



Pax Environmental Science Institute 2021

A hands-on experiential program for selected high school students.

Saturdays, March 27 - May 23, 9:00 am to 12:00 pm

Who Can Attend: Ojai Valley high school students, selected by application.

Qualifications: Demonstrated passion for the environment, and excitement about exploring natural locations in Ojai to learn about flora and fauna with top local scientists.

Cost: This program is offered free of charge this year; underwritten by generous grant donors.

TOPICS COVERED:

BIRDING

Learn about the magical world of birding with Pax wildlife biologist, Ivett Plascencia. Which species call the Ojai Valley home and which are resting along their migration journey? What are those woodpeckers up to anyway? Why are those crows pestering that hawk? You will be equipped with binoculars, a field guide, and a field journal and will be introduced to the secret life of birds. You will gain experience identifying birds through calls and observations and will be introduced to "citizen" data collection applications. Finally, you will set up wildlife cameras on site for analyzing at the end of the program.

- Birding
- Wildlife photography
- Field journaling
- Digital data Collection

FISHERIES

Learn about the Ventura River Watershed! What is the difference between a creek, river, stream? Why do some of our waterways run yearlong while others dry up? What are the indicators of a healthy waterway? Who depends on the water in our watershed? What is a threatened or endangered species? What species are endangered/threatened in our watershed? What is the local history of steelhead and what are the current obstacles they face as a species? What is being done to improve habitat locally? You will be introduced to water sampling tools and

techniques, data collection apps, aquatic surveys, and will participate in a native planting of riparian species (willow, mulefat).

Topics:

- Watershed
- Water Sampling
- Aquatic survey
- Native planting
- Field journaling
- Data collection

BOTANY

Learn about the secret language of plants with Pax botanist, Scott Tomkinson. What is all the fuss about scientific names versus common names? What is that round thing growing on that oak tree? Which plants are native to the Ojai Valley and which were introduced by humans? You will be equipped with a field journal and field guide and will learn about the plant communities that surround us. You will gain experience identifying plants and propagating plants for planting.

Topics:

- Plant identification
- Natural history of plants including indigenous uses
- Native seed collection (seasonally dependent)
- Introduction to vegetation communities
- Propagation
- Field journaling
- Digital data collection

FIELD TECHNOLOGY - DRONE/WILDLIFE CAMERAS

Learn about the tools that support ecological restoration including drones and wildlife cameras. An FAA certified pilot will lead a drone flight of the area covered in weeks 1-6 and introduce you to operating techniques. Wildlife cameras installed in week 1 will be processed and analyzed.

Topics:

- Mapping observations/study area
- Drone flight
- Wildlife camera processing

STORY MAP

You will help to develop the story of the mentorship program in the form of a digital scrapbook with maps (Story Map). What birds were observed and where? What was planted and where? What wildlife was caught on the cameras after hours? What is the water quality in different reaches of the creek? Who participated in this program? Using data points collected, photos, drone flight, etc., The Story Map will display the information in a meaningful way and will always be available as a reference.

Topics: Developing our story.

APPLICATIONS DUE BY MIDNIGHT ON MARCH 19, 2021. [APPLY HERE.](#)

The Green Valley Project is an initiative of The C.R.E.W. to activate the Ojai Valley's younger generation of environmental stewards. Pax Environmental is a consulting firm in Ojai comprised of scientists, biologists, arborists, botanists, water quality specialists, planners, and more.

Questions? greenvalleyprojectojai@gmail.com. **More info:** www.greenvalleyproject.org