

# THE ACORN

American River Natural History Association Members' Magazine - Spring 2019

### Deer Antlers

By Dave Cook

A common question regarding deer antlers is whether you can determine the age of a deer by the number of antler points. The answer is an unqualified yes, no or maybe! But first, a bit of general info about antlers.

Only male deer grow antlers and they "wear" them for about three quarters of the year, roughly from April of one year through January of the following year. (Horns, by contrast, are permanent structures and are not grown & shed annually as antlers are.) Antlers are used by bucks to spar with other bucks and to impress the ladies during the rut (the mating season), from October through December of each year.



A male fawn will show the earliest start of antler growth at 5 to 6 months of age, starting with a nub (called a pedicel) at the base of the antler where it attaches to the skull. Antlers represent the fastest growing tissue in the animal kingdom and can increase up to 1/2 inch a day at their growing peak. During the next 12 months, these first antlers will continue to grow and end in just one point. Such a deer will be called a "spike" and so a one year old buck will have one point on each antler.



That set of antlers will fall off after the rut is over, usually by January or February of the next year. A new set of antlers will start growing in April and will typically have two points on each antler. The buck will wear that set as a two year old, making it look like a pattern that age can be determined by the number of points.

While this pattern works well for the first couple of years of a buck's life, it isn't particularly reliable as the buck gets older. Often, antler growth is adversely affected by poor nutrition and/or injury. An occasional lack of symmetry leaves the observer confused about which antler of the pair (the points on only one side are counted) is showing the most representative age indication. So, who really knows how old a three, four, six or more point buck is? The best thing to do is enjoy the viewing while admiring the buck and wish him well reaching another birthday the following year no matter how many he's already had.

Dave Cook has been rehabbing fawns (as well as occasionally rescuing adult deer) with Sierra Wildlife Rescue since 2000. He is also the Facilitator for the Statewide Fawn Rehabbers' Workgroup, which is sponsored by the California Department of Fish & Wildlife.

Photos by Kathy Kayner



## President's Message, Spring 2019

It is always a little odd when I am writing these messages because it isn't the season I am writing about. It is a cold, rainy day here in Sacramento and I'm writing for the spring edition. But, in doing so, I get to turn my mind toward my favorite season that brings longer days and new growth all around.

Spring is the season for new growth and this edition of *The Acorn* is the first to be electronic only, unless you have told us that you absolutely need a printed copy. We are trying to reduce our impact on the environment and on our finances, and reducing the number of *Acorn* magazines printed in hard copy is one way we are approaching that goal. Change is never easy, but it is our hope that you will find this new format enjoyable and informative.

Speaking of changes, the Nature Center offered full day camps this winter for the first time. Our camps are so amazing that we wanted to extend our reach to families who could not run over in the middle of the day to pick up their campers. These camps were successful and we will offer them again this spring.

Bird and Breakfast will happen on two weekends in March. If you haven't come to this event, you are missing a very fun and educational day, not to mention good food. The traditional event will be March 16th and the

family-oriented event will be March 23rd. Our partners, the Sacramento Audubon Society scope out (pun intended) where various species of birds have built nests and they set up their scopes so that people can see these wonders. These expert birders lead small groups through the preserve and answer questions along the way.

The 10th annual Spring Gala & Auction will be on June 8th. This is our biggest fundraising event and it is a wonderful experience. An evening of good food, good conversation and music under the trees, with the opportunity to support the Nature Center by bidding on art, experiences and vacations. The proceeds from this event make it possible for the Effie Yeaw Nature Center to continue to offer the best nature education experiences to future stewards of our beautiful planet.

Please do yourself a favor this spring and come wander the trails in the Nature Study Area. The Red-Shouldered Hawks have been seen hanging around, there is a 10-point buck regally surveying his kingdom and multiple other flora and fauna to be enjoyed. You will find yourself feeling better about the world with a little nature therapy.

In the environment the end of the day year

In the spring, at the end of the day, you should smell like dirt. - Margaret Atwood



### Annual Birding Events at Effie Yeaw Nature Center

Two delightful mornings of birding with Sacramento Audubon and a hot breakfast afterwards

Traditional Event ~ Saturday, March 16 at 8am Tickets: \$45 per adult, \$40 for members

Family Event ~ Saturday, March 23 at 8am
Tickets: \$12 per adult, \$7 per child
(discounts for members)

And don't miss the chance to win the grand raffle prize! See event page for details!

Purchase tickets at www.SacNatureCenter.net or call (916) 489-4918



## The Harvester Ants of Effic Yeaw

Mary Louise Flint, Docent, Effie Yeaw Nature Center

Next time you walk along the Natoma Trail, stop at a sunny, wide-open location and start following an ant. You might be surprised at how much fun ant stalking can be.

Chances are the ant you find will be a harvester ant. There are other smaller species on the trails, but harvester ants are by far the most common. They are large red ants. Unlike the smaller ants that invade your kitchen, trailing each other in long lines, harvester ants forage on their own radiating out from their nest in all directions.



Harvester ants are sometimes called "bearded ants" in reference to the hairs behind their mouthparts that allow them to carry large seeds and small stones.

Look closely and you will probably find an ant carrying a seed. Harvester ants get their name from their habit of harvesting seeds and bringing them back to their nests to fill their large underground granaries. Seeds are their primary food source, but they will occasionally feed on insects. A recent review of harvester ants in the Annual Review of Entomology noted that these ants harvest "several million seeds per hectare (2.5 acres) per year". Thus they have a huge impact on plant abundance and the ecosystems where they live.

Follow an ant long enough and eventually they will lead you to their nest entrance. It may take some time because worker ants may forage 10-15 feet or more from their nest. Nest entrances appear as holes surrounded by small rocks and plant debris. Often a few worker ants will be emerging from the nest with rocks that they are excavating from down below. Harvester ants are sometimes called "bearded" ants because of the long hairs under their heads that they use to carry small rocks and large seeds.

Once established, harvester ant nests may remain active for 15 to 30 or more years with a single long-lived queen who remains below ground laying eggs under the care of her entourage of worker ants, which may number in the thousands. Nests consist of a system of tunnels leading to granary storage chambers, nurseries for eggs and the legless and helpless ant larvae, and often several entrances at the soil surface. Although some species of harvester ants have nests that reach 15 or more feet below the soil surface, the harvester ant species at Effie Yeaw, *Pogonomyrmex subdentatus*, is unlikely to excavate deeper than 3 feet.

Winged reproductives are produced from October to May after rains and these winged ants may be seen along the trail. The newly mated queens will burrow into the soil and try to establish new colonies on their own. Only a few succeed.

Observing their red color, the students on my elementary school tours often call these ants "red fire ants". In fact, the much feared imported red fire ant, *Solenopsis invicta*, does not occur in California north of the Tehachapi Mountains. It's a smaller, darker ant that attacks aggressively in groups. Although the harvester ant can produce a painful sting, it is not aggressive, does not travel in groups and is unlikely to sting or bite you unless you pick it up or allow it to get trapped in your pant leg.

Besides being fun to watch, harvester ants play an important role in our Nature Preserve's ecosystemThey move seeds around, clean up dead insects and debris in their path, excavate our dry, compacted soil to help with drainage and aeration, and are food for many other animals including lizards, birds (like the northern flicker), spiders, ant lions and other insects.



Harvester ants emerging from their nest along the Natoma Trail.

Close up of a harvester ant, Pogonomyrmex spp. Photo by Jack Kelly Clark, used with permission from the University of California IPM Program.



### Hikers, Heroes and Happy Kids!

Where can children experience all the natural wonders of springtime? Where else, but at the Effie Yeaw Nature Center! Our spring day camps provide families a safe, educational environment where kids get valuable time exploring nature. From studying plants, exploring the river bank and hiking the preserve to encounters with resident animal ambassadors, crafts, crafts and games, our camps will keep kids busy and engaged during spring break 2019. We are pleased to be able to offer full-day camps in addition to our traditional half-day option. Full-day camps run 8:30am to 4:30pm daily. Half day camps run 8:30am to 12:30pm. Camp dates and titles are below:

- Monday, April 15 Phenomenal Plants (ages 6-7 & 8-11)
- Tuesday, April 16 Wondrous Water (ages 6-7 & 8-11)
- Tuesday, April 16 Earth and Sky (Camp 5 just for 5 year olds!) 9am to 12pm
- Wednesday, April 17 ECO-Superheroes! (ages 6-7 & 8-11)
- Thursday, April 18 Happy Hikers (ages 6-7 & 8-11)
- Friday, April 19 Egg-stravaganza! (ages 6-7 & 8-11)

More information and online registration at: www.sacnaturecenter.net/education/nature-camps/spring/







### Annual Gala Event Gets a Spring "Refresh" for 10th Anniversary

On June 8th, 2019, most important fundraising event of the year for the Effie Yeaw Nature Center will take place. Anyone who has attended knows that this is one of the loveliest evenings in the Sacramento region, occurring outside and under the trees at the Effie Yeaw Nature Center. In the past it has been known as the Art Gala, but this year in celebration of its 10th anniversary, we are changing things up a bit and the new name is the Spring Gala & Auction. This event will continue to celebrate local artists and their work, but there will be many other ways to support the nature center and come away with some special things for yourself. In addition to beautiful art work, the auction will include vacation opportunities, adventure experiences, local pampering services and many other items. There will be something of interest for everyone. The venue will be just as lovely, as will the catered dinner and beverages. And the cause will be just as important. As always, the proceeds from the auction and Raise the Paddle will go to support the amazing nature education programs that are the core of our mission of developing future stewards of our environment. More details of the event will be available on our website in the near future.

We are also looking for sponsors for this amazing event. This is a great opportunity to get the name of your business or organization in front of 350 people who care about our community as well as nature. Information on how to be a sponsor is available at info@sacnaturecenter.net.

Be a part of an event that makes a huge difference in the lives of children whose experience with the Effie Yeaw Nature Center brings them to nature in a way that they will never forget.









Photos by Kari Bauer





Each year, the Sandhill Cranes return to Bosque del Apache Natural Wildlife Refuge for the winter as a part of their spectacular migration. You have the opportunity to experience this amazing process firsthand! Join wildlife expert Paul Tebbel on a special trip to New Mexico to view this event. A portion of the proceeds benefit the Nature Center. You won't want to miss this educational adventure!

#### November 15-17, 2019

The vast majority of North America's population of Sandhill Cranes spend the winter in Texas and New Mexico. Since cranes are tied to wetlands (they spend the night standing in shallow wetlands), they must find spots with the right habitat. The Rio Grande River, which flows north to south through New Mexico, is perfect for cranes. In the 1930's, the US Government established the Bosque del Apache National Wildlife Refuge (BDA), to divert Rio Grande water to create seasonal wetlands for cranes and other waterfowl. Skip forward 90 years and visit BDA's 1,100 acres of managed wetlands between November and February and you can view over 10,000 Sandhill Cranes plus 50,000 light geese (combination of Snow Geese and Ross's Geese). The birds seem to know they are safe within the refuge and getting less than 10 yards from the geese and cranes is not unusual. It is a photographer's paradise!

Your guide, Paul Tebbel, has presented at the local wildlife festival for 24 years so he knows the refuge, the birds and the best places for viewing. His 40+ years of studying cranes and crane behavior will make this trip truly memorable. Join Paul and other nature enthusiasts for a wonderful 3 days in New Mexico in November 2019. Spaces are limited to 14.

**Trip cost:** \$950 per person/double occupancy (add additional \$350 for single occupancy) Cost includes:

- Ground transportation while in New Mexico
- Two nights double occupancy in a hotel in Socorro, NM
- Two breakfasts and two dinners
- Expert presentations by Paul Tebbel
- Tour of Armendaris Ranch with picnic lunch







Photos by Paul Tebbel

Don't miss this amazing opportunity! Space is limited, so register early.

View additional details and registration information at: www.sacnaturecenter.net/events/other/event.html?EventID=46487



## Vision for the Future

Joey Johnson, ARNHA President

The Effie Yeaw Nature Center has been around since 1976. The main building, that houses the museum, Discovery Shop, restrooms and office space, was constructed at that time. It was built for a nature center that had a few visitors and ran a few education programs to schools. Now, we serve nearly 19,000 students per year and have more than 104,000 visitors annually, sometimes hosting 500 visitors on a weekend. The board of directors decided to explore updating and remodeling the main building and the surrounding grounds that are not a part of the Nature Study Area.

So, what has been done, and what is in the future? We have engaged the services of Two Rivers Architects (TRA) to give us some ideas of what we might do within the constraints that exist. While the Nature Center is a part of the nonprofit ARHNA, the buildings and the land still belongs to the county of Sacramento. For a variety of reasons, there are limitations to what we can even dream of doing. Larry Washington, the owner of TRA is a former ARNHA board president and long-time fan of EYNC. There is also a very dedicated committee working on this project, made up of board members, staff and stakeholders who bring expertise in planning. The committee, the county parks department and the architects are working closely to develop a well thought out proposal for a Master Plan of Facilities Improvement for the Effie Yeaw Nature Center.

A few of the visions for this project are an improved aviary for our ambassador birds that would give them better accommodations and provide a better educational experience for visitors, a more welcoming entrance and flow through the Nature Center and a more engaging entrance from the parking area. All concepts embrace the mission of the nature center and will enhance the visitor experience for people of all ages. All concepts and planning will include input from all of our stakeholders.

We will share information on progress through the coming year, so stay tuned.

## THANK YOU to our NatureFest sponsors!

Title Level

Fred & Betsy Weiland



**Platinum Level** 



#### **Gold Level**





Sacramento Municipal Utility District

#### Silver Level

























### Ask a Naturalist

### **How do non-migratory** birds stay warm during the winter?

Many species of birds migrate somewhere warmer to escape the cold months, but what about the birds that do not migrate? Non-migratory birds



Naturalist, Kristen Angelini

have wonderful adaptation abilities and will adjust their bodies to tolerate the cold weather. These adaptation skills are crucial because a bird's body temperature, depending on the species, can get up to 105 degrees Fahrenheit! Some birds will even grow extra feathers months prior, so they'll stay warmer when temperatures drop. They also have the capability of fluffing up their feathers to create pockets between the feathers, which provide even more insulation.

Like humans, birds also shiver when they are cold. This has the same purpose: it causes a bird's metabolic rate to increase and thereby increases body temperature. Another way non-migratory birds stay warm is by closely flocking together. When large flocks crowd together in a tight space, they all benefit from their shared body heat.

Some bird species will go through a hibernation-like state called torpor. During torpor, body functions decrease rapidly to conserve energy and heat. Torpor, depending on the species, usually only lasts a few hours or overnight. This is a great way for birds to lock in their energy and warmth. However, torpor can be dangerous. If a predator were to come by and notice the bird, the bird would have barely any time to react, and would most likely be eaten. It's a bit risky, but if it means surviving the cold winter, it might be worth it for these birds!



In January, we decided it was time to name the little songbird who joined us a few months ago. We asked the public to help choose her name by casting their votes for either Josie, Melan, Poppy or Sierra. After three weeks of voting, the contest ended and a winner was declared:

## Poppy the Black-headed Grosbeak

We wish to thank everyone who participated by voting! The money raised through the voting process will help pay for our resident animal care as well as educational programs provided by the Effie Yeaw Nature Center.

Please stop by and meet Poppy soon!

More about these interesting birds can be found at: https://www.allaboutbirds.org/guide/Black-headed Grosbeak/id



Support the Nature Center on Thursday, May 2!



Watch for our emails and social media posts in the coming weeks! More info at www.bigdayofgiving.org



### New Members: October through December 2018

- · Dianne Abi-Nader
- · Zabrina Adamek
- · Lisa Agoitia
- Kristen Angelini
- · Christopher & Jaymie Arns
- Bernadette Austin-Bower
- Nikki Avdis
- · Irene & Steven Baltzell
- Daniel Bardin
- Marcy Brower
- · Deidre Brown
- Rachel & Grayson Castro
- · Tom Chesko
- Kathy Cox
- Bob Crosbie
- Barbara Dawson
- Danny De Piazza
- · Annette Everlove
- · Yumi Fisher
- · Elisa & Miguel Frisancho
- · Greyson Garo
- Eric Gee
- Geraldine Grant
- Jane Grossman
- · Stephen Hayhurst
- Katherine Hensley
- · Jenny & Shawn Hersevoort
- · Mia Hershiser
- · Peggy Hower
- Paul Hunt & Angie Gould
- · Deborah Inouye
- Kristina & Kimberly Ishihara

- Melissa Ivie & Family
- Margaret Janssen
- Mona & Jay Jordan
- Dasie Jurgersen
- · Elisha Kendagor
- Alan Kepler
- Alice Kingsnorth Cindy Landy
- Jennifer Lane
- David & Tammy Lasich
- Gloria Lee
- John Leonard
- Douglas Lewis
- · Michele Lozano
- Carol Luery
- Jack Mador
- Kevin McGill
- Ken & Dahlynn McKowen
- Aaron Montag
- Liz Muir
- Jimmy Munson
- Judy Murray & Barry Eldridge
- Mark A. Neuburger
- Charlotte Newcomb & Jeff Soesbe
- Jean Newell
- Barbara Nicholson
- Karen & Chris Nissen
- Chervl Noss
- Clyde Nunn
- · Kerry O'Keefe
- JoAnn Peter
- · Pamela Price

- · Drew Queen
- Aaron Reeves
- Jan Roberson
- · Maryclaire Robinson
- · Heather Romanolo
- · Timothy Rosales
- Ilana Rub
- · Jessica Ryder
- Farm Saeturn
- · Kirk Schild
- · Kathy & Daniel Schweissinger
- · Patricia Simms
- Dari Smolich
- · Richard Soehren
- Frances Spivy-Weber & Michael Weber
- · Amanda Starr
- · Kathryn Sundin
- Susan Terlecky
- Greg Thyberg
- Lvnn Truax
- · Adam & Kristina Van Coops
- Alejandro Vargas
- Micaila Walton
- · Dee Warenycia
- Eric Webb
- Melissa Wheeler
- · Asa Whetstone
- Heather White
- John Whitelaw
- Lee Willoughby
- Mackenzie Yamamura

# Thank you donors!

Your generosity allowed us to meet our year-end fundraising goal of \$40,000, giving the Nature Center a strong start to 2019!

These funds will support:

- Free and low-cost educational programs for the public
- School program supplies, materials and transportation
- Resident animal food, care and veterinary costs
- Educational publications available at the Nature Center and local bookstores



Thank you for "Bringing people to nature... and nature to people."



### Donors - October to December 2018

- · George Abbott Jr & Susan Abbott
- Dianne Abi-Nader
- · Robert & Doris Adam
- Zabrina Adamek
- · Jane Adan
- · Mitch Adler
- Lisa Agoitia
- Michele Allan
- · Brittney Alling
- in honor of Deer Families
- · Meghan & Ryan Amos
- Clifford Anderson
- · Rebecca Anderson
- Ellis & Barbara Andras
- Peter Andrew & Burnece Property
- Barbara & Dennis Angelini
- Kristen Angelini
- · Shankari Arcot
- Christopher & Jaymie Arns
- Nishant Arora
- Paige Ashley
- Bernadette Austin-Bauer
- Nikki Avdis
- Kathleen Ave
- Iris Bachman
- through Giving Edge of the Sacramento **Region Community Foundation**
- Gail Bakewell
- Paula Baldi
- Sara Baldwin
- · Rita Ball
- · Steven & Irene Baltzell
- Franklin & Karen Banker
- · Amy & Fenn Barden
- Anne Barmby
- · Paul Barth
- Bartkiewicz, Kronick & Shanahan
- Lacy Bauer
- Frances Baxter-Guigli & Jim Guigli
- Katie Baygell
- in memory of Janice Livingstone
- Michael Bedard & Justine Hearn
- Chris & Dave Beeby
- in memory of Maureen Beeby
- · Judy Bell
- in honor of Landon
- Allen Bender
- · Bette Benedetti
- · Beverly Benningfield in honor of Kristin Dozier
- · Laura Berard
- Robert Bernstein
- Robert & Janene Beronio in memory Carol Fulton Yates
- John Berry in honor of Peggy Berry
- Bert & Cathy Betts
- · Elaine Bickford
- Christine Birkhead in honor of Nancy Oprsal
- Karen Bishop-White & Ken White
- · Lynette Rae Blumhardt
- Hilde Bly
- Steve & Sharon Bogart
- · Amelie Bohannon
- Elaine Bonnington
- · Borgo Fund of the

- Sacramento Region Community Foundation
- · John & Margaret Borkovich
- Tanja Braun
- · Elizabeth Bredberg
- Sue & Brad Bristow
- Brian Bristow
- · Sabreena Britt
- Michael & Pam Britton
- Fran Marie Brolan
- Karen Brookhyser
- Marcy Brower
- Deidre Brown
- · Caroline & Martin Brsiak
- Julie Brusca
- · Doris Buchman
- Sally Ann & Robert Buck
- Peggy Buckner & Miles Card
- Timothy & Cindy Burke
- Jean Burke
- · Cynthia Burton
- Torey Byington
- Campbell Family
- Mary Carboni
- in honor of Jonas Carboni
- Veronica Carreno
- Agathe Carroll
- Elisa Casale Frisancho
- · Rachel & Grayson Castro
- Daniel & Carolyn Chamberlain
- Lee & Susan Chambers in memory of Carol Doersch
- Evelyn Chasserear
- Henry & Jane Chavez
- Tom & Jeanne Chesko
- Donna Chipps
- Ellen Chrismer
- Gretchen Christophel in memory of Robert E Christophel
- · Gesna Clarke
- Mary Claus
- Jeffrey Clayton, MD in memory of Carol Doersch
- · Lisa Close
- · Linda Cochran
- Debbie & Jim Coffin
- Beth Coffman
- Kelly Cohen
- Kathleen Cole
- Frances Coletti
- · Michal & Lisa Connelly
- Shana Cook
- · Shana Cook & Fagnani
- Betty Cooper
- In memory of Dr. James Cooper:
  - o Dr. Bruce & Barbara Berg
  - Margaret & William Berry
  - Frankie Christie
  - Marilee & Stephen Flannery
  - Elizabeth Hajek
  - Peter Hayes
  - Jeanne Holmes
  - Elaine Hujambojoie
  - o Claudia Hulbe
  - Joey Johnson
  - Peggy & Bruce Kennedy
  - Linda Melching

- Julia Morgan
- Diane Ramsey
- Margaret Rogers
- o Kristina Ross
- Megan Rutherford
- Heidi Sanborn
- o Fred & Betsy Weiland
- Frank & Carol Whitaker
- o Liz Williamson
- Diane Wolfe
- Jeanne Corcoran & Darrell Redman
- · Lupe Cortez-South
- Mary Cotton Myers
- County of Sacramento Department of
- Water Resources · Janice Cowan
- in honor of Rachael Cowan
- · Sam & Rachael Cowan
- Lvnn Cox
- Kathy Cox
- Jacqueline Crawley
- Sarah & Keith Cromie
- · Heidi & Daniel Crosbie
- in memory of Scott Crosbie
- Lindsley Cross
- · Candace Cross-Drew • Glen Cunningham
- Gay Currier
- Kim Cusimano
- · Donna D'Amico
- · Maria & Micah Darden
- Chris & Gretchen Dariotis
- Marian Darmsted
- · Kathryn Davalos
- Robert & Carole Davenport
- In honor of Courtney Davies' Birthday:
  - Kristen Angelini
  - o Bonnie Bernstein
  - Tim Davies Melanie Depner
  - o Faith Merino Riley
  - Deb Montz
  - o Shauna O'Rourke
  - Aly Tambini
  - o Brianna West
  - Nanette Williams Loomis
  - Aleaha Wood o Devin Wrba
- Laura Davis • William Hobart Davis
- Rodney & Susan Davis
- Barbara Dawson William Dawson
- Susan de La Torre • Danny De Piazza
- Norene Debruycker
- · Susan & Thomas DeHart
- Richard Deletetsky · Robert DELL'Agostino
- Jacqueline DeLu & Michael Covey
- Dustin & Sarah Dequine
- · Anthony DeRiggi • In honor of Jackie DeWeese's Birthday:
  - Kristen Angelini Kari Bauer
  - o Christy Berger



- o Barbara Lezon
- Cindy Rogers
- Brandon Rowley
- Paula Thompson DeWeese
- Timothy Dietler & Cyndi Monday
- · Ellen Dillinger
- · Darryl Disano
- Deborah Dodd
- Dora Dodson
- Todd Doersch
- Ann Doersch & Stephanie Monzon
- · Michael Donnoe
- Shardool Doongursee
- Krystin Dozier & David Dozier Jr.
- Elaine Driggs-Putney
- Hunt Drouin

through United Way California Capital Region

- Eriberto & Monika Dulay
- Sandie Dunn
- In honor of Sandie Dunn's Birthday:
  - Paige Ashley
  - o Danilo Bonilla
  - o Andrea Dunn
  - o Dianne Dunning
  - o Doris Gertsch Jeannie Hunt
  - o Michael Koerner
  - Suzanne Matthews
  - o Barbara Reel
  - o Mary Schmidt
  - Christine Somach
  - Kate Williams
- · Virginia Dunstan
- · William & Diane Durston
- Betsy Eaves
- Dennis Eckhart
- · Harvey Edber
- Barton & Suzanne Edises
- · Rhonda Egan
- Elaine Eisner
- · Pamela Elmore
- Nancy Emelio
- Kristen Encinas
- Mark Erickson
- · Rebecca Erickson
- E.D. Eskridge & L.B Van Beers in honor of Vounteer Melanie Loo
- · Malcolm Ettin
- Peggy Ewing
- · Richard & Patricia Fairall
- · Nathan Fairman
- Rex & Cheryl Farmer
- · Lisa Farquhar
- Eileen Ferber
- Cornelia Ferrara
- · Virginia Feuchter
- · James & Gail Finnegan
- · Yumi Fisher
- Fred Fix & Paige Ashley
- Marilee & Stephen Flannery
- Kathryn Fleming
- · Mary Louise Flint
- Diwata Fonte
- · Ben & Kate Fox · Richard Frink
- Eric Frisk
- Marc Fugler
- Gordon & Mary Sue Fuller
- In honor of Heather Gabel:
  - Chris Christensen

- o Rosie Cullimore
- Barbara Lezon
- Jill Lute-Faust
- Joe Soots
- Lloyd Strong
- o Jamie & Larry Washington
- · Kris & David Gagne
- Tricia Gaiduk
- · Frederick Galante
- · Gail Galante
- · Monica Gallen
- Carol & Patrick Gannon
- · Barbara Gardner
- Sarah Gardner-Kerss
- Denise Garland & Mike Cardwell
- Mary Gaspari
- · Ruth Gay
- · Eric Gee
- Eric Gee Sr. in honor of Cearra Sgoyi Gee
- · Maureen Geiger
- · Fatih Gencer
- · Richard Gerber
- · Donald Gerigk
- · Maurice Getty
- · Clinton Gibson in honor of Jaspreet Dhillon's Birthday
- Nancy Gilbert, MD
- · Poh-lin Gillis
- · Carole Girard
- Giving Edge of the Sacramento **Region Community Foundation**
- Ted & Mary Glum
- · Heather Goodman
- Shannon Gordon
- John Graham
- · Gary Gravier in memory of Debbie Gravier
- Aaron Gravvat
- · Kathryn Gray
- Tim & Celeste Grennan
- · Art & Linda Grix
- · Eli Groppo, MD
- · Jane Grossman · Jeff & Debbie Gualco
- Sylvia Gude
- · Elke Guenter
- · Amy Guis & Marvin Fenner
- Elizabeth Gutierrez
- Marcel Hadamek
- James Hagedorn
- Thomas & Janine Haka
- · Chuck Halnan
- Mildred Hanson
- · Mary Hanson
- In honor of Mary Hanson's Birthday:
  - Natalie Carrier
  - Marty Hanson
  - Tony Kelly
  - Bryan Merton
  - Monica Norman
  - Melissa Schirmer
- · James Hargrove
- Ed Harper & Susan Scott
- Bea & Edward Harris
- Carole Harris Heather Harris
- Ronald Harrison
- Yoshino Hatanaka
- Deborah Hatch · Cassie Hawkins
- In honor of Cassie Hawkins' Birthday:

- Lisa Daly
- o Barbara Lezon
- Jacquelynn Ramos
- Denise Svetich
- · Dale Hawkins
- · Melissa & Charlie Haworth
- · Stephen Hayhurst
- Stefanie Hedayati
- Eric & Linda Henry
- Charlotte Henshaw
- Katherine Hensley
- Charlene Henwood
- Jenny & Shawn Hersevoort
- · Layne Hersh
- Mia Hershiser
- Julian Herszage
- Bruce Hester
- · Elaine Hill & Michael Hill Jr.
- · Louise Hirsch
- · Amy Hiss
- Rainer Hoenicke
- Jenny Hoepner
- · Julian Holt
- · Carol & Ron Hoops
- Julie Horenstein
- · George Hortin · Timothy & Shellie Horton
- · Peggy Hower
- Wee Huang · Amanda & Keith Hubbard
- Kathi Huff Jennifer Hughes
- Elaine Hujambojoie
- · Paul Hunt & Angie Gould
- Gregg Hutchison & Bev Lewis
- Walter Hyatt Deborah Inouye
- · Kimberly Ishihara
- Kristina İshihara Marlene Ishihara
- · Catherine Ishikawa
- · Melissa Ivie Ijaz Jamall
- Alex James
- Margaret Janssen
- · Sulay Jaramillo
- Janet Jewell
- · Alice Jobe • Diane Jodar
- Ronda Johnson
- in honor of Torey Byington
- Kathy Johnson
- Joey Johnson Cyrus Johnson
- Michael Johnson
- Gerald Jones
- in memory of Georgia Jones
- Mona Jordan
- · Suja Joseph James Joye
- Holly Juch
- Sarah Kalas Kane Family
- · Erica Kantar • Amanda Kaparich Stangis
- · Virginia Kaser Corey Kashiwagi
- Dennis Kauffman Christina Kautz
- · Chris & Fiona Renton Keithly



- · Herbert & Elizabeth (Ann) Kelly
- · Elisha Kendagor
- · Alan Kepler
- · Linda & Roy Kimura
- · Sara Kinaci
- Alice Kingsnorth
- John Kirlin
- Larry Klink
- · Lannie Koch & Lloyd Strong
- · Lois & Ken Koefoed
- in memory of Kelda Lee Koefoed
- Ann Kohl
- Jennifer & Ben Kopperl
- Suzanne Krale
- Peggy Kraus-Kennedy & Bruce Kennedy
- In memory of Jack Bass, Thomas A. Kursar, Jo Smith, Lee Wilner, and William Wooten
- Kriner Family
- · Carol Kruidenier Luery
- Nanci & Matthew Kuzins
- · Michael Laing
- · Cindy Landy
- · Sandi Lane
- · Jennifer Lane
- Jeri Langham
- Martha Larkey
- Karon Larson
- Jennifer & Alexander Larson
- Margaret Larson
- · David Lasich
- · Bhagawandas & Rajani Lathi
- Dick & Carol Laursen
- · Kathy Lazier in honor of Max McGregor
- · Karla Lazier
- Gloria Lee
- · Lisa Lee
- · Margie & Les Lehr
- David Lemont
- · John Leonard
- Judith Lerner
- · Joe Lesh
- · Beverly Lewis Christina Lewis
- Michael & Dolores Lewis
- Kari & Randel Lewis
- Douglas Lewis
- Norm Leyte
- Barbara & Chris Lezon
- Marya & Robert Dunn Liberty
- · Chang Lihon
- Luna Lilly
- In honor of Sumi Lineback's Birthday:
  - Brian Delaney
  - Angie Ebrahimi
  - o Linda Koshell
  - Larry Lineback
  - o Mike Pereira
  - Lucky Seto
  - Matt Timberlake Nina Vasiliev
  - Tammy Warta
- Dennis Link
- · Eric Liskay
- Lyn Livingston
- · Rodney Loeffler & Carol Berry
- · Melanie Loo
- Anthony Luna
- Stacy Lunetta
- David & Julie Lydick
- Katie Mack

- Laura MacLeod
- Jack Mador
- · Lynn Maher
- Cheryl Mahoney
- · Nick & Kim Majetich
- Suzanne & Bob Mapes
- · Mary & Joe Maret in memory of Janet Baker
- · Helene Margolis
- Linda Marks
- · Charles Marshall
- Tracy Marshall
- Kelly Martinez
- · James & Judith Mathews
- David & Joan Matsler
- Brian & Nancy Matson
- Jacqueline Marie Matson
- · Bennet & Sigrid Mattingly
- Greg Maynard
- Dominika Mazur
- Tessa Judith McCarthy
- · Curtis & Fatima McCasland
- Sharmaine McClain
- The James & Susan McClatchy Fund of the Sacramento Region Community Foundation
- Bob McCleary
- Kathleen McConville
- · Mary Rose McCorkell
- Jim McCurley
- Anne McDonald
- · Carolyn McGill
- Kevin McGill
- · Timothy & Janie McGinn
- In honor of Phyllis McGrath's Birthday:
  - Marcia Amant
  - Stephanie Cyr
  - o Barbara Diaz
  - Jacqueline Hartert
  - Craig Hunter
  - o Ken Lee
  - Joanne Lord
  - o Sean Menefee
  - Laura Schwab
  - Beverly Scott o CJ Vaughn
- · C R McKenzie PHD
- · Mike & Merrie McLaughlin
- · Laura Mclean
- Robert & Darlene McLean Family Fund of the Sacramento Region Community Foundation
- Myra McPherson
- Robert & Anne Meagher
- · Sylivia Mae Mehlhaff
- Christi Meier
- · Dan Meier
- Linda Melching
- Maryke Melman
- Hunter Merritt Mary Messenger
- Kristi Michels
- Joyce Mihanovich Charleen Milburn Ramey
- · Denise Miller
- · Dana Miller-Blair
- · Joan Mills
- · Catherine Minicucci
- · Shannon Mirsadjadi · Robin & Marilyn Mitchell
- Lori Miyasato
- · Belen Mojica

- Linda Moniz
- · Michael & Elizabeth Monnot
- · Aaron Montag
- John Moore
- Barbara Moore
- · Lisa Moore
- · James & Helen Moorefield
- Morehead Family
- Mary Morris
- John Mott & Marsie Bellezza Mott
- Liz Muir
- Andrea Mummert
- Jimmv Munson
- · Anne Murch
- Judith Murray • Gary & Lynn Myers
- Eric & Meegan Nagy
- Shreya Nambiar
- Mark Nemmers
- Charlotte Newcomb & Jeff Soesbe
- Jean Newell
- Kent Newton
  - in honor of Jan Ahders' Birthday
- · Laurel & Danny Nguyen
- · Lestelle & James Nichols
- Barbara Nicholson
- Karen Nissen
- Robert & Rebecca Norris

in honor of Alexis Covey-Noss

- Cheryl Noss
- Clyde Nunn
- Malody Ochoa
- Mallory O'Conner
- · Susan Oie
- · Kerry O'Keefe • Diana & David Oliver
- · Nancy Oprsal
- · Lawrence & Judy Orcutt · Sandra Osborn
- Kimberly Pacini Hauch
- Robert & Terri Palomba • Muriel & Robert Parker
- Desmond Parrington
- Bob Pasko
- Jaclyn Pasko & Aaron Potnick
- William Patterson & Doris Brown
- · Pamela Peacock
- James Pearce · Michael & Jill Pease
- JoAnn Peter Tracy Peterson
- Gail & Dennis Philippart
- · Jim & Kathy Phillips • David & Lynne Pinkerton
- Kendra Plat
- Shirley & Corinne Poirier · Beth Post in honor of Brena Seck, Cal Nat
- Instructor Extraordinaire
- · Jennifer Postlewaite
- George & Maro Poulos Justin & Sarah Powell
- Pamela Price • Prietto Cuetto Fund of the Sacramento **Region Community Foundation**
- In honor of Marsha & Dave Prillwitz's 50th Anniversary:
  - Nancy Gelbard
  - o Barbara Marquez & David Ginsburg
  - Caroline Roberts
  - o Maryclaire Robinson & Peter Brostrom



- Joseph Sarzynski
- Richard Soehren
- · Robin Primavera
- Drew Queen
- · Leah Quezada
- George & Peggy Rackelmann
- Noreen Rademacher
- · Narasimhachari & Haripriya Raghavan
- · Diane Ramsey
- in honor of EYNC volunteers
- Alex Ray
- Ruth Rezos
  - in memory of Bill Dillinger
- · Janet Rezos & Steve Woodward
- · Naomi & John Rice
- Eric & Karin Richardson
- · Kimberly Rider
- in honor of Melissa Paschal, and Evelyn, Nelson, Nancy & Paul Fees
- · Riding the Wave Grant
- Sarah & Jon Ries
- · Ronald Ritchev
- Jan Roberson
- · Mary Ann Robinson
- Peter Rodgers
- · Cindy Rogers
- · Margaret & John Rogers
- Jason & Amy Rogers
- Heather Romanolo
- Christine Root
- · Timothy Rosales
- · Linda Rosenberg-Jones
- Jenn Ross
- Ilana Rub
- Bonnie Russell
- · Steven Rutledge
- Meredith & Patrick Ryan
- · Jessica Ryder
- Rebecca & Lance Ryen
- Mandy Sabbadini
- Sacfit Parkway Half Marathon
- Farm Saeturn
- · Kim & David Safdy
- Carrie Sage
- Jack Sales
- · Claudia Sandberg-Larsen
- Janet Sandlin
- Robert & Alison Sawyer
- Andrew Sawyer & Carol Bingham
- · Elisa Sax
- JaNahn Scalapino
- Sam & Mary Ellen Scarlett
- · Kirk Schild
- Robert Schlichting & Elizabeth Reifsnider in honor of Dave and Marsha Prillwitz
- · Barbara Schneider
- · Ronald Scholar
- · Mary Beth Schwehr
- Katherine Schweissinger
- Doug & Teresa Scoles
- · Diane Scott
- · D.H. & D.L. Scott
- · John Seal
- Kelly Selfridge Allen
- Nancy Senlio
- · Lanna Seuret in honor of Charlie Klinger
- · Lyvonne Sewell • Julia Sheldon
- Benjamin Sher
- Patricia Simms

- Susan Skinner
- · Cindra Smith
  - in memory of Jo and George Smith
- · Elizabeth & Felix Smith
- · Dennis & Diane Smith
- · Julia & Christopher Smith
- · Dari Smolich
- · Smoothie Patrol
- · Susan Solarz
- · Lily Soley
- John Solie
- · Sonia South
- Douglas Souvignier
- Bill & Anne Marie Spaller
- In honor of Bill Spaller's Birthday:
  - Gail Miner
  - o Laura Pellar
  - Kristen Shaw
  - Tavis Shaw
  - Eric Spaller
  - Anne Spaller
  - Wendy Wright
- · Donald Spiegel
- · Leigh Stamets
- Tom Stanton
- Rebecca Starr
- · Amanda Starr
- Laurence E Stearns
- Jane Steele
- · Morna Stephens
- M.E. Stephens
- Rick Sterner
- Kristie Stevens
- · Jeanine Stevens
- In honor of Parker Stewart's Birthday:
  - o Iris Abbott
  - Emily Albusche
  - o Dola Albusche
  - Kristen Angelini
  - Sandra Brown
  - Nathan Fairchild o Gerry Grant
  - Shelby Pafford
  - Sabrina Stewart o Alta Tillis
- Cordel Stillman
- in memory of Effie Yeaw
- Carl Stillman
- Ellen Stillman
- Carol Stirnaman
- Sarah Stoltz & Gregory Herrera
- · Elizabeth & Jeffrey Stone
- Todd & Betsy Stone
- Steve Sundin
- · Carol Sutton in memory of J.R. Gittins
- · Joseph & Patricia Symkowick
- Dan & Jan Tankersley
  - in honor of Peggy and Bruce Kennedy
- Lawrence Tasker
- Jaclyn & Jon Teofilo
- In honor of Jonathan Teofilo's Birthday:
  - Krissie Bee
  - Carrie Benavides
  - Robyn Kelley Timothy Krantz
  - Hayley Lukes
  - Cory Phillips
  - David Shinn

- Leah Teofilo
- Susan Terlecky
- · Craig & Micheal Thomas
- Laura Thompson
- Paula Thompson DeWeese
- Greg Thyberg
- Terry Tice in memory of Carol Thomas
- Alison Tilton
- Kendra & Garth Torvestad
- Trinity Face Painting
- Lynn Truax
- Sandra & Daniel Tschannen
- Keith & Nancy Turner
- · Graham Tzur
- · Colleen Ann Uhlenhop through United Way California Capital Region
- Robert Ulrich
- Adam & Kristina Van Coops
- Alejandro Vargas
- · Leslie & Margaret Veldman
- · Linda Verde
- · Zuzana Vona
- · Ron Vrilakas
- Elizabeth Wade • Dorothy & Patrick Wagner
- Diana Wallace
- · John Walton
- Zoey Walton • Micaila Walton
- Katie Walton
- Lori Ward
- Dee Warenycia
- · Stephen Warth
- · Jamie & Larry Washington in honor of EYNC Staff and Volunteers
- Eric Webb
- Jacqueline & Richard Webber
- Fred & Betsy Weiland
- · Laurie Weir
- · Cathy Weitzner Norma Wesolowski
- · Frank & Helen Wheeler
- · Melissa Wheeler Asa Whetstone
- · William White
- · Heather White
- · John Whitelaw
- Kenneth & Barbara Wiesner
- · Mary Wilkinson
- Ann Williams • Kate Williams & Thomas Gohring
- Liz Williamson
- · Lee Willoughby • Rodney & Kathryn Winegarner Dan Winkelman
- · Brad & Trish Wood
- · Madison Wood
- Patty Wood
- · Lucinda Woodward · Beverly Wright
- · Phil Wright · Kevin & Mackenzie Yamamura Lynne Yamane
- Marci Yellin Mary Yung
- Elisa Zitano

Karen Skeen

Lance & April Rood