

THE WONDERFUL, INDISPENSABLE WORLD OF WETLANDS!

BY ANNE MORKILL, EXECUTIVE DIRECTOR

The Laguna Celebrates Its 10 Year Anniversary as a Wetland of International Importance

Weighing in at approximately 4.4 ounces and 490 pounds, respectively, a California tiger salamander and a Royal Bengal tiger seemingly have little if anything in common. The former lives in the Santa Rosa Plain's vernal pools in the Laguna de Santa Rosa watershed and the latter in the largest remaining contiguous mangrove forest in the world, the Great Sundarbans in India; but, their fate is intertwined. For both of these endangered species, survival is dependent on wetlands. Of the 19,500 threatened species worldwide, 25% are found in wetlands. Here in the United States, a whopping 43% of all endangered species are dependent on wetlands.

Today, natural wetlands are threatened ecological communities. Worldwide, wetlands are disappearing three times faster than forested areas. To save the most valuable and vulnerable, an intergovernmental treaty known as the Ramsar Convention on Wetlands was created in 1971. This is the only global treaty to focus on a single ecosystem. The Laguna and Great Sundarbans are just two examples of the more than 2,300 sites across 170 countries recognized by the treaty as Wetlands of International Importance for their many and varied ecological benefits.

Thanks to you, we're celebrating the tenth anniversary of the Laguna de Santa Rosa as one of these remarkable Wetlands of International Importance. Situated within the California Floristic Province—a globally recognized biotic "hotspot"—the Laguna wetland complex is composed of creeks, ponds, marshes, vernal pools, riparian forests, oak woodlands, and grasslands that harbor many unique, rare, and endangered species. The Ramsar designation—one of only seven in California—applies to 4,000 acres on a mix of public and private properties, representing the diversity of wetland habitats found throughout the 254-square-mile Laguna watershed set in the heart of Sonoma County.



This delicate and globally significant ecosystem is also home to the majority of Sonoma County's human population, which relies upon the Laguna for water quality, flood control, scenic beauty, cultural heritage, and recreation. We have a moral imperative to properly steward this vitally important wetland complex for the benefit of all.

We know that if we lose our wetlands, it would have a direct and measurable negative impact on the quality and availability of water. Losing our wetlands would also reduce our ability to sequester carbon; we'd lose biodiversity, and our vibrant agriculture sector would be impacted. Together, with your support, we can ensure our wetlands endure for future generations.

(Continued on page 7: WETLANDS)

LET'S START AT THE BEGINNING: EARLY CAREER LEADERS

BY ALLISON TITUS, COMMUNITY EDUCATION MANAGER



The Early Career Conservationist series this spring kicked off with hearing from young women in stewardship and conservation.

Presentations on the natural world often feature principal researchers, directors, and managers in environmental work. This past year, the Early Career Conservationist events reversed the status quo to feature the passionate and valuable perspectives of early career leaders doing critical “on the ground” work to protect our natural world.

The environmental and conservation fields have a long way to go to become more inclusive and equitable. Our goal with these events was to offer young professionals a chance to speak out on where they want to see this field go, challenges they face, and the exciting work that fuels their enthusiasm and commitment. Highlighting and listening to diverse perspectives within our community is one small step in the right direction. In addition to amplifying more voices in the environmental field, this series also provided a professional development opportunity to panelists. It was a chance to network with each other and practice speaking to the public on issues we have in common.

“The panel discussions have been a great way to share stories from people of all different backgrounds. Our

common interest in the environment is what brings us together, but it’s our different journeys that build this strong community,” says Laguna Foundation’s Annie Madden, Restoration Field Supervisor and panel participant.

Panelists shared work they are proud of, from working with community

college students to monitoring endangered plant species to tracking wildlife. They also commented on challenges in the environmental field, such as a lack of diverse representation and unpaid internships. The series will conclude this spring with a panel featuring experienced ecological professionals who support early career leaders. They will provide insight and advice to aspiring conservationists looking to enter the field and other managers and mentors of early career leaders.

Our Community Education Program benefits enormously from a collaborative spirit between environmental organizations, agencies, and instructors. We all share a common goal of educating and inspiring people of all ages and backgrounds to care about the environment. Special thanks to: Ag + Open Space, Pepperwood Preserve, Point Blue Conservation Science, LandPaths, Daily Acts, The Climate Center, Sonoma Land Trust, Sonoma Water, Bodega Marine Reserve, and Audubon Canyon Ranch.

Visit our YouTube channel to view this series and other exciting videos: www.youtube.com/user/LagunaFoundation

HERON HALL GALLERY & GIFT SHOP



CURRENT EXHIBIT:

“A Salute to the Laguna de Santa Rosa Foundation”

Paintings and Pyrography by Julianne Sooley

On display through August 30, 2021. Closing Reception on Sat., August 28, 3-5pm

Virtual Gallery of paintings and pyrography: laguna.julieswatercolors.com

The Gallery is open by appointment only, Mon.-Fri., 9am – Noon. To schedule a visit, contact maggiehart@lagunafoundation.org

SPECIES SPOTLIGHT: AMERICAN MINK

BY ALLISON TITUS, COMMUNITY EDUCATION MANAGER



The elusive American mink.

Before I moved to the area, all I knew of mink was that they have soft, silky fur coveted for fancy coats. However, I soon found out there is a lot more to these native mammals than their beautiful pelts.

Elusive, fierce, and objectively cute, the American mink (*Neovision vison*) is a

small, semi-aquatic member of the weasel family. Covered in dark brown fur, their long, slender body will grow to be about 12-22 inches long. Though they are unquestionably adorable, these carnivores are equipped with sharp teeth and claws and are fearsome predators both in and out of the water. Their diet along the Laguna consists of fish,

rodents, crustaceans, frogs, and birds. In addition to being great swimmers, they are adept at using their partially webbed paws to climb trees and brush. Minks raise their young in stream-side dens or burrows and have scent glands like skunks to mark their territory. They are widespread in aquatic habitats in North America, but like many mammals, their mostly nocturnal or crepuscular behavior and excellent camouflage make them difficult to spot.

While visiting the Laguna, you might mistake them for a baby otter upon a glance before the mink disappears into the water or brush. However, baby otters are rarely far from their mothers, and the solitary nature of minks is a clue that this is a different animal.

When first learning about the Laguna wildlife, one of the biggest surprises was discovering how common the American mink is in our watershed. We are lucky to see them frequently on our wildlife cameras and enjoy hearing the exciting stories about mink encounters in the Laguna!

WALKS, TALKS & CLASSES: UPCOMING EVENTS

The Community Education program fosters life-long learning and engagement in the natural world. We collaborate with local biologists, educators, and partner organizations to provide workshops, walks, and online programs all year long to increase public appreciation for the Laguna de Santa Rosa. There is something for everyone here, from family-friendly events to art classes, to deepen their connection to our local environment.

All events are free and require pre-registration unless otherwise noted. In-person outings have very limited capacity due to COVID-19, strict safety protocol, and are subject to cancellation per county health orders.

Vernal Pools of the Santa Rosa Plain
Virtual Panel Presentation
Thursday, April 8, 2021 4:00pm - 5:30pm

Earth Day 2021: Restore Our Earth
Family Scavenger Hunt at Laguna Uplands
Thursday, April 22, 3:30pm - 6:30pm

Tiny Green Mysteries at Tomodachi Park
In-Person Outing with Laguna Staff
Saturday, May 1, 9:00am - 11:00pm

Beginners Birding Walk at the Laguna de Santa Rosa
Guided Walk with Teresa & Miles Tuffli
Saturday, May 15, 8:30am - 10:30am

Nature Journaling at Laguna Uplands
In-Person Outing with Marley Peifer
Saturday, June 5, 2021. 9:00am - 11:00pm

Please visit our website for more details on these and other upcoming events!



**AG +
OPEN
SPACE**
SONOMA COUNTY

There is no charge for these outings, which is made possible by the voters of Sonoma County, who fund Ag + Open Space's work with a quarter-cent sales tax.

LAGUNA DE SANTA ROSA WETLAND COMPLEX

BY DR. WENDY TROWBRIDGE, DIRECTOR OF RESTORATION AND CONSERVATION SCIENCE PROGRAMS

Wetlands often go unnoticed. It is easy to fall in love with a mountain, lake, or alpine vista, but one must look past the occasional mosquito and the earthy smells to genuinely enjoy a wetland. Wetlands are critical to filter water, control erosion, reduce flooding, provide habitat for migrating birds, and safe rearing grounds for fish. They are also uniquely beautiful places to visit. Sonoma County is rich in wetlands, and spring is the perfect time to get out to see them. Here in Sonoma County, we have different types of wetlands, so come with me on a tour and get your virtual boots muddy as you imagine the sounds of frogs in spring and the subtle fragrance of wildflowers.

The Santa Rosa Plain is famous for its seasonal vernal pool wetlands. These shallow depressions are invisible for much of the year, hidden among the oak savannah, but when the rains come, they fill with water and appear as shallow pools scattered across the Plain. In the winter, they provide safe places for salamanders and frogs to spawn away from predatory fish. As temperatures warm in the spring and the water begins to recede, wildflowers reach up through the water and bloom in stunning displays of color. There are better-known vernal pools in other parts of California, such as the Central Valley, but our Laguna wetlands have evolved distinct and unique species found nowhere else.

The wetlands along the Laguna de Santa Rosa main channel were historically diverse and varied, ranging from emergent marshes that were wet year-round to wet meadows that dried down by early summer with vernal pools and willow forests mixed in. Emergent marshes are the prototypical wetland, with cattails and bulrush rooted in the ground and growing up through the water. This was once the dominant plant community on the west side of the southern portion of the Laguna channel. Still, the fertile peat, flat land, and proximity to water made this valuable agricultural land, and they were mostly drained by the middle of the 20th century. The loss of these marshes and their filtering capacity contributed to our water quality challenges. The Laguna Foundation is working with our partners to restore this vital wetland type. The best place to visit an example of this wetland type is Kelly Marsh along the Laguna de Santa Rosa Trail. This is a constructed wetland, and it can give you a flavor of what the Laguna used to be like and could be again in the future.

Wet meadows may also contain sedges and rushes, but they dry down more quickly and include a more diverse group of

species, including more grasses and wildflowers. California Department of Fish and Wildlife's Cooper Road Unit is the best remaining patch of this habitat type. The easiest way to see it is from our Laguna Uplands Preserve behind Sonoma Specialty Hospital on Palm Avenue in Sebastopol. If you look down toward the Laguna, you will see a beautiful mixture of willow forest and emergent marsh patches, surrounded by wet meadow, extending south out of sight and across the Laguna channel to Brown Farm.

The final freshwater marsh type occurs mostly outside of the Laguna de Santa Rosa watershed in places like Atascadero Marsh and Ragle Ranch. There are three important examples either in or right on the western edge of the watershed. Cunningham, Perry, and Pitkin marshes are unique forested marshes and are thought to be relics of a once widespread wetland type. They contain a mix of unusual species found nowhere else: the Pitkin marsh lily, Pitkin Indian paintbrush, and white sedge. In addition to these rare, endangered species, these marshes also have a mix of uncommon shrubs, including azaleas and rhododendron, as well as black oaks and willows. While these three unique marshes are on private property, you can get a feel for the more common aspects of this marsh type at Ragle Ranch and along the West County trail at Atascadero Marsh.

Today is a perfect day to get out and explore, get your boots muddy, and get to know your local wetlands and all the diversity they have to offer!

You can find maps by visiting our website at LagunaFoundation.org/about_recreation.html



Tomodachi Park is a great place to get an up-close look at vernal pools in the Santa Rosa Plain.

CAMP TULE GRADUATES SHARE LESSONS FROM THE LAGUNA

BY CHRISTINE FONTAINE, DIRECTOR OF EDUCATION

It's stories like the following that make me smile with satisfaction. The Foundation's education programs—which happen because of you—make quite the impact on young minds. Enjoy this story of a *Camp Tule* family who recently shared their fourth-grader's school project, *Plants of the Laguna*. Lucas Chernin attends University Elementary at La Fiesta Elementary in Rohnert Park. Both he and his brother, Derek Chernin, are *Camp Tule* graduates, having attended camp for the last three years. Their grandfather, Michael Knappman, thought our education staff would be interested in seeing Lucas' project, which was indeed true. On a lovely February afternoon, Derek and Lucas led us on a walk along a section of the Laguna in the headwaters area.

It was thrilling to reverse roles and have Lucas and Derek as the teachers and walk leaders! Lucas explained, "We have been walking here all of our lives. It is nearby nature to us. Lots of people use this trail, but they walk right by the plants." Along the walk, he also pointed out his favorite plants, including cattail, willow, toyon, basket sedge, elderberry, creek dogwood, oaks, coyote bush, basket sedge, and hawthorn. He shared what he learned from his project research, including traditional uses of the plants, along with the toothbrush he made by chewing on a creek dogwood branch.

They have seen nesting ducks along the Laguna Headwaters Trail, and they pointed out signs that they helped put up to protect the ducks. We watched birds, including a red-shouldered hawk perched nearby, and spotted a hummingbird by first listening to its emphatic chip sounds. The boys shared their excitement about watching the nesting Cooper's hawks in their neighborhood. When we asked, what their favorite Laguna animal is, they exclaimed in unison, "River Otter!" Derek followed with, "That was the first animal I saw and thought: *That is cute!*" Lucas added, "It is amazing how they come out of the water and absorb the sun to warm up." Derek and Lucas also appreciate crows, jackrabbits, and frogs. When thinking about their bird feeder, Lucas shared a story about a scrub jay that visits his house. As he concluded, he looked up at us and earnestly stated: "...and it stares into my soul."

At the end of our nearly 2-hour walk, we sat down on a picnic bench in Ladybug Park for a few more questions.

Q: *What did you like best about Camp Tule?*

A: Hiking and the activities on the hikes!



Derek and Lucas Chernin share their discoveries along the Laguna.

Q: *What do you think we should do to make it better?*

A: Your camp is sort of like a role model. I can't think of ways to make it better. Maybe you could share your ideas and convince other camps to be like yours.

Q: *What do you think people should know about the Laguna?*

A: It is pretty, but that is the least important. People struggle because we depend on stores and chemicals. We are too lazy to figure out how to live with nature or to make things from plants. People aren't patient enough to learn about it. We shouldn't take too much from nature or take more than we need. We should learn about [its] history, so it doesn't get lost. Probably so much has been lost because people stopped caring.

Q: *What do they think we should all do for the Laguna?*

A: Stop throwing trash and polluting! It builds up and contaminates the water.

We were both humbled and impressed by the answers from this nine- and eleven-year-old.

They still have questions about the Laguna. "I wonder if there are trees still alive today that saw how Native Americans lived in the old ways?" "I wonder why there are so many plants at the Laguna?" "How did they all get there?" "Why do specific plants grow in certain places?"

Keep noticing and wondering Lucas and Derek... a lifetime of adventure and learning awaits. Hopefully, we will see them again soon as a *Camp Tule* naturalist or maybe even a restoration specialist, botanist, or a future Environmental Education Director!

RESTORATION IN THE HEART OF SEBASTOPOL

BY ANNIE MADDEN, RESTORATION FIELD SUPERVISOR

Urban creeks play an essential role throughout the Laguna watershed. Within those corridors, biodiversity is the lead contributor to a functioning ecosystem. Native riparian vegetation along our waterways provides vital habitat for wildlife, increases a creek's ability to collect sediment and clean urban runoff while also acting as a green space for community members to love and enjoy.

Zimpher Creek, a tributary to the Laguna, is a restoration success story. Zimpher Creek's headwaters originate in the City of Sebastopol near St. Sebastian's Church and flows eastward 1.1 miles to its confluence with the Laguna main channel. The creek spends most of its life underground and surfaces at our project site in Sebastopol Laguna Wetlands Preserve. Restoration efforts along this creek began in 2017, thanks to Sonoma Water's Watershed Partnership Program. The collaboration with Sonoma Water and the City of Sebastopol has allowed us to continue working towards habitat connectivity within the Preserve.

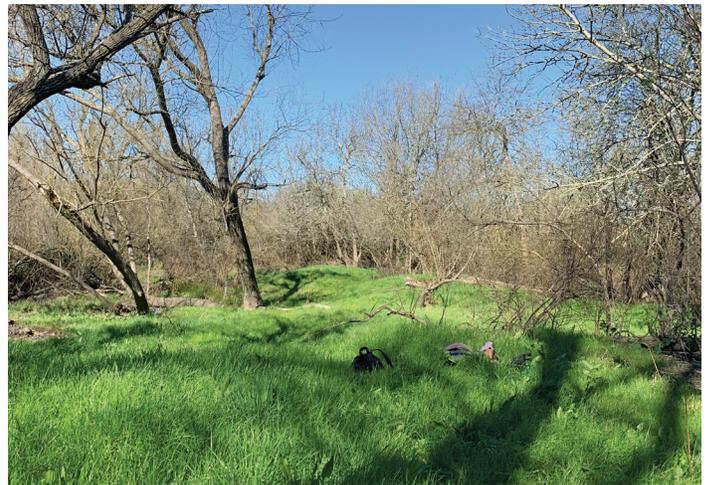
When we started this project, the area was dominated by invasive Himalayan blackberry and illegal encampments. The result was a barrier for wildlife movement, degraded soil, loss of native riparian cover, and large volumes of trash washing into the Laguna. Upon the initial removal of blackberry, over 100 tires and several truckloads of trash were cleaned up. With the help of volunteers, thousands of native grasses, rushes, and sedge were planted, and native locally collected grass seeds spread throughout the area. The years following were spent fostering the native plants and suppressing the blackberry with monthly targeted weed whacking.

Today, Zimpher Creek is transformed! Thanks to the powerful collaborations and supporters like you, what was once an uninviting wall of blackberry is now a thriving and biodiverse wet meadow. You will discover a layer of native grasses and colorful wildflowers like Western goldenrod, Pacific aster, and California poppies. The Dogwood and Elderberry stand tall. The otters are swimming through once again. We look forward to continuing the enhancement of urban creeks throughout the watershed. Zimpher Creek is a beautiful model of what the community can achieve together. Thank you for being a part of the story.

Before...



After!



VOLUNTEER OPPORTUNITIES



GARDEN VOLUNTEER DAYS ARE BACK!

Date/Time: 1st and 3rd Friday of every month, 9am – Noon

Location: Laguna Environmental Center, 900 Sanford Road, Santa Rosa, CA

COVID-19 SAFETY PRECAUTIONS: Limited to 8 volunteers, please RSVP to secure a spot. No experience needed. Training and tools provided. Physical activities can be tailored to your abilities.

For details, email maggiehart@lagunafoundation.org.

CREEKS CLEANUP MENTORSHIP PROGRAM

BY MAGGIE HART, OUTREACH MANAGER

Your donation dollars in action! At the beginning of the school year, five students from Cardinal Newman High School reached out to us about being a mentor for their senior service project. These students wanted to address environmental pollution by removing litter along creeks, keeping them clean and safe for people, plants, and wildlife.

They were so earnest in their desire to care for our creeks and community that we mobilized to reprioritize the workloads of staff and secure the necessary resources to provide a comprehensive mentorship program.

We contacted the City of Santa Rosa's Creek Stewardship Program about partnering on a monthly creek cleanup to complement the work the City already had underway. We are incredibly grateful the City offered supplies and services to haul away the trash. There are over 100 miles of creeks in Santa Rosa, so the City staff's knowledge of current creek conditions and how to navigate them has been invaluable to planning our cleanups.

We picked up trash along Santa Rosa Creek, Kawana Springs

Creek, Copeland Creek, Paulin Creek, Coffey Park, and Piner Creek. In January, students were encouraged to cleanup near their homes. Removing trash from the creeks around their neighborhoods helped build awareness of connections between the storm drain system and our streams.



Seniors Bryce Turbeville and Aydan Solano help clean up Santa Rosa Creek.

These dedicated students have worked tirelessly at each cleanup, scrambling up and down streambanks with heavy bags of trash. While they worked, they learned about wildlife that lives in and around the creeks, how the creeks connect to the greater Laguna watershed, and how to help their community with their actions. As Ayden Solano aptly said, "My experience was very enjoyable as it is very fulfilling to serve the community in which you live. A small contribution can go a long way in helping others and the environment.

Also, it's super satisfying to clean an area of trash!"

Many thanks to all of our supporters who made it possible for us to mobilize and help nurture and grow an environmentally-conscious next generation.

WETLANDS *Continued from page 1*

Why are Wetlands Important?

- Wetlands are one of the most biologically productive ecosystems, providing habitat to 40% of species.
- Wetlands absorb 8.1 million tons of carbon dioxide each year from the atmosphere.
- Wetlands capture and store rainwater, aiding in replenishing groundwater aquifers.
- Wetlands protect from natural disasters - each acre can absorb up to 1.5 million gallons of floodwater.
- Wetland plants improve water quality by acting as a natural filtration system that removes pollutants.
- Wetlands support a diverse economy including agriculture, fisheries, and recreation.
- Wetlands embody cultural and spiritual importance for Native peoples to harvest plants and animals for variety of uses.

Our mission to restore, conserve, and inspire appreciation of the Laguna de Santa Rosa, Sonoma County's own Wetland of International Importance, is only made possible with you by our side. As we examine the causes of the decline in wetland health, investments like yours fund our efforts to reverse this decline through restoring and conserving habitat. Your support is also vital for our educational programs that provide inspirational and emotional experiences for people of all ages to connect with nature and become better stewards of this extraordinary place.

We especially wish to thank all those who own and manage properties that are formally recognized under the Ramsar designation. These include the cities of Sebastopol and Santa Rosa, California Department of Fish and Wildlife, Sonoma County Agricultural Preservation and Open Space District, Sonoma Water, and many private landowners.

To learn more about wetlands that support cool critters like Bengal tigers and California Tiger salamanders, visit the Ramsar Convention of Wetlands at Ramsar.org.



Founded in 1989, the Laguna Foundation is a place-based organization focused on the Laguna de Santa Rosa. We are a 501(c)3 non-profit organization with the mission to restore and conserve the Laguna de Santa Rosa, and to inspire public appreciation of this Wetland of International Importance. The Foundation conducts educational programs, implements conservation science and restoration projects, works with landowners and public agencies to protect and improve Laguna resources, and advocates for appropriately managed opportunities for the public to enjoy the Laguna.

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