

VALLEY OAK

Introducing the Vegetation Monitoring Technicians for 2016

By Sara Sweet

In the last several years, I've been lucky to gain permission and funding to hire seasonal staff who spend most of their time collecting data on plants at CRP. I have a couple projects going on currently, and I could not accomplish anything without the Veg Techs. One project attempts to link characteristics of the valley oak forest to groundwater conditions. We're not even sure right now whether all of our forest patches are tapping the regional groundwater. They might be relying on water perched on top of a clay layer, or even on seepage from nearby irrigation. It's important to find out whether and how groundwater and plants are connected in different parts of CRP because the groundwater law enacted by California in 2014 has some protections for ecosystems – but only if the plants depend on regional groundwater.

A second project takes place on the floodplain enhancement site just north of Twin Cities Road. In September 2014, The Nature Conservancy not only breached a levee intentionally (after lots of engineering and modeling), but also took the neighboring terrace down a few feet. The primary goal was to increase the frequency and duration of flooding onto CRP property. Some of the vegetation monitoring documents the progress of natural succession. On a portion of the project land, the Conservancy started an experiment to compare this natural succession to what is called horticultural restoration; that is, when people plant cuttings and nursery-grown plants. The vegetation monitoring in this area will characterize differences among the experimental plots. We'll also be able to see how the different patterns flooding across the site might affect the experiment.



From left to right Vic Oelschlaegel, Sara Sweet, Jane Thompson, Audrey Kelly and Troy Shea.

I'd like to offer the 2016 Veg Techs a big thank you for all their hard work! They'll be on board until the beginning of October. Read on to find out a little bit more about these dedicated ecologists.

Vic Oelschlaegel

Thirty-plus years of working in an office can make you hungry for tasks in the great outdoors. Cosumnes River Preserve offers many opportunities to do this. For someone like me who left the working world in order to pursue his dream of being an idle slacker it also provides a way to stay busy and involved. Through involvement with CRP's Habitat Restoration Team (HRT), raptor and waterfowl surveys plus being a Volunteer Naturalist (I highly recommend taking CRP's training class for this), I gained much knowledge about the preserve wildlife and why the preserve is so important. But, through all that, I did not learn much about the plant life found there.

There is nothing like full immersion to gain quick knowledge of a new subject. Working for TNC as a Vegetation Monitoring Tech has been a great way to learn more about our green neighbors.

Well, they're mostly brown this time of the year and that makes learning to identify what it is that much more challenging. Working in the field installing plant survey plots and having gained the knowledge to identify what grows there has been a great change of pace for this former office worker.



A flower of virgin's bower (*Clematis ligusticifolia*), a vine in the buttercup family. The Veg Techs found this plant in a sample plot in Shaw Forest.

My name is Audrey Kelly and I am one of the 2016 veg techs. I grew up in southern California and I have just graduated from Humboldt State University with a degree in biology and a minor in botany. After spending much of my time in school studying the ecology and the vast biodiversity that exists within California, I understand the importance of these ecosystems and want to pursue a career in conservation biology. This summer my team is collecting vegetation data to aid in ecosystem succession and groundwater studies for The Nature Conservancy. I am most excited that my work is helping contribute to studies that will provide future conservationists with information they need to accomplish their goals. My favorite part of my job is that every day

seems to be a new adventure. CRP is a landscape different from anywhere I have lived in the past, and as a result I have been able to learn a whole new set of plants and wildlife. I appreciate the natural beauty in remote areas of the preserve that few others have access to. Every day of my stay here I have fallen in love with the preserve a little bit more. Thank you to all the volunteers that help to keep this place running!

I am Jane Thompson, Vegetation Monitoring Technician working for Sara Sweet and The Nature Conservancy at Cosumnes River Preserve, Galt, California. I have been a volunteer Habitat Restorationist for nearly 25 years. I enthusiastically enjoy being a Naturalist at the Visitor Center, also engaging in raptor and waterfowl surveys as well. Hired in April 2016 for this wonderful seasonal opportunity, I bring a wide array of experiences and skills that qualifies me to work and play in a land that I love. As a desire for being here, I appreciate learning about the different land types (riparian forest, floodplain and valley oak savanna) and the plants in their respective communities.

The essential scope of my responsibilities include gathering data concerning the plants growing in these areas (determined by scientific name), gaining knowledge of how well the forests are growing, and comparing native and introduced species with in these areas. One project that I found especially interesting is monitoring the new Oneto-Denier restoration site, where approximately 17,000 trees, shrubs and other plants have been installed this year. Other duties include invasive plant removal, easement monitoring of pasture land, data entry and general equipment maintenance. The work that intrigues me the most is being able to recognize and know the scientific names of every plant I meet as I walk through the fields and forests.

I have enjoyed working with Sara and the dedicated crew. We are brilliantly dedicated to the work that we do and willing to simply enjoy what we do. I have learned a great deal from my fellow Vegetation Monitors. In addition, I have a great affection for the people I work with too. This opportunity of enlightenment is most satisfying. I encourage everyone to come see what is new here at Cosumnes River Preserve!



This crowd favorite is called red maids (*Calandrinia menziesii*), and it was quite common on the floodplain enhancement site. Unfortunately for the Veg Techs, it blooms in early spring, and by this time of year it is dead and crispy.

Hi volunteers. My name is Troy Shea. I graduated from UC Davis in June with a degree in Ecological Management and Restoration. I'm particularly interested in grassland restoration, having propagation experience with a number of native grass species. I hope to have a career in ecological restoration. I'm particularly concerned in making sure a species is both native to the restoration area as well as suited to the ecological conditions at the site before including it in restoration plans. Additionally, I believe that genetic material should be sourced as locally as possible.

This summer at the CRP I am one of four vegetation monitoring technicians working under Sara. Our work consists of locating macro-plots, or transects, to conduct vegetation surveys. After locating the northeast corner of the plot, which in most cases will be marked, we use compasses to determine where the other corners should be. We then use metal detectors to locate the nails that mark the other corners. Once we have marked the bounds of the plot with tapes, we conduct a species survey, recording all the species we find in the plot. We then estimate the percent cover of each species as well as that of bare ground and litter. For trees, diameter at breast height and canopy diameter are also measured.

The locations we have worked at are Castello, Oneto-Denier, Shaw Forest, and "The Floodplain." My favorite location has been Oneto-Denier because of the high diversity of herbaceous species, particularly grasses. Two more grass species, *Panicum capillare* and *Bromus tectorum*, will be added to the CRP species list after I found them in macro-plots. Shaw Forest has been my least favorite location due to the abundance of poison oak, Himalayan blackberry, and mosquitos. Because of the density of the tree canopy, our GPS unit would have difficulty getting a signal, making navigating even more difficult. However, in one plot I found some tomato seedlings, evidently dispersed from nearby fields, making my time in Shaw more bearable.

Mt. Lion Study Photos



Deer and Skunk



Bobcat with Rabbit

Cosumnes River Preserve Summer Day Camp

By John Durrand

A GJUESD Bright Future Learning Center Program

Youth from Galt schools spent part of their summer learning, exploring, hiking, canoeing, and working on the Cosumnes River Preserve!

During the weeklong summer camps, fourth through sixth grade youth explored oak forests and woodlands and discovered areas of the Preserve not open to the general public. The day campers learned important wilderness safety and survival skills. Each day youth practiced Leave No Trace principles for future use when camping, fishing, hiking, or visiting local parks.



Water samples were collected at various locations on the Preserve including at the river, in the sloughs, and from the rice fields. Students identified macroinvertebrates and conducted investigations to measure clarity, dissolved oxygen, and pH.

The CRP summer camp was part of the GJUESD's Bright Future Learning Center summer school program. Bus transportation was provided through the Bureau of Land Management, Every Kid In a Park grant.

Kyle Bowlin led the orienteering activity as kids learned to use a compass and navigate a complex course through the seasonal wetlands. Forty-nine students participated in the camp program

As part of the integrated service-learning project, youth worked on the Oneto-Denier floodplain restoration project with staff and volunteers from The Nature Conservancy. Alex Cabrera led the restoration projects while Judah Grossman explained to the youth how science and technology tools are used for ecological restoration and in agriculture. Here students examine a drone equipped to a GoPro camera and linked to an iPhone that will be used to monitor the planting site.

Along the trails students identified trees, learned to use binoculars and observed bird behavior, and kept a nature journal.

Campers also learned some basic survival skills including how to distill, filter, and purify water in the field. At the McFarland Ranch site students practiced building campfires using flint and steel, hand lenses, and outdoor matches. Camp cooking highlights included grilling hot dogs, roasting marsh mellows, and perfecting the art of eating s'mores.

The weeklong adventures culminated with an introduction to water and boating safety. Kyle Bowlin, Sacramento County Parks and Recreation, taught basic paddling skills and led the river adventures.



The very successful summer program highlights the multiple partnerships that makes the Cosumnes River Preserve so unique.



By Chau Tran

I never thought a part of my job would be to supervise the YCC crew, but I'm so glad that I had the opportunity to meet them. The crew consisted of five Grant High School students along with their supervisor. These kids were top of their class, no wonder they were selected to participate in this summer job! I am really impressed with them, not a lot of kids in high school these days are working a summer job let alone this type of job. Land management is a lot of work.



From left to right: Chau, Ausbon, Jose, Alicia, Thor & Diana

The crew was ready to work right from the start. Initially, we went through a tour of the preserve where I discussed various habitats and activities that occur here. They were also introduced to some of the preserve staff members. Alex Cabrera was especially helpful because of his valuable advice and encouragement. Thank you Alex! An introduction to the tools and personal protective equipment was the next step. In addition, we also discussed other safety hazards such as heat stress, ticks, and dangers associated with power tools.

After their training, we started working on tasks provided by our preserve manager Harry McQuillen. These tasks involve weed eating around valves and water control structures, moving rip rap, and general trail maintenance. These tasks are definitely strenuous in the summer heat and the crew did so without any complaints.

We also tried to incorporate other fun activities for the crew as a break from the strenuous work. For example, we went paddling around the Tihuechemne Slough towards the Cosumnes River towards the end of one shift. For most of the students, it was their first time paddling in a canoe. Funny enough, one of the boats tipped and two students went swimming. Since we were in the Cosumnes, they were safe once they stood up. :) The crew also went out with the mountain lion team under the supervision of Perry (one of the many amazing volunteers). The students went out to various areas of the preserve and checked our trail cameras for any presence of a cougar. And on our last day, we spent some time together eating pizza for lunch before they left for the state office.

Overall, the crew were a valuable resource for the preserve because of their work ethic and efficiency. They helped our biologists Mark Ackerman and Patrick Moffett by managing the weeds around our water structures (valves, vents, and standpipes). In doing so, they helped Mark and Pat perform their job more safely and efficiently. They helped me tremendously also since I was able to delegate some of the items on my to-do list to them. They were also really good company, everybody was really engaged and had positive attitudes. They are definitely missed and hopefully I will get the opportunity to see some of them back for next year. :)

Chau Tran

Visitor Center and Website Update

By Kyle Bowlin

I want to start off by thanking all of you for coming out to the Cosumnes River Preserve and volunteering your time helping to lead tours, staff the Visitor Center, lend a hand with restoration projects, and be part of the Preserve's biological studies. The Preserve has been able to accommodate a large number of visitors each year, because of your hard work and dedication. Without volunteers like you, this Preserve could not be what it is today. Thank you for your patience through the changes of the Visitor Center, website and forums this summer.

As you know, this summer brought new changes to the Preserve which has impacted both our visitors and volunteers. The Bureau of Land Management secured funding to perform much needed repairs and improvements to the Visitor Center and Lower Parking Lot. The Lower Parking Lot has been enlarged to accommodate additional 9 or 10 parking spaces. The Visitor Center will be receiving new interior paint, exterior paint, 2 new HVAC units, new carpets and new signs for the parking lots and trail heads. These repairs and upgrades will enable the Preserve to better serve the increase of visitors.

During the construction the Visitor Center, Visitor Center Deck and Lower Parking Lot will remain closed. The construction was originally supposed to be completed around September 15th. This date has been pushed back to October 25th due to difficulties in the contracting office, which resulted in a late start for the work. Once the construction is complete, it will still take about a week to get all the office equipment and supplies moved back into the building. We are hoping to be open for the Lodi Sandhill Crane Festival which is the first weekend of November. During construction volunteers are encouraged to sign up for Visitor Center shifts on Volgistics as a roaming shift. You are welcome to walk along the trails and through the parking lots.

Another change this summer was getting the Preserve's website updated to the most current platform. This update allows additional features to be utilized on the site. Summer has also welcomed the addition of a forums section on the Preserve's website for all volunteers to communicate with one another. These forums have replaced the other forums hosted on other sites. All current volunteers and staff have usernames for the forum, but if you don't know what yours is or don't know your password, please send Kyle an e-mail. If you are interested in what is happening in a certain volunteer group then you can subscribe to get updates for that specific forum or you can subscribe to receive update for all forums. Also the new forum does not have ads and you won't be receiving e-mails about buying products. I hope this forum and new features are beneficial to all volunteers and help make your volunteer experience greater.

Starting this month the Preserve will be using Eventbrite for participants to sign up for some of our activities. By using Eventbrite we will be able to better tell how many people will be attending each activity. This will enable us to ensure there are enough docents for each tour. We will also be able to limit the number of RSVP's so that tours do not have too many people. This service is free to the Preserve and participants and is very easy to use. A link to RSVP for an activity will be listed in each activity that is advertised on the Preserve's site. Please encourage visitors to visit the Preserve's site to RSVP for activities they are interested in. Here is how one would RSVP for an activity. First go to www.cosumnes.org, click on the activities tab at the top of the page, then click on the activity one is interested in. Below the description of the activity there will be a link to RSVP for the activity.

September

- 3 Guided walk, 9:00 a.m., meet at Visitor Center Deck
- 10 River Walk Bird Count, 6:15 a.m., meet at Visitor Center
- 10 Restoration Day, 9:00 a.m.-3:30 p.m., meet at the Barn
- 17 Tall Forest Bird Count, 6:15 a.m., meet at Farm Center Gate
- 17 Public Guided Bat Paddle
- 24 Guided Photo Walk, 8:00 a.m., meet at the Visitor Center Deck (bring a camera)
- 24 Habitat Restoration Day, 9:00 a.m.-3:30 p.m., meet at the Barn

October

- 1 Guided walk, 9:00 a.m., meet at Visitor Center Deck
- 2 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail
- 8 River Walk Bird Count, 6:45am, meet at Visitor Center Deck
- 8 Habitat Restoration day, 9:00am - 3:30pm, meet at the Barn
- 15 Tall Forest Bird Count, 6:30 a.m., meet at Farm Center Gate
- 16 Guided Paddle, arrive at 8:30 a.m., meet in the Visitor Parking Area (must provide own gear and PFD)
- 22 Guided Photo Walk, 8:00 a.m., meet at the Visitor Center Deck (bring a camera)
- 22 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail
- 22 Habitat Restoration Day, 9:00 a.m.-3:30 p.m., meet at the Barn definitely
- 29 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail

November

- 5 Guided walk, 9:00 a.m., meet at Visitor Center Deck
- 5 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail
- 6 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail
- 12 River Walk Bird Count, 6:45am, meet at Visitor Center Deck
- 12 Habitat Restoration Day, 9:00 a.m.-3:30 p.m., meet at the Barn
- 12 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail
- 19 Tall Forest Bird Count, 6:00 a.m., meet at Farm Center Gate
- 19 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail
- 26 Habitat Restoration Day, 9:00 a.m.-3:30 p.m., meet at the Barn
- 26 Guided Photo Walk, 8:00 a.m., meet at the Visitor Center Deck (bring a camera)
- 26 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail

December

- 3 Guided walk, 9:00 a.m., meet at Visitor Center Deck
- 4 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail
- 10 River Walk Bird Count, 6:45am, meet at Visitor Center Deck
- 11 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail
- 17 Tall Forest Bird Count, 6:30 a.m., meet at Farm Center Gate
- 17 Guided Photo Walk, 8:00 a.m., meet at the Visitor Center Deck (bring a camera)
- 18 Ducks In Scopes, 10:00 a.m. - 2:00 p.m., Along Boardwalk Trail



Cosumnes River Preserve



Aerial Photos of the Preserve Taken September 15, 2016 By Volunteer Naturalist Tom Palmer



Horseshoe Lake looking toward Highway 99



Horseshoe Lake looking toward Highway 99



Rice and Safflower Fields



Cosumnes River



Cosumnes River Preserve



Fields and Wetlands The Barn is upper left



Franklin Blvd. middle, Interstate 5 top



Boardwalk Parking Lot



Visitor Center's New Lower Parking Lot



Cosumnes River Preserve

Staten Island