

UPDATE

What's New at RCRCD?

by Diana Ruiz

Many exciting things will be happening at the Riverside-Corona Resource Conservation District (RCRCD) this Fall.

The LandUse Learning Center (LLC) is now open daily 8 am to 4 pm. Request a tour or take your own by picking up plant lists, animal treasure hunts, and publications. The LLC is a 3-acre garden that demonstrates sustainable practices for the three main land uses of southern California: native habitats, urban areas, and agriculture.

We will be holding our first LLC docent training on Saturday, October 6. If interested in tours or volunteering as a docent, please contact Erin Snyder at snyder@rcrcd.org or (951) 683-7691, Ext. 207.

Also at the LLC, we will be launching "Ask a Master Gardener" on the first Saturday of each month starting in November from 10 am – Noon. That same day, November 3, RCRCD is hosting the local chapter of the California Native Plant Society's (CNPS) Native Plant Sale from 9 am to 3 pm with a lecture at 11 am. CNPS, Master Gardeners, and Riverside Garden Council volunteers will be on hand to answer gardening questions.

CNPS plans to have speakers in Building F on Saturdays: September 22, October 20, and December 15. See back cover for details and follow them on Facebook.

It's a new school year! We host customizable fieldtrips for public and private schools, homeschool and youth groups, and scouts. Arrange for tours at the LLC and/or Sycamore Creek Interpretive Center (SCIC), which is open Thursday through Saturday 9 am – 3 pm.



SCIC will host monthly "Days of Wonder!", educational and fun open house days the third Saturday of each month from 11 am – 2 pm, excluding November and December. See back cover for topics. For SCIC information, please contact Michele Felix-Derbarmdiker at Felix-Derbarmdiker@rcrcd.org or (951) 277-0219. SCIC is located at 11875 Indian Truck Trail, Temescal Valley, CA 92883.

For information about upcoming events, follow SCIC on Facebook at https://www.facebook.com/SCICTV/

Hope to see you this Fall!



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Need Environmental Ed?

by Kirstyn Kay

The Riverside-Corona Resource Conservation District (RCRCD) provides an array of educational programs and services. RCRCD offers free conservation education materials to schools, youth groups, and homeschooling families who live or work within our district boundaries. The District offers mini-grants to school and youth groups to help fund outdoor conservation projects such as gardens, tree plantings, and re-vegetation projects. Find order forms, applications, and additional educational resources on our website: www.rcrcd.com/#Education Programs





In addition, visit our educational sites: The LandUse Learning Center (LLC) and Sycamore Creek Interpretive

Center (SCIC). Learn about resource management at the LLC, a demonstration of sustainable practices for the three main land uses of SoCal: native habitats, urban areas, and agriculture. The LLC is now open daily from 8 am to 4 pm.

Corona Water and Recycling Presentations

Are you a schoolteacher or youth group leader in Corona? If you are looking for engaging ways to teach your students about water conservation, waste reduction, and recycling, then we have just the program for you. The City of Corona's Department of Water and Power provides their residents with two free interactive classroom presentations that are taught by a resource educator from the Riverside-Corona Resource Conservation District. The educator is available to visit your site to demonstrate water conservation and recycling concepts. Free educational materials are also available and can be provided with or without a classroom presentation.

The **WATER** presentation includes information about

- simple ways to conserve water and why it is important
- · where Corona gets its water
- storm water pollutants and how we can reduce them.

The **RECYCLING** presentation demonstrates

- · how to recycle bottles and cans at school and at home
- why recycling is important
- ways to lessen human impacts on our environment.

With both programs, students learn to reduce the amount of pollutants that enter our storm drain system that flows to waterways (washes, creeks, arroyos) and ultimately to the Santa Ana River and ocean. Since people unknowingly generate the largest amount of storm water pollution, we can be the largest part of the solution. Educating students about these concepts helps to ensure that future generations will understand the importance of water as a vital resource. These fun programs help youth develop lifelong habits to practice the three Rs: Reduce, Reuse and Recycle.

Sign up for one or both presentations that will engage your students and help create a more sustainable future. To schedule a hands-on presentation, please contact our resource educator Kirstyn Kay by email at kay@rcrcd.org or by calling (951) 683-7691, Ext 226. Supplies and presentations are limited and are provided on a first come, first serve basis.

Be a Change Agent!

The Riverside Food Rescue & Waste Reduction Ambassador program is a free, 40-hour certificate program that consists of five workshops followed by a community-based project. Workshops over a four month period include 20 hours of lectures, hands-on work, field trips, and industry guest speakers. The second half of the program requires attendees to complete 20 hours of community volunteer work or a project pertaining to food rescue and waste reduction. Upon successful completion of the program, participants will be recognized in an award ceremony by the Mayor and City Council.

Participants will engage with local experts and professionals about:

- The Life Cycle of Food: From Cradle to Cradle with Olivia Sanchez. The first workshop will include a tour of Burrtec's Material Recovery Facility and a waste audit to examine what our community is throwing away.
- Powering Healthy Soils with Food Waste Compost: Get your hands dirty with UCR's David Crohn, PhD. and urban farmer Scott Berndt.
- Food Rescue and Waste Reduction is a fun, hands-on session with Sue Struthers, chair of the Riverside Food Systems Alliance. It will cover use of all parts of fruits and vegetables, storing food to prevent food loss, menu planning to use all produce parts, cooking from scratch, quick pickling and food preservation, cooking with leftovers, and re-purposing prepared and food discards.
- Composting, Technology and Energy includes managing organic discards after food rescue and waste reduction efforts, with Nick Burciaga and Craig Justice.
- Community Challenge: Using Your Knowledge for Local Action with Olivia Sanchez and Joyce Jong.

For the second half of the program, food ambassadors complete 20-hours of community volunteer work over three months. Activities may include, but are not limited to:

- · Volunteer with Gleaners for Good
- Coordinate a neighborhood project
- Staff GrowRIVERSIDE and other related events
- Volunteer at a food bank, like Feeding America
- Present learned information to neighborhood groups and/or community organizations.

Fall Program Dates:

September 15 and 29, October 13 and 27, November 10, 2018*

Registration is now open for the Fall, 2018 Ambassador Certification Program at http://growriv.com/ambcert/ . For questions, please contact Olivia Sanchez at OSanchez@riversideca.gov or (951) 351-6174. (More classes will be scheduled for 2019.)

*Workshop dates only. Participants are required to complete an additional 20 hrs on a community project by the end of January 2019.









Neighbors Work to Restore a Creek

by Diana Ruiz

This article highlights the work of two of our Cal Naturalist graduates, Teri Biancardi and Jack Learned, and describes their California Naturalist capstone project.

The Meadowview community in Temecula is soon to be the site of a unique stream restoration project that has been planned by a partnership of residents and multiple agencies. The Meadowview Stream Restoration Project began with a group of residents concerned about an eroding creek that runs through

the Homeowners Association's nearly 400 acre open space. Upstream development caused concentrated stormwater flows that transformed a small, ephemeral creek into a dangerous crevasse with ten-foot tall, cliff-like banks.

The creek posed a hazard to people who use the open space recreationally, so homeowners began working with Jonathan Snapp-Cook, a biologist from the Partners for Fish and Wildlife program at the US Fish and Wildlife Service. The team worked with the USDA Natural Resource Conservation Service's District Conservationist Bob Hewitt and Soil Conservation Technician Bob Dunkle to engineer a design. Instead of constructing a traditional concrete-lined channel, the team is working with nature to "bioengineer" using plants to control erosion and create habitat. The plans include cutting back the creek banks to a 3:1 slope and revegetating with local native



Teri Biancardi, Meadowview resident, is coordinating volunteers to plant the nursery stock.

plants. The toe or base of the sloped banks will be held in place with compost rolls staked with willow cuttings and planted with native vegetation. The Riverside-Corona Resource Conservation District's Plant Restoration Ecologist Dr. Arlee Montalvo helped with specifying plant palettes for the stream bank.

While the proposed plan was well-received, residents balked at the idea that they would be paying to fix a problem not of their making. The Meadowview team again asked for help, this time from Riverside County Flood Control and Water Conservation District. General Manager Jason Uhley listened and decided to try what for them is a totally different type of project. Their engineers would take the opportunity to learn some skills of stream restoration from NRCS. Says Uhley, "the Meadowview Stream restoration project is an unique example of the District's collaborative efforts with local communities. Working together, we have since further crafted a project that will stabilize a stream, reduce negative impacts downstream, as well as enhance both the environment and community."

This project is novel in the sharing of responsibilities. The Flood Control's contractor will be doing the heavy earth-moving and placement of rocks. Then volunteers will take over and plant, a technically complicated effort for a homeowners' association (HOA). This requires members of the community to learn skills such as working with contractors, building a solid team of volunteers, propagating and planting native plants.

Teri Biancardi, the HOA's lead on the project, said she was delighted to have had the opportunity to be part of this process and its "visionary" team. She continued, "this truly has been a collaborative effort which has relied on the expertise and goodwill of professional engineers, planners, regulators and the wildlife agencies at the Federal and State level, on down to the community's residents. It is a monument to the decision-makers who have the courage to embrace new ways of thinking, are nimble enough to adapt when change is needed, and a willingness to assume risk in the quest for better outcomes."

The public-private partnership is the first resident-led, multiple agency project in the area, and its proponents hope it will serve as a prototype for many more community-based environmental restorations in the future.

Drought and Its Effects on Native Fisheries

by Kerwin Russell

Nature has always been a dynamic of contrasts: night and day, hot and cold, flood and drought. Most of these cycles are changes people can deal with, but the natural environment, and the species that are dependent on their habitats are sometimes not as quickly adaptable. Fires burn vegetation in summer, and downpours in the winter wash away soil, trees, and sometimes cars. Long, hot summers cause trees to be vulnerable to insects and wind damage.

California is seeing multiple years of drought and local waterways are drying up. Native fish are having a hard time coping with the "new normal". Native fish that rely on flowing creeks with good water quality and quantity have suffered during the drought. Many have been extirpated or lost, after reaches of local creeks dried out. This puts stress on the remaining fish, forcing them into smaller amounts of shallow water where they can become predated or die from warmer temperatures and low dissolved oxygen levels. Even after water returns, fish have died and will take several years to recover and repopulate the once-dry creeks. Managing these sites takes continued vigilance and tracking of both water flow and quality. Reducing diversions of water to illegal marijuana farms and removing non-native plants that use large amounts of water help to keep water in creeks.

With only six native species of freshwater fish in Southern California, the small amount of naturally flowing water is critical for their survival. The coastal rainbow trout, Santa Ana speckled dace, arroyo chub, three-spine stickleback, Santa Ana sucker and the desert pupfish are all uniquely adapted to occasional harsh conditions. But they all need one thing to survive....water.

Yet, with the turn of a handle, water always seems to come out of the tap. With over 37 million people in California, a reliable water supply is harder and harder to come by, and naturally-flowing creeks in Southern California are becoming an anomaly. Water for agriculture, urban, and environmental uses all play a part in how much water is needed each year. It often takes many years to recharge an aquifer, so rain that falls this year may not recharge a well or other groundwater area for many months. A few months of good rain do not make up for years of drought. Drought causes water to become more expensive, resulting in higher costs for food and to irrigate our landscaping.

Until increased rainfall occurs, many of the streams that support native fish will require monitoring and management plans that help conserve the fisheries that remain.



Local creek in September of 2016 during drought.

Same creek in April of 2017 after drought.

Phainopepla (Phainopepla nitens)

by Michele Felix-Dermbarmdiker

When you think of symbols of the holiday season, some of those symbols may be birds. You may think of images of cardinals, chickadees, doves, possibly a penguin? One bird that may not conjure up holiday memories, but its BFF (Best Friend Forever) mistletoe probably does. Phainopepla (pronounced: fane-o-pep-la) is named from the Greek phain pepla meaning "shining robe", in reference to the male's plumage. You may have never noticed this stylish bird, but with a few facts you will begin to notice this beauty all over Southern California.

Habitat/Feeding

While the Phainopepla relies heavily on mistletoe berries, mistletoe also relies on the bird for propagation. After passing through the digestive track, the berries stick to the branches of trees and sprout new clumps.



Thank you to Lee Reader for providing this photo of a difficult bird to capture.

Phainopeplas are found in deserts of the southwest and locally in chaparral, riparian woodlands, and oak foothills. During the cool months of October to May, Phainopeplas reside in the mesquite and desert scrub of the Colorado Desert. As temperatures rise and food supplies shift, they move to inland habitats from June to September. In the desert they prefer to feed on the plant parasite mistletoe (Yes, mistletoe is a parasite. You may want to rethink the meaning of that kiss!). Inland they eat insects and native berries.

Breeding

Phainopepla is unique in its breeding habits, compared to other North American Passerines. It breeds twice a year in two types of habitats. Breeding begins with the male courting the female. The male tries to charm the female by chasing her or offering her a meal. The pair will build a well-hidden cup nest of plant fibers, twigs, animal hair and spider webs. Mistletoe clumps provide excellent nest camouflage. Both parents help in the incubation and rearing of the chicks, which takes place over about five weeks.

Now this is where it gets interesting. This bird may breed again when it moves inland during the hot summer months. What is unclear is whether the same birds that bred in the deserts are breeding again inland. Even its behaviors change when it makes the habitat switch.

In the desert the birds are very aggressive in defending their territories, while inland they form loose colonies and even share food supplies. Further research needs to be done in order to answer all the questions surrounding this bird's behavior.

Identification

The Phainopeplea is a medium sized song bird and member of the silky-flycatcher family, weighing about 1 ounce, with a wingspan of 11+ inches. You are most likely to see this bird perched high on a tree. When perched, it proudly displays its crest and flicks its tail. Here are a few things to notice:

- Shiny jet black feathers in males/ gray in females
- Tall slender head crest

Threats

Populations are believed to be stable at this time. Numbers have fallen slightly over the last few decades due to loss of habitat. Many of the areas this bird prefers for breeding are sought after for agricultural use. The bird is protected by the Migratory Bird Treaty Act, which states it is illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit.

Inland Empire Naturalists

by Erin Synder

The California Naturalist Program is a master certification class that's designed to introduce Californians to the wonders of our unique ecology. The program's mission is to foster a diverse community of naturalists and to promote the stewardship of California's natural resources through education and service.

Erin Snyder and Erika Presley coordinated RCRCD's first Cal Nat training this past summer. The graduates completed more than 40 hours of classes about natural history and resources. The students attended three, day-long field trips focused on the diverse Santa Ana River Watershed and contributed to citizen science projects, including CALeDNA (http://www.ucedna.com) and iNaturalist (https://www.inaturalist.org).

Many thanks to our local experts who generously served as trainers:

Botany: Chris McDonald, PhD of UC Cooperative Extension and Arlee Montalvo, PhD (RCRCD)

Botanical Drawing: Tania Marien of ArtPlantae

Fire Ecology and Tree Identification: Bonnie Corcoran of US Forest Service

Habitat Management and Stephen's Kangaroo Rat: Brian Shomo and Harry Sandoval of the Riverside County Habitat Conservation Agency

Soil Science: Peter Fahnestock, Natural Resource Conservation Service

Water, Waste and Energy: Justin Scott-Coe, Riverside Public Utility; Olivia Sanchez City of Riverside; Aaliyah Muhammad of Grid Alternatives.

A special thanks also to all the wonderful people who opened their facilities and shared the treasures of the watershed:

Diamond Valley Visitors Center Riverside County Idylwild Nature Center Megan Brousseau of Inland Empire Waterkeeper Helen at Bolsa Chica Wetlands Back Bay Newport

UC James Reserve Highland Environmental Library Bob Packer, birder extraordinaire Muth Interpretive Center Oak Canyon Nature Center.

Cal Nat is coordinated through the University of California Agriculture and Natural Resources (UCANR) and University of California Cooperative Extension (UCCE). Watch for announcements about the next Cal Nat class at http://calnat.ucanr.edu. Learn more on Facebook at Inland Empire Naturalist. To join our Spring, 2019 class, please email Presley@rcrcd.org with your contact information.



Welcome Inland Empire certified California Naturalists: (left side back row) Rebecca Hoggarth, Michele Feliz-Derbarmdiker, Scott Hanson, Bob Knight, (right side standing) Instructor Erika Presley, Jack Learned, Princess Hester, Guest Speaker Bonnie Corcoran, Gary Sandjian and Teri Biancardi (left middle row) Diego Tamayo, Linda Bratz-Brown, Eva Yakutis, (kneeling, front) Jenna Hoover, Aly Micheal, Instructor Erin Synder, Stacey Alvarez, Nicole Hernandez, Maribel Martinez.



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Web site: http://www.rcrcd.org

Facebook: www.facebook.com/RCRCD

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All RCRCD programs and services are offered on a nondiscriminatory basis, without regard to race, national origin, religion, age, gender, or orientation.

UPCOMING EVENTS

Land Use Learning Center Docent Training

OCTOBER 6, LAND USE LEARNING CENTER, BUILDING F To register contact Erin Snyder at Snyder@rcrcd.org or (951) 683-7691

Food Ambassador Certification Program

SEPTEMBER 15 AND 29, OCTOBER 13 AND 27, NOVEMBER 10, 2018

Register today at http://growriv.com/ambcert/

Days of Wonder!

11 AM - 2 PM, SYCAMORE CREEK INTERPRETIVE CENTER

- · September 15: Slithering Snake Saturday
- October 20: We've Gone Batty for Bats
- November 2018 (Date TBA): Amazing Native Plants Plus basket weaving class with Lori Sisquoc of Sherman Indian High School https://www.facebook.com/SCICTV/

Technology Tools for Urban Forestry

SEPTEMBER 20, 9 AM - 3 PM, CHINO BASIN WATER CONSERVATION DISTRICT https://www.facebook.com/InlandUrbanForestCouncil/

Bird Walk and Breakfast

SEPTEMBER 22, 6:30 AM, UCR BOTANIC GARDENS http://gardens.ucr.edu/documents/bird walk 2018.pdf

Home Gardening Basics

OCTOBER 8, 15, 22, 29, 10 AM, WESTERN MUNICIPAL WATER DISTRICT Presented by UCCE Master Gardeners of Riverside County http://ucanr.edu/sites/RiversideMG/?calitem=417831&g=94564

Santa Ana River Trail Bike Ride and Festival

OCTOBER 14, 9 AM, BONAMINIO PARK

http://sartbikefestival.org/

UCR Botanic Gardens Fall Plant Sale

OCTOBER 20, 10 AM - 4 PM, UCR BOTANIC GARDENS http://gardens.ucr.edu/documents/plant sale fall 2018.pdf

California Native Plant Society (CNPS) Programs

LAND USE LEARNING CENTER, BUILDING F (See Facebook page for times)

September 22: Apps and Tools to Track Plants

October 20: Native Plant Horticulture with landscape designer Orchid Black December 15: 11 AM - 2 PM: Social, potluck lunch, and photo sharing

Includes gardening presentation by Julie Dauer.

https://www.facebook.com/CaliforniaNativePlantSocietyRiversideSanBernardino/

Native Plant Sale at RCRCD

NOVEMBER 3, 9 AM - 3 PM, LAND USE LEARNING CENTER

Benefits the Riverside-San Bernardino chapter of the California Native Plant Society (CNPS). Plus SoCal Yard Transformation by Pam Pavella of Western Municipal Water District at 11 AM. https://riverside-sanbernardino.cnps.org/

Sign up for our email newsletter at http://eepurl.com/dDYYf1

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