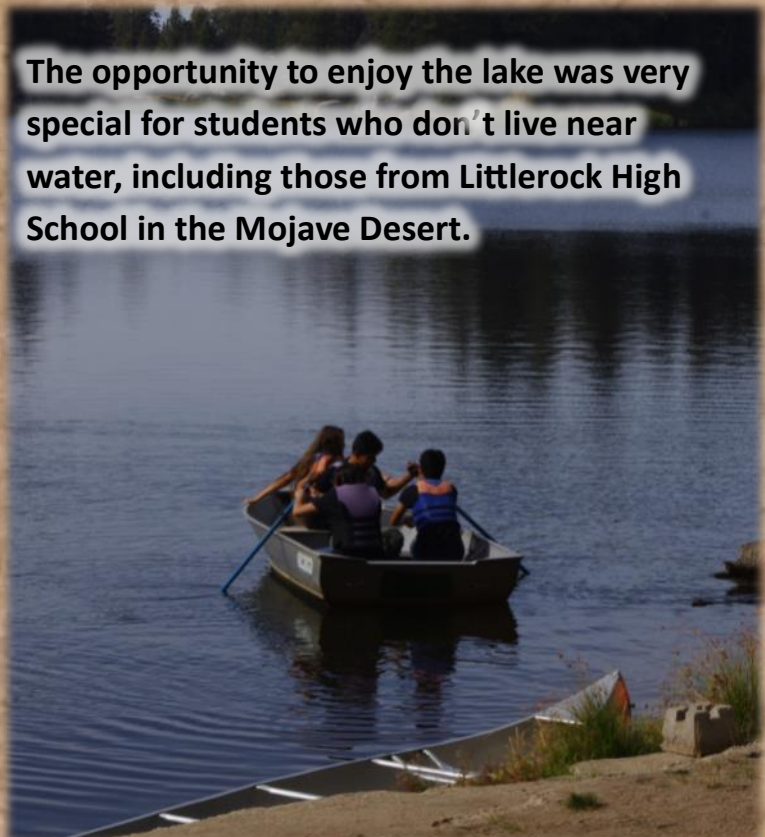
S Sequoia

Reedley High School



First Place Team

The opportunity to enjoy the lake was very special for students who don't live near water, including those from Littlerock High School in the Mojave Desert.



EL DORADO

Leoni Meadows Camp, October 26 - 29



13 schools with 84 students and 18 teachers

*Argonaut Bella Vista Cordova Don Pedro
El Dorado Foresthill Golden Sierra Grant Marysville Ponderosa
Rosemont Sac New Tech Vista Del Lago*

Rain didn't dampen the spirits of participants at the El

Dorado Forestry Challenge, at 960-acre Leoni
Meadows Camp. Students applied Brown's

Transect methodology to collect data
used to calculate fuel loading and
simulate prescribed fire

behavior. Teams braved a drenching
downpour during field testing, and

soared on Leoni's zip line and
adventure course in equally wet

conditions. Many of the teams
concluded, after running the fire behavior

computer models, that the unit being

evaluated will not be ready to burn for a few more

years, helping the Leoni forest manager prioritize fuels

treatments on their well-managed forest.

Vista Del Lago



First Place Team

**The George Little
Memorial Award
for Volunteer
Excellence**

Nikki Visser
Lead Cook



Locating plot centers takes students off road and out of their comfort zone, emphasizing the need for a compass and pacing.

Grant High School is one of many participating schools that has an environmental science academy. These students arrive at events with built-in knowledge and interest.



4-Year Awards

Only a select group of students earn special recognition for attending a Forestry Challenge event all 4 years of high school. This year there were three 4-Year Award recipients, two of whom have attended the El Dorado Forestry Challenge. Congratulations to Jonae Curry and Joi Jacobs, both of Cordova High School.



SAN BERNARDINO

Green Valley Lake Camp, November 9 - 12
9 schools with 73 students and 14 teachers
*Anaheim CAMS Charter Oak Hawthorne
Littlerock Los Osos Oxford Academy
Valencia Vista*



The students from Southern California are always excited to come to the forest, and the participants of the San Bernardino event were extremely focused and enthusiastic. Thinking outside the box, students created a business plan for non-timber forest products at Green Valley Lake Christian Camp. Teams quantified potential earnings from often-overlooked forest products such as pine cones, Christmas trees, and decorative hardwoods. Camp managers prompted this topic, as they are always open to alternative ways to generate income that are compatible with the Camp's primary mission.



Los Osos High School

First Place Team and Pacing Contest Winners



Wow, there's forest in Southern California? Yep, and where dead trees were removed after the 2003-2004 bug epidemic and after wildfires, the remaining stand is vibrant and healthy.



Students were amazed to learn that Coulter Pine cones are sold for as much as \$20 each, depending on their size and condition. By measuring and grading the cones, a potential value could be calculated.



Generous equipment loans and donations result in the students being geared up with the proper forestry tools and safety equipment.

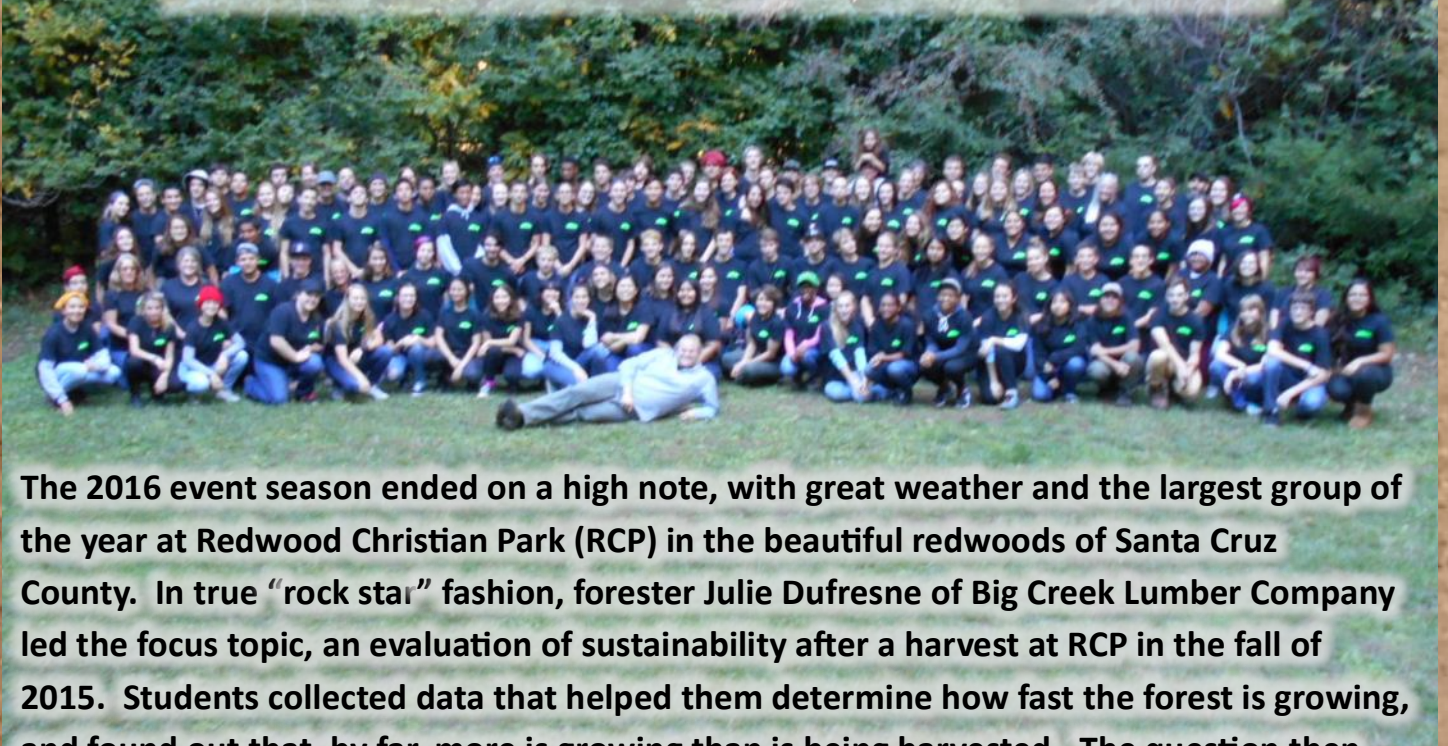


Returning students are an indicator of success. This year's events had a combined total of 70 multi-year seniors, who are recognized with a certificate at the end of each event.

SANTA CRUZ

Redwood Christian Park, November 16 - 19
14 schools with 117 students and 24 teachers

*Acalanes Benicia Eleanor Roosevelt Elk Grove Enterprise Franklin
Miramonte Mountain Oaks Charter Ponderosa Porterville
San Lorenzo Valley Soquel Trinity Woodside*



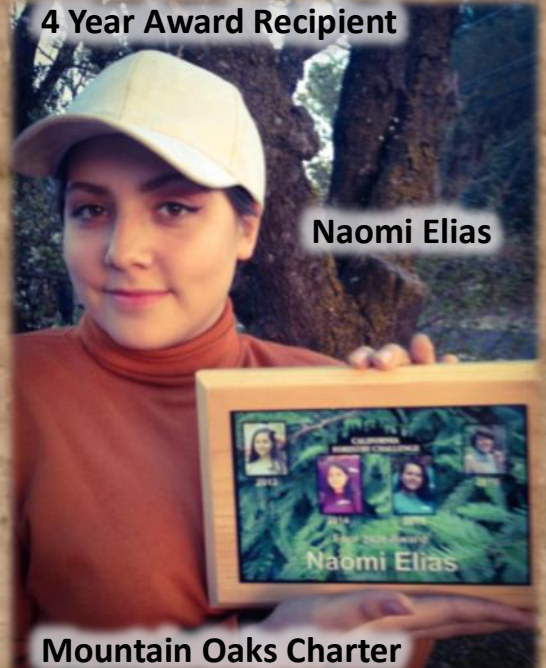
The 2016 event season ended on a high note, with great weather and the largest group of the year at Redwood Christian Park (RCP) in the beautiful redwoods of Santa Cruz County. In true "rock star" fashion, forester Julie Dufresne of Big Creek Lumber Company led the focus topic, an evaluation of sustainability after a harvest at RCP in the fall of 2015. Students collected data that helped them determine how fast the forest is growing, and found out that, by far, more is growing than is being harvested. The question then became one of the carrying capacity of the land and determining an optimum long-term growth and harvest cycle for the forest.

Benicia High School



First Place Team

4 Year Award Recipient



Naomi Elias

Mountain Oaks Charter



Avery Wagner is a senior at Eleanor Roosevelt Community Learning Center in Visalia, a public charter school designed to assist families in homeschooling their children. Schools participating in the Forestry Challenge are diverse, and include both traditional and alternative educational models.

By collecting their own data, students realize that data represents tangible objects, and that the correct interpretation of the data is important in making management decisions. Here are some students from Elk Grove High School, who are working well as a team to prepare their final presentation.



Forester John Nicoles featured on homepage of SLVHS website

Forestry Challenge Scholarship

For the last two years, Redwood Empire, a division of Pacific States Industries and the Burch Family, has awarded scholarships to assist students who plan to obtain a college degree in Forestry and participated in one or more California Forestry Challenge events. Recipients must be enrolled full time in a four-year program that leads to a B.S. degree in Forestry or a closely related field. In 2016, two students each received a \$2,000 scholarship.



BRIANNA CEBELLERO received scholarships in 2015 and 2016. She is a graduate of Nevada Union High School in Grass Valley, where she and her team won the 2014 Shasta Forestry Challenge. Brianna is in her second year at Reedley College, and plans to transfer to a four-year school to earn her forestry degree. Last summer Brianna got an introduction to forestry field work at the Tahoe National Forest as a Recreation Technician. After graduation, she wants to be a field management officer for the U.S. Forest Service.



SUMMER VON AESCH was also part of a winning team, from Bella Vista High School, that won the 2015 El Dorado Forestry Challenge. Summer is a student at Sierra College in Rocklin, and hopes to transfer to Cal Poly San Luis Obispo for her forestry degree. On her scholarship application, Summer wrote, "The Forestry Challenge was honestly one of the best experiences of my life because I genuinely loved learning everything and was so interested in the topics

we were presented with. After the Challenge, it was like a lightbulb went off in my head, and I suddenly had clarity on what I wanted to do with my life."

What is the Forestry Challenge?

The California Forestry Challenge is an academic competition for high school students in technical forestry and current forestry topics. The four-day events are held in five locations throughout California.

Goal #1: Teach students the basic principles of forestry, connecting classroom math and science to hands-on experiences with real-world applications, enabling them to make recommendations about natural resource management.



Goal #2: Give students the opportunity to explore careers by interacting with natural resource professionals including foresters, hydrologists, soil scientists, wildlife biologists, and fire scientists.

Goal #3: Provide an opportunity for a diverse student population to experience outdoor recreation and develop an appreciation for the forest and its benefits to us all.



3140 Sierrama Drive
Shingle Springs, CA 95682



530-417-1960

www.forestrychallenge.org

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