

THE ACORN

American River Natural History Association Quarterly Magazine – Summer 2023



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Message from the Executive Director, Summer 2023



Kent Anderson

Hello, I'm Kent Anderson, Executive Director of the Effie Yeaw Nature Center. Although I've served in this role for more than three years and I have met many American River Natural History Association (ARNHA) members, I haven't had a chance to talk to all of you. Writing a quarterly message in *The Acorn* will provide a great opportunity for me to share my thoughts with the wider Nature Center community. This is my first installment, and I look forward to addressing a broad range of topics in future issues.

I'll start with the weather. So far, we've had an extraordinary year. An article on the January storms later in this issue documents some of the issues we had to address early in the year, and the wet weather kept coming all the way into April. As the spring season ends, we at the Nature Center are excited to put the rain behind us and welcome the warmer days ahead. Longer daylight hours draw people outdoors and hot days fade into warm evenings surrounded by the pulse of the plants and animals all around us. The seasonal changes in the Village and Nature Study Area are dramatic this time of year filling the region with so much life, color and activity.

Summer is often a busy time for the Nature Center and this summer will be no exception! Starting out with our Annual Art Gala and Auction on June 11th, we head straight away into Summer Camps, delivering programs on a variety of educational themes from animals to ecosystems, Nisenan Maidu culture to STEM. New to our programs this summer will be a partnership with Chuck Kritzon and Willow Deer Education to provide camp programming around early technology. Each summer we see nearly 200 campers over 8 weeks of camp with campers spanning an age range from 5 to 16.

Summer will also bring some exciting changes to the Nature Center grounds and Museum. We have received a substantial grant, thanks to the California Natural Resources Agency's Cultural Program Endowment, for more than \$400,000 to advance the facility. The Nature Center will be embarking on a multi-year improvement to our Museum and lobby, focusing on greater accessibility for our diverse and engaged visitors, including developing multi-lingual signage, integrating new technologies to better connect with our visitors with varying abilities and even hands-on exhibit features for those visitors with visual impairments. These updates will open up our Museum exhibits and programs to a much wider audience and help us to deliver on our mission in a way never before achievable. As a visitor to the Nature Center for more than 37 years, I am thrilled to see us grow and change and to make these much needed improvements that will benefit visitors for many years to come.

In the Village and around the Nature Center proper, you will see a multitude of changes, including new features in the Nature Playscape, a new enclosure near the courtyard for our Animal Ambassadors, and amazing new interpretive signage, including interactive QR codes that will link directly to our branded Effie Yeaw Nature Center phone app. New signs in the Pollinator Garden will feature bright colors and activities targeted at our young visitors and "Plant Friends of the Maidu" signage will present indigenous knowledge on native and endemic plants and their historic and modern cultural usage.

We encourage everyone to visit the Nature Center over the summer months and to enjoy all the new and improving features of the Museum, lobby, Village area and the Nature Center proper and, as always, to explore the trails and the beauty of Nature!

Kent Anderson



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Cover: River Otter.
Photo by Dave Dawson.

River Otters along the American River Parkway

By Eric Ross

Last summer I went searching for beavers to photograph for an article I was writing for *The Acorn*. I thought I saw some beavers in a marshy backwater behind Rio Americano High School. Sneaking down for a closer view, I found myself staring at an entirely different species.

Not 25 feet from me, river otters were cavorting in the water. Hearing my approach, four of them popped their heads up to check me out. Delighted, I took their picture and watched them play for the next ten minutes.

North American river otters (*Lontra canadensis*) are weasel family members whose range is limited to our continent. In addition to rivers, they also inhabit ponds, lakes, marshes, swamps, and estuaries. They seek habitat with abundant food sources and vegetation for shelter. Otters are active throughout the year and do not hibernate. Where otters live close to people, they are active from dusk until midmorning; in more remote areas, they are more diurnal.

River otters are abundant throughout the lower American River. Our river's excellent water quality is good for otters who are sensitive to and avoid polluted waters. Otters can be seen along the main river, but they are more likely to frequent adjacent marshes and side channels. Specialized for aquatic life, they can be spotted sliding through the Arden rapids, frolicking among submerged logs off Jacob Lane, or rolling on vegetation not far off the Parkway.

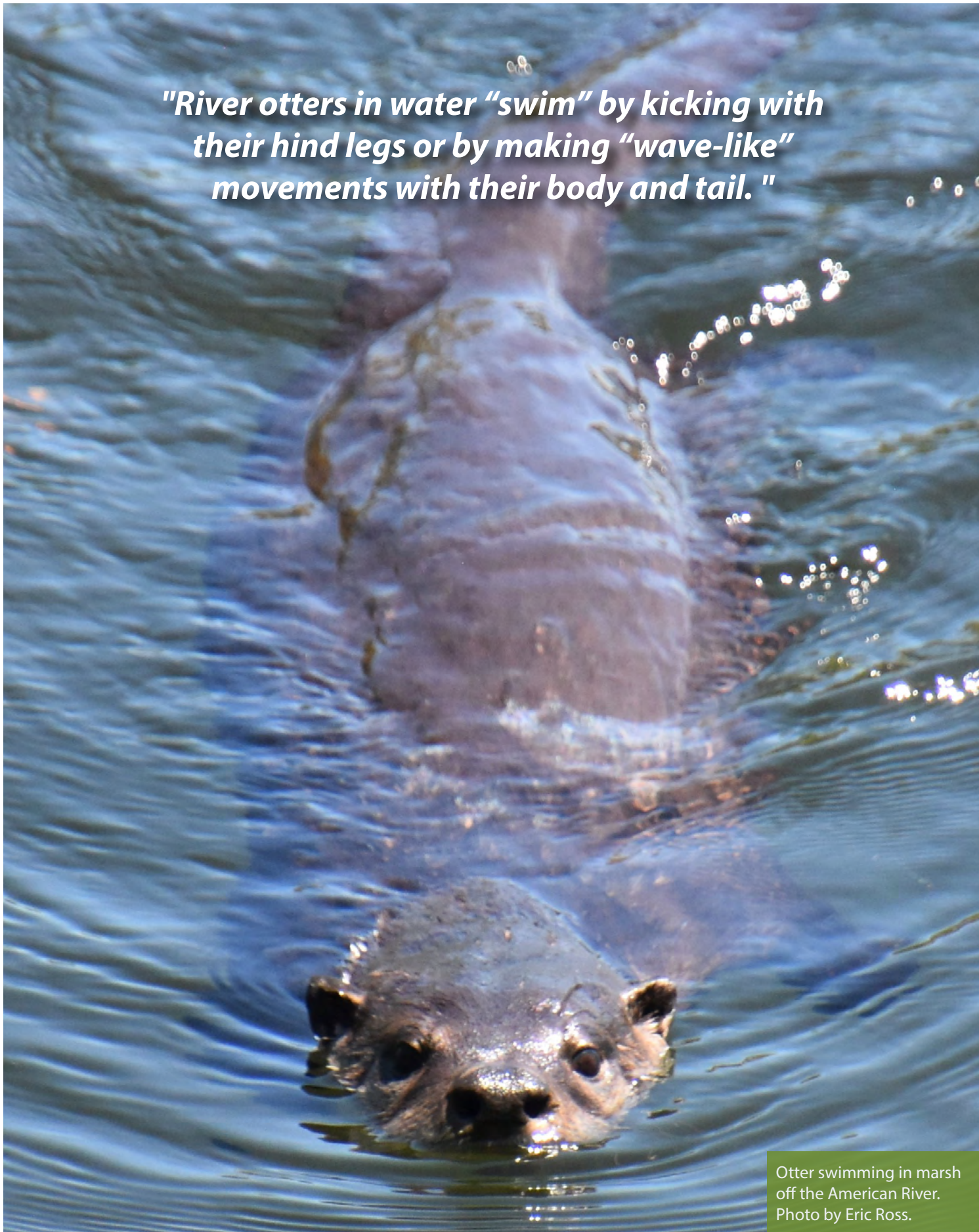
Historically otters existed throughout most of North America except in the desert southwest and the Great Plains. Since European colonization, their range has been significantly reduced by habitat loss and by fur trapping. Before 1961, California law allowed people to kill otters for any reason; since then, acting to protect the species, California has mandated they can no longer be killed, except when it is determined that otters are causing damage or destruction to property.



Four curious otters watching the author. Photo by Eric Ross.



"River otters in water "swim" by kicking with their hind legs or by making "wave-like" movements with their body and tail. "



Otter swimming in marsh off the American River.
Photo by Eric Ross.



River otters are highly intelligent, social creatures with life spans averaging eight to nine years. They are rich brown in color with a silvery sheen from below their eyes and down their front. They have small ears and keen hearing. They have wide snouts and an acute sense of smell. Their tail is about a third of their length, broad at its base and tapering towards its end. Evolution has given them webbed feet. Adult males are larger and average around 25 pounds, while adult females are around 18 pounds.

At close range, river otters will make soft chuckles and purring grunts as contact calls. Shrill chirps are used when otters are farther apart. When scared or surprised, they make a loud nasal snort or hiss as an alarm call and will scream when injured or under duress.

On the lower American River, river otters are highly skilled predators particularly adapted to hunting. Their streamlined shape allows them to move quickly in fresh water. Through evolution, otters, like beavers, have developed transparent inner eyelids to protect their eyes while underwater. They possess long, thick whiskers, which help detect prey in dark or muddy waters and partially compensate for their underwater nearsightedness.

River otters have specialized teeth to inflict lethal bites to their prey (sharp canines) and for crushing hard objects like shells (large molars). The relative availability and vulnerability of the otter's prey determines their food choices. They forage along undercut banks and around rocks, logjams, and clumps of vegetation. Underwater, they roll rocks and push aside other objects to flush anything that may be hiding underneath.



A river otter eating its prey. Photo by David Dawson.

Fish are a primary component of a river otter's diet. The lower American River has more than 40 species of native and non-native fish that otters can prey on. Crustaceans such as crayfish are almost as important as a food source and are seasonably plentiful in the American River.

River otters are omnivores. In addition to fish and crustaceans, they eat a variety of other food including fruits, reptiles, amphibians, birds (especially flightless ones in molt), aquatic insects, squirrels, and mice. They generally do not prey on animals of their own size.

River otters in water "swim" by kicking with their hind legs or by making "wave-like" movements with their body and tail. Watching them in the water is like observing an effortless, underwater ballet. While in water, their front paws are held to their sides when not being used. They can swim over 7 miles per hour, dive as deep as 60 feet, and spend up to 8 minutes underwater on a single breath.

Although many people think they are primarily aquatic, otters actually spend about two-thirds of their time on land. Despite appearing awkward, they can walk and gallop well across the ground, reaching speeds of 15 miles per hour. Their land gait is a "lope" with head and tail outstretched and their back hunched high in the air. River otters are sufficiently agile to climb trees. By sliding down grass slopes or across flat ground, otters can often quickly cover distances ranging from a few feet up to hundreds of yards.



A river otter taking a break on a fallen tree. Photo by David Dawson.





A pair of river otters on a riverbank. Photo by Michael Covey.



River otter family on a riverbank. Photo by Katherine Roberts.



River otters cuddling. Photo by Katherine Roberts.



River otter getting onto shore. Photo by Katherine Roberts.

Because otters need waterproof fur to stay alive, they frequently groom themselves at “rolling sites” where they roll and tumble on vegetation to clean and dry their fur. This activity also distributes secreted oils to keep them waterproof and maintain their insulation. Otherwise, they would catch pneumonia and die.

River otters rest aboveground in a temporary, convenient “nest” of dense vegetation or in a permanent den in a riverbank with both underwater and outside entrances. Beaver dams and lodges are well-suited and are commonly used as dens by otters, which usually get along with the other species.

River otters mate with more than one partner throughout their lifetime. They breed from about December to April each year. Estrous females’ scent-marking attracts breeding males. When a male and a female locate one another, active courting begins, which leads to copulation either in the water or on land. Once a male mates with a female, he leaves to mate with others; she stays to raise the young.

North American river otters and sea otters are the two otter species known to have “delayed implantation”, an unusual birth strategy in the animal world. This strategy means the female otter’s fertilized eggs will remain in suspended development for 7-10 months before implanting -- usually during late winter/early spring months. Because of their long-delayed implantation, females sometimes give birth up to a year after mating, and just before their next breeding cycle.

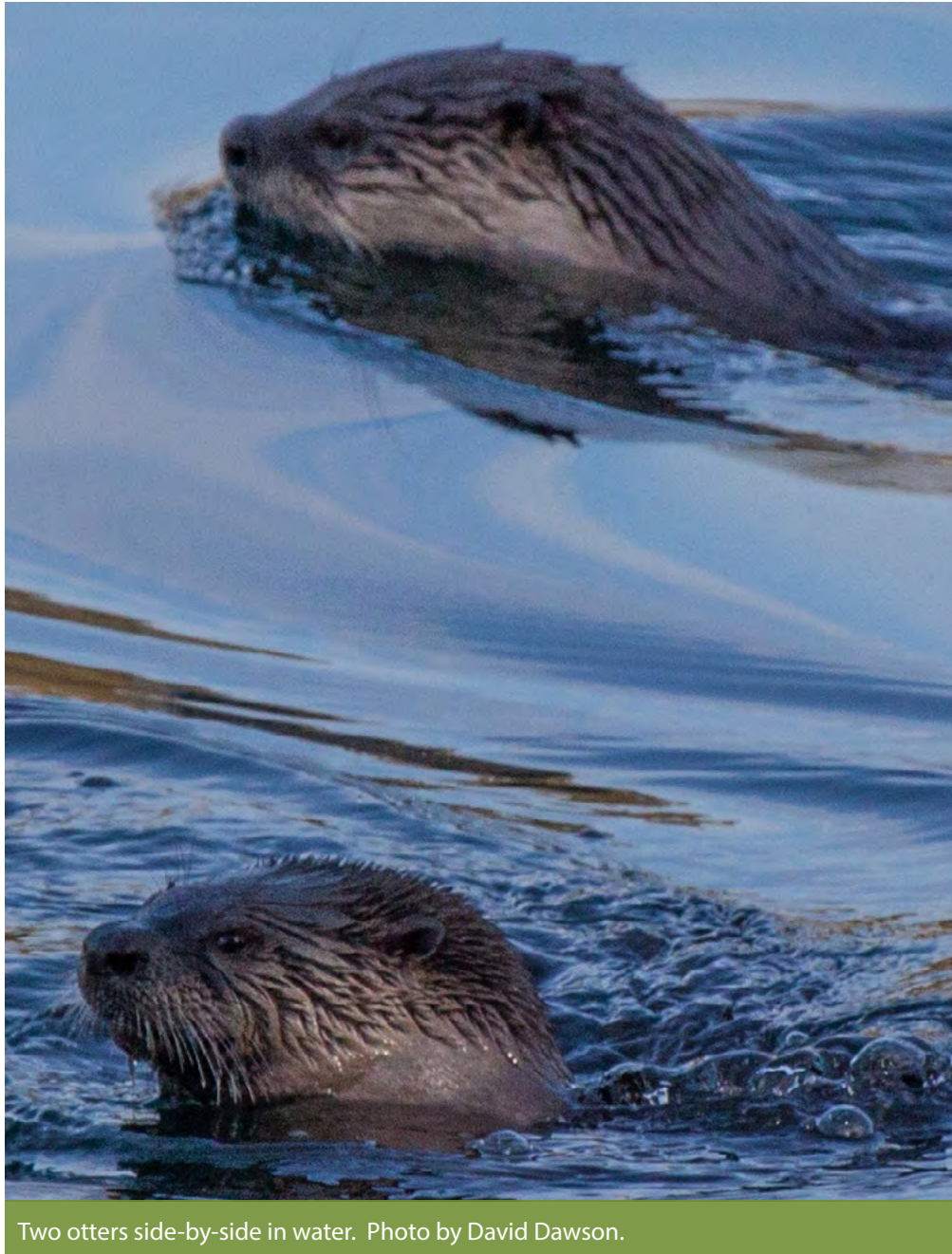


Mothers raise their young in dens with litters usually consisting of 1 to 3 kits, which are moderately well-developed at birth although blind and toothless. Kits gain sight in a month and move and play well after 5 or 6 weeks. In the third and fourth months, they begin solid food and are close to ending their suckling. Kits can leave the den after their fifth month, but normally stay until they are 8 to 10 months old while the mother helps feed them.

Throughout their home range, river otters are often seen alone or in small groups. The most enduring social unit is a

mother and her young. Fortunately, despite the degrading of many aquatic habitats, increased concerns about maintaining river otter populations along with improved natural resources management point to a cautiously optimistic future for this fascinating and energetic species.

Eric Ross is a Docent at Effie Yeaw and a Certified California Naturalist. Special thanks to photographers Dave Dawson, Katherine Robertson and Michael Covey.



Two otters side-by-side in water. Photo by David Dawson.



Fossils from the American River Drainage in California

By Richard P. Hilton

WHAT IS A FOSSIL?

A fossil is any evidence of prehistoric life. Most people think that all fossils are petrified (turned to stone). Some fossils are petrified, but most are not. They can be original materials such as bone or wood or even footprints or impressions left behind by an organism. Two conditions favor something becoming a fossil: hard parts (such as bones, teeth, shells and wood) and rapid burial. Rapid burial cuts off oxygen that decomposers (like bacteria) need to cause decay.

Fossils are an important resource and should never be removed from either private or public lands without permission and/or a permit, and then only by a professional. It is imperative that fossils be removed as undamaged as possible and detailed records kept.

FOSSIL DISCOVERIES IN THE AMERICAN RIVER DRAINAGE

The American River drainage extends from the river's origins in the Lake Tahoe region of the Sierra Nevada down to Sacramento. Thousands of fossils have been discovered in this area, and, without a doubt, many more remain. The oldest (> 250 million years) and often the rarest fossils are found in the hard, somewhat altered rocks of the Sierra Nevada. These fossils originally were deposited in ocean sediment. Many are found in limestone outcrops and include crinoids (related to starfish), bryozoans (moss animals), corals, and snails.

Several fossils have been reported from Jurassic (~160 million years ago) "slates" at mid-elevations of the Sierra Nevada. These include clams and ammonites, the coiled relatives of the chambered nautilus (Figure 1). A sea urchin was also found on the Middle Fork of the American River (Figure 2).

By the Late Cretaceous (~80 million years ago), erosion had stripped away miles of overlying rock from the original Sierra. This exposed the granitic rock and altered bedrock along the western foothills. The sea then flooded inland and ocean sediment was deposited on these older rocks creating a set of layers called the Chico Formation. Numerous marine fossils such as ammonites and baculites (another relative of the chambered nautilus), scaphopods (tusk shells), clams, snails, urchins, crinoids, brachiopods and shrimp burrows have been collected locally. Marine vertebrates collected locally include several species of shark and other fish, as well as three types of marine turtle, and the mosasaur *Clidastes*, a large sea-going varanid lizard related to the Komodo dragon (Figure 3).



Figure 1. Jurassic ammonites from slates in the Mariposa Formation, SCNHM.



Figure 2. The Jurassic urchin, *Sierradiadema kristini*, Colfax Sequence, CAS.



Other fossils include the woody portions of plants and seeds, as well as leaves (from a variety of flowering plants) and fronds from ferns and cycads that washed into the marine environment. Other plant fossils discovered include conifers (such as foliage from monkey puzzle trees), an entire trunk of a moderate-sized tree fern (Figure 4), and seeds of numerous unidentified cycads. Some of the animal species that washed into the sea include land snails. But the most surprising of the Chico Formation finds is a bone from a theropod dinosaur, the first and only bone of a carnivorous dinosaur found in California.

As time progressed, layers of the lone Formation were deposited on top of the Chico Formation. At lower elevations it is predominately deltaic river deposits. Uphill from the deltas in former river beds are the Auriferous (gold-bearing) Gravels. These are found today on the ridges of the Sierra Nevada like those seen at Gold Run on I-80. Locally, fossil leaves (mostly magnolia) and seeds (lily and palm nut) have been found in deposits from the lone Formation. Some of the most beautiful petrified wood found anywhere has also been discovered at these sites (Figure 5). Dates of the lone Formation range from 31 million to over 50 million years. The plant fossils show that the climate at that time was much like that of today's southern Atlantic coastal region with heavy rainfall and warmer temperatures.

The ice age started around 2.5 million years ago and lasted until about 10,000 years ago. There are two major divisions of ice age fossils in California: Irvingtonian (older) and Rancholabrean (younger). The Irvingtonian is represented by bone-crushing dogs, hyenas, saber-toothed cats, rabbits, giant marmots, horses, mammoths, and mastodons. The age of Rancholabrean fauna is based on the presence of bison and many mammalian fossil species still living today. Other Rancholabrean fauna include mammoths, mastodons, camels, horses, and ground sloths.

Ice age fossils in the American River drainage come from two distinct settings. The first of these is limestone caverns. Here animals have been preserved after wandering into, being washed into, or falling into underground caves. Bones often became encased in limestone when water dripped over them and slowly evaporated, leaving behind the mineral calcite. There are two limestone cavern sites, both in El Dorado County.

The first site is Hawver Cave and Cool Quarry, a single limestone outcrop east of Auburn. Some of the animals appear to have washed into the cave, but a significant number were deposited in rubble at the bottom of a collapsed sinkhole into which unsuspecting animals apparently fell. The



Figure 3. A model of the mosasaur *Clidastes* in the Sierra College Natural History Museum. Chico Formation, Granite Bay, SCNHM.



Figure 4. Tree fern, Chico Formation, Granite Bay, SCNHM.



Figure 5. Opalized wood, lone Formation, Granite Bay, SCNHM.



list of fossils found here is extensive and beyond the scope of this article. The second site is Crystal Cave 1. The fossil fauna there includes lizards and birds (such as owls and California quail). Mammals include striped and spotted skunks, rodents, mule deer, mountain beavers and the extinct shrub ox.

The second setting of ice age fossils is within sedimentary rocks that are common around the lowest parts of the American River. Here, throughout the ice age, the river often overflowed into low floodplain areas burying bones, wood and invertebrate shells. Today, whenever erosion or land development occurs in the area, there is a fair chance that ice age fossils may be exposed. Nearly all the types of fossils occurring in the La Brea Tar Pits, plus many others, are found in these young rocks of the lower American River. Add to this the fossils of the limestone caves and our area has a wealth of ice age fossils! See Hilton (2018) below for more details.

Reference: Hilton, Richard. P., 2018, Chapter 4, Paleontology, pgs. 52-53 and Appendix B, pgs 361-422 in Overview of Geology of Sacramento, California, United States of America, Edited by Garry Maurath, Robert Anderson, Christopher Dennis. [Geology of the Cities of the World Series, Association of Environmental and Engineering Geologists Special Publication No. 29.](#)



Figure 6. Live Oak leaf, Mehrten Formation, Roseville SCNHM.

Richard Hilton is Professor Emeritus, Geology and Paleontology, Sierra College, Rocklin, California. He has been collecting fossils in the Sacramento area and throughout the West for over 40 years and took all the photographs in this article. The repositories for the fossils are indicated in the figure captions: CAS = California Academy of Sciences; SCNHM=Sierra College Natural History Museum.



Figure 7. *Mammuthus columbi* (Mammoth), palette with molars, Rancholabrean, Riverbank Formation, SCNHM.-



A New Look for the Museum

By Joey Johnson

The Museum at the Effie Yeaw Nature Center (EYNC) is getting a lot of new and exciting features. Some of the recent additions include a beautiful display of metal fish suspended from the ceiling and a new array of preserved animals high in the upper ledges of the Museum. The fish were purchased through Etsy as a part of our collaboration with Water Forum and the salmon habitat restoration project and represent several species common to the area including salmon, steelhead, rainbow trout, and several species of bass. There is also a large enclosure waiting to house a desert tortoise.

The term biofact is used by the Association of Zoos and Aquariums to refer to dead material of a once living organism. Although the Museum has always had biofact animals on display, many more have been kept in storage waiting for their opportunity to be a part of the Museum exhibits again. Now almost a dozen additional animals have been installed for all to see. Some of these biofact animals are registered with either the state Department of Fish and Wildlife or the federal Department of Fish and Wildlife.

New to the Museum this April is the Pollinator Exhibit, created by members of the EYNC Habitat Restoration Team. The exhibit includes nine tall panels illustrating the major pollinator groups--bees, butterflies and moths, flies and beetles, and hummingbirds--as well as information on how flowers attract pollinators and how you can help these important insects and birds by planting a pollinator-friendly garden. The display features stunning photographs, three-dimensional models, and interactive puzzles that allow children to build their own pollinators.

There are big things coming in the next two years for this museum. In March, the California Resources Agency's California Cultural and Historic Endowment Board, which oversees the California Museum Grant Program, approved the Nature Center's application for a \$400,750 grant for a Nature Museum Renovation and Revitalization Project. The focus of the grant is to improve accessibility for the museum building and revitalize the museum exhibits. EYNC was one of 63 groups to receive a grant.

The grant project includes installing Americans with Disabilities Act (ADA) upgrades to the Museum and bathroom flooring, installation of under floor wiring, replacing door thresholds, and installation of automatic doors, which will enable easier access to the building and the interior space for people with mobility challenges. Updates to exhibits will provide accessible exhibits and interactive digital touchscreens and signage. Museum lighting will be redesigned

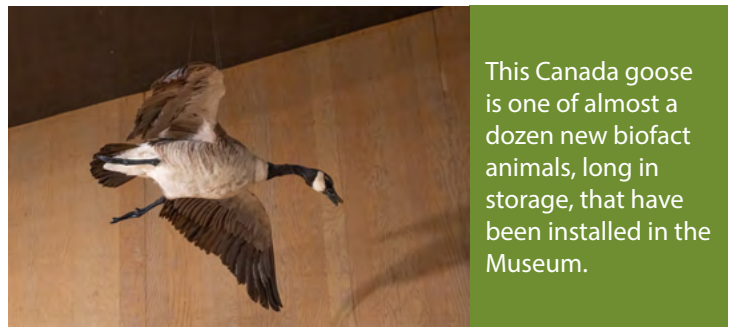
to enhance viewing of the exhibits and exhibit content will be updated in collaboration with Nisenan and Maidu representatives. An exact timeline has not been set yet, but it is expected that this project will take around two years to be completed.

These changes enrich the educational experience of the Nature Center Museum for visitors of all ages. We will enjoy the most recent additions and look forward to the amazing upgrades made possible by the grant.

Joey Johnson is a Past President of ARNHA, a photographer and nature lover. All photos are by the author.



A new collection of metal fish hangs from the ceiling above the Water Forum Exhibit.



This Canada goose is one of almost a dozen new biofact animals, long in storage, that have been installed in the Museum.



A new pollinator display includes stunning photographs of bees, butterflies, hummingbirds and other pollinators.



January Storms at Effie Yeaw

By Melanie Loo and Mary Louise Flint

January 2023 arrived like a lion with fierce wind and record-breaking torrents of rain. The Effie Yeaw Nature Study Area (NSA) lost many trees and branches, and the Nature Center and Ancil Hoffman Park were closed for more than a week because of the damage and hazard to visitors. The American River rose up to the River View Trail, a height not seen for a number of years.

Effie Yeaw staff and volunteers immediately came together to remove fallen limbs from trails, gather trash along the river front, and clear debris from the village area. County staff with hefty equipment opened up trails obstructed by larger trees.

After a week or so, the Nature Study Area was back open to visitors, but keen observers could sense the loss of trees and changed landscapes facing the NSA's wild inhabitants. The photos below document the experience.

Melanie Loo, Ph.D. is a retired Professor of Biological Sciences at CSU Sacramento. She volunteers at EYNC as a docent, trail steward, and member of the Habitat Restoration Team. Mary Louise Flint, Ph.D., is a docent at EYNC and Extension Entomologist Emerita at the Department of Entomology and Nematology, UC Davis.



The American River rose up to record heights. Photo by Mary Lou Flint.



The area behind the EYNC Museum building seems stark with the loss of trees from December and January storms. Photo by Melanie Loo.



Volunteers Teresa Kahl, Chris Miller, Tammy Hayes and Luna Ramirez clear trash along the river. Photo by Jacqueline Ramirez.



Blockage on the Main Trail. Photo by Kent Anderson.



A giant oak topples near the Natoma Trail. Photo by Melanie Loo.



A massive root ball blocks the Main Trail. Photo by Kent Anderson.



Alliance Maintenance volunteers Connor Berris and Chris Helmsen clear damage on the Bluff Trail. Photo by Jacqueline Ramirez.



Volunteers from the Meristem Program clean up the EYNC Village. Photo by Melanie Loo.



EYNC Board member Ed Smith demonstrates his forestry skills removing hazardous hanging limbs in the Village. Photo by Melanie Loo.



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- Timothy & Janie McGinn
- Tom & Cleann McGuire
- Victoria McIntyre In Memory of Steven Keeney
- Mila McLevich
- Andrea Meier
- Linda Melching
- Liliana Mendoza
- Stacie Merchant
- Julie Merkel
- Collin Michael
- Melissa Millerhenson
- Robin & Marilyn Mitchell
- Michelle Monteforte
- Erienne Moore
- Patricia Moore
- James & Lori Morgan
- Mary Morris
- Mary & Larry Morris
- Emily Moulton
- Judith Murphy In Memory of Steven Keeney
- Barbara Nakano
- Suzanna Naramore
- Jeffrey Nauer
- Elaine Nelston
- Shirley Nelson
- J. M. Nemmers
- Arianna Neuberger
- Lestelle Nichols
- Lou & Ellen Nishimura
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- M A Nunes
- Kevin O'Brien
- Mallory O'Connor
- Rosemary O'Grady
- Elizabeth Oller
- Deborah Ondricka
- Christine O'Neal
- Dorothy Orolin
- Christopher Papouchis
- Veronica Pardo
- Sagar Patel
- Dee & John Peacock
- Michael & Jill Pease
- Nick Pedersen
- Georgianna Pfof
- Lisa Phenix
- Steven P. Phillips
- William Phillips
- Mahlon Picht
- Lynn Pinkerton
- Lucia Plumb-Reyes
- Frank & Carol Poelman
- Jeannine Powell
- Nancy Reid & Richard Price
- Ralph Propper
- Justin & Vernelle Puerta
- Werner & Sabina Raab
- Blake Rabe
- Radwick Charitable Fund
- Loretta Reed
- Melissa Reisinger
- Resilient Families
- Kathryn Reynolds
- Steve Woodward & Janet Rezos
- Ruth Rezos
- Valerie Riaz
- Naomi & John Rice
- Kimberly Rider
- Kimberli Riley
- Katherine Roberts
- Valorie Rodriguez
- Robert & Cheryl Roesser
- Michael Rogawski
- Cynthia Rogers
- Julia Rolstad
- Christine Root
- Ronald Rose
- Katie Russo
- Lyn Rutan
- Meredith & Patrick Ryan
- Antoinette Sabelhaus
- Sacramento Region Community Foundation
- Essie Saldana
- Theodore Samson
- Samuel & Mary Ellen (Pat) Scarlett
- Adam Schawel
- Jennifer Schieck
- Anne & Chris Schoch In Memory of James Raleigh
- Karen Schwalm
- Sara Sealander
- Lanna Seuret
- Katharine Severson
- Paula Huber & Francis Sheehan
- Heather Sheridan
- Yi Yi Myint & Myo Shin
- Jill & Mike Short
- Tommy Silver
- Susan Simmons
- Patricia Simms
- Roxanna Skull
- Bob & Robyn Slakey
- Lynn Frank & Patty Slomski
- Elisa Zitano & David Smith
- Jennifer Smith
- Starlene Smith
- Steven & Janet Smith
- Deborah Snipes
- Susan Solarz
- Amy Solov
- Joann Solov
- Douglas Souvignier
- Bill & Anne Spaller
- Krishna Spier
- Laurence Stearns
- Jane Steele
- Joni & Steve Stein
- Kimberly Steinmann
- Morna Stephens
- Craig Stevens
- Patricia Stock
- Daniel & Cindy Stone
- Todd & Elizabeth Stone
- Perry Stout
- Jasmina Suljic
- Gail Sullivan
- Celia & Adam Surridge
- Carole Sussman
- The SVVMA Charitable Foundation
- Norma & Masoud Tabatabai
- Patrick Taillon
- Lorraine Talbot
- Kathleen Taylor
- Lynn Schweissinger & Paul Tebbel
- Catherine Tedesco
- Kalynn Tennerson
- Jaclyn Teofilo (Krantz)
- Ned Thimmayya
- Patricia Thompson
- Dale Tilton
- Michele Todman
- Maureen Tracy
- Lenea Travis
- Elizabeth Traylor
- Majorie Tuckerman
- Stephanie Turner
- Stephen Tuttle



- Colleen Uhlenhop
- Jillian Van Ness
- Sheng Linda Vang
- Leslie & Margaret Veldman
- Dorothy & Patrick Wagner
- Robert Wall
- Diana Wallace
- Katie Walton
- Ann & Jerry Ward
- Larry & Jamie Washington In
Memory of Sigrid Trevino
- Kathryn Webb

- Fred & Betsy Weiland
- Wendy Weinland
- Jacek Lisiewicz &
Laurie Weir
- Daniel & Amy Welsh
- Tracy & Stephen Wetzel
- Andrew & Shireen
Whitaker
- John Whitelaw
- Valerie Whitworth
- Tom Gohring & Kate
Williams

- Liz Williamson
- J.M. Wilson
- Leo and Brenda Winternitz
- Heather Wong
- Nathan Woods
- Lucinda Woodward
- Christopher Yamashita
- William Yeates
- Diane Young
- Tracy Young
- Ruthann Ziegler

**In Honor of Susan Solarz &
Bruce Nortareus Wedding**

- Barbara Beeman
- Sheldon Brown
- Richard Clowdus
- Tammy Egger
- Gail Kara & Phillip Guddemi
- Laura & Walter Kaweski
- Carol La Russa
- Michael Ranta
- Christine Weinstein





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