

# Mountain Echo

THE NEWSLETTER OF SEMPERVIRENS FUND

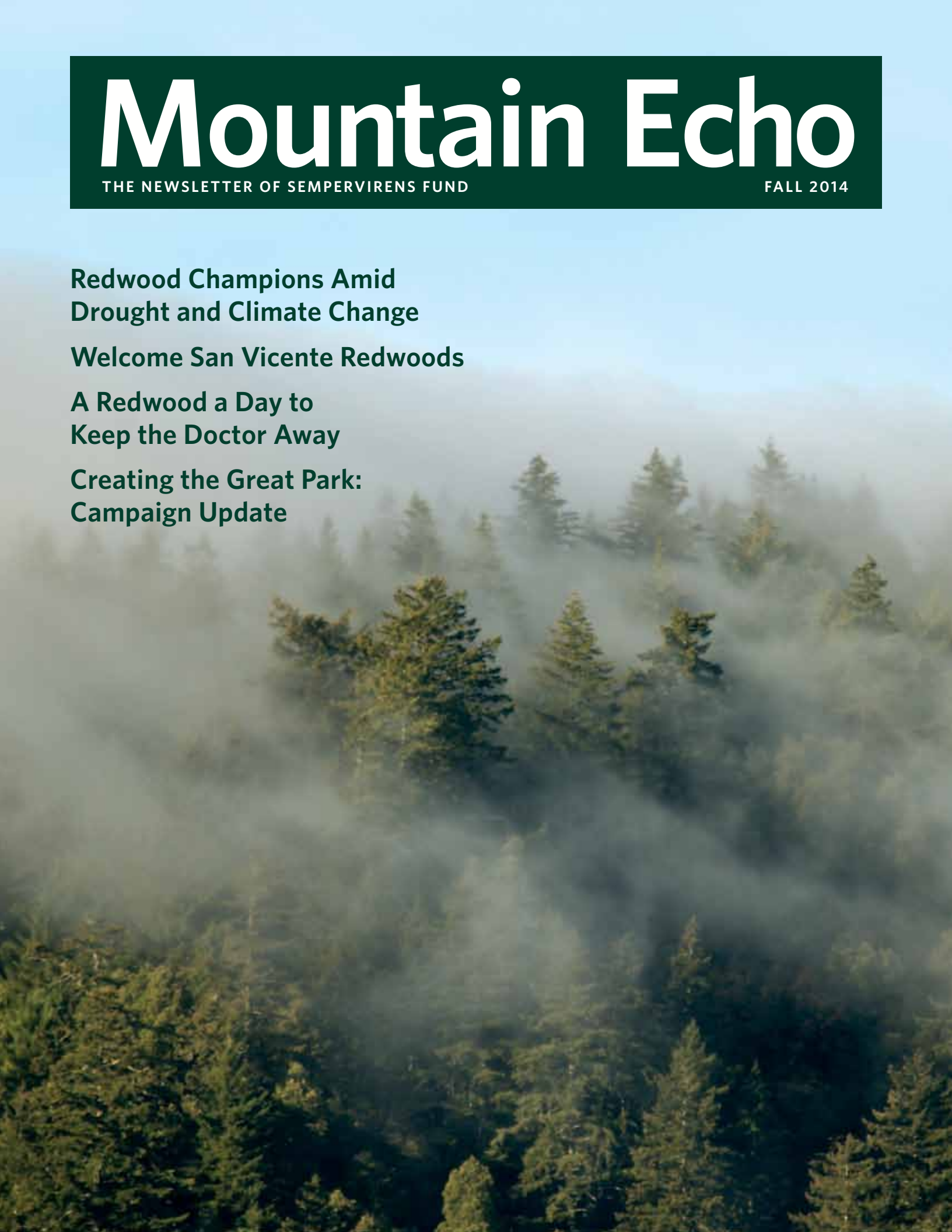
FALL 2014

**Redwood Champions Amid  
Drought and Climate Change**

**Welcome San Vicente Redwoods**

**A Redwood a Day to  
Keep the Doctor Away**

**Creating the Great Park:  
Campaign Update**





Preserving redwood forests  
since 1900

**EXECUTIVE DIRECTOR**

Reed Holderman

**DEPUTY EXECUTIVE DIRECTOR**

Shelley Ratay

**FINANCIAL DIRECTOR**

Patrick Gibbons

**DIRECTOR OF DEVELOPMENT**

Anne Dimock

**BOARD OF DIRECTORS**

Fred Keeley, President  
Jacqueline B. Wender, Vice President  
Richard L. Conniff, Treasurer  
Betsy Herbert, Ph.D., Secretary  
Howard Chao  
Philippe S. Cohen, Ph.D.  
Kevin Flynn  
William N. Harris  
Robert L. Katz  
Dan Martin  
Craig Neyman  
Marina Park  
Kent Putnam  
Diane Talbert  
Emily F. Thurber  
Stephen N. Wyckoff, J.D.

**SCIENCE ADVISORY PANEL**

Betsy Herbert, Ph.D., Chair  
Philippe S. Cohen, Ph.D.  
Robert Curry, Ph.D.  
Wallace "J" Nichols, Ph.D.  
Will Russell, Ph.D.  
Steve Singer, M.S.  
Jerry Smith, Ph.D.

**FOUNDING DIRECTORS**

Andrew P. Hill  
George C. Collins  
Howard J. King  
Claude A. "Tony" Look  
Dorothy Varian

**LETTER FROM THE EXECUTIVE DIRECTOR**

# P is for Partnership!

We can do more together. This is our mantra, and the results speak for themselves. When Patricia Van Kempen came into our office to discuss selling her redwood property near Peters Creek, she didn't know she was helping us complete a redwood assemblage project, started by Save the Redwoods League and aided by POST, to protect a spectacular grove of old-growth redwoods in Portola Redwoods State Park and open it up for people to enjoy.

By selling her land to us at a steep discount — 50% below appraised value — Patricia Van Kempen provided easier access from Portola State Park Road into Peters Creek, turning a long, challenging 11-mile round-trip hike into a flat 5-mile hike that almost everybody can do — once the trail is open to the public. Her land was the last piece of the puzzle, and she generously put that piece in place.



Ms. Van Kempen's goal was to save this beautiful forest in memory of her late father. The only thing she asked in return was the placement of a plaque on the land that said: "I believe that LAUGHTER is the only cure for grief and I believe LOVE is stronger than death. In memory of Rolf Van Kempen." Gladly we put up the plaque.

I believe generosity enriches our lives and has healing powers, too. When this trail is open to the public, it will become one of the most popular, transformative destinations in the Santa Cruz Mountains. Patricia Van Kempen gave us all a very generous gift filled with love and respect for her father and for all life. She reminded us that we are all in this together, and if we help each other, we all go a lot further with ease and, yes, laughter.

We will schedule some hikes on this new route this fall. If you are interested in joining other Sempervirens Fund supporters, please contact the office at [redwoods@sempervirens.org](mailto:redwoods@sempervirens.org) or 650-949-1453.

To each of you, I extend my appreciation for your contributions, large or small, to putting back together the extraordinary redwood world that will thrive here again and will inspire many, many generations after us.

Reed Holderman  
Executive Director



Photo © Frank Balthis

# Redwood Champions Amid Drought and Climate Change

Redwoods are extraordinary. The more we learn about them, the more extraordinary they prove to be. We've known for a long time that California's coast redwoods (*Sequoia sempervirens*) are the world's tallest trees and among the longest-living. Scientists are now confirming that redwoods play an important role in the local water cycle and in achieving a healthy, stable climate.

By meticulously measuring redwoods, scientists are determining how fast they're growing, storing carbon and capturing fog, and how they are responding to climate change. For example, a team of scientists is working on the "Redwoods and Climate Change Initiative" (RCCI), with support from Sempervirens Fund, to quantify how accelerating climate change is affecting California's redwoods.

## Climate champions

While all trees provide oxygen and help stabilize the climate, redwood trees are truly climate champions. "Ancient redwood forests store at least

three times more carbon above ground than any other forests on earth," according to RCCI findings. Two mature redwoods remove and store roughly 1,600 tons of carbon from the atmosphere, as much as the average American produces in a lifetime through his/her carbon dioxide emissions (CO<sub>2</sub>).

Forests cover roughly 30 percent of the earth's surface and store more carbon than is contained in the entire atmosphere!

How do forests pull carbon out of the air? Through the fundamental life process of photosynthesis, all plants capture energy from sunlight to convert CO<sub>2</sub> and water into the building blocks for growth. During photosynthesis, plants pull in CO<sub>2</sub> and release oxygen into the atmosphere, supplying the entire animal kingdom.

Coast redwoods are exceptional at storing carbon and releasing oxygen because of their enormous size, fast — and continuing — growth, and longevity. Attaining heights up to 350 feet and trunk diameters more than 24 feet, redwoods can live more than 2,000 years.



## ***"Ancient redwood forests store at least three times more carbon above ground than any other forests on earth."***

We now know that redwoods continue to grow as long as they live, packing on the girth, growing new tops after windstorms blow off old ones and sprouting millions of new needles. Thus they continue to pull in CO<sub>2</sub> and release oxygen as they age — long after they attain their full height.

This discovery has dispelled an old myth that old-growth redwoods stagnate and take up space in the forest. These forest elders are anything but "old and in the way!"

When trees are cut or die, they stop pulling in carbon. As they decay, they begin releasing their stored carbon back into the atmosphere. Different tree species have different life spans and decay at different rates. Once again, redwoods are extraordinary. After an old-growth redwood dies, it can take many centuries to decompose and release its stored carbon.

### **Redwoods in the local water cycle**

Redwoods also play a critical role in local watersheds, both in terms of water quality and

water supply. We've known for a long time that the vast root systems of redwoods carpeting our local watersheds help prevent erosion and that their deep loamy soils act as natural water filtration and storage systems. Forest soils act like giant sponges, soaking up rainwater as it falls, and slowly releasing it throughout the dry season. In addition, redwoods that grow along streams provide shade, keeping the water cool for native fish.

What's really extraordinary about redwoods is that they've evolved to use fog as their primary water source during times of year when rain is most scarce in northern California.

As the fog rolls in off the coast and creeps through the redwood canopy, it condenses on millions of redwood needles. If you've ever walked under a big redwood when it's foggy, you know you need a raincoat to stay dry. This fog-drip is captured by redwood roots, which spread out widely near the surface of the soil. Todd Dawson, a UC Berkeley researcher and RCCI team leader, estimates that fog-drip supplies 30 to 40 percent of the water that redwoods require to grow!



Photo © Karl Kroeber





Photo © Dan Quinn

Fog-drip from redwoods also supplies summer water to fish and humans. Spencer Robert Sawaske, a Stanford researcher, measured fog-drip from individual trees in the Santa Cruz Mountains during the 2013 dry season. He found that older redwoods and Douglas firs on the Pacific Coast side near the ridgetops produced the most fog-drip: up to 38 inches recorded over 2.5 months! He also found that this fog-drip soaked into the ground and replenished stream flow.

San Vicente Redwoods (formerly known as CEMEX Redwoods) encompasses 13 square miles of forest land within a very productive area for fog-drip: between Skyline Ridge down to the Pacific Ocean. Thanks to Sempervirens Fund and our partners, the redwood trees within reserves in this area are fully protected and will continue to produce fog-drip for a healthy watershed and forest ecosystem.

Redwoods are key actors in the water cycle of the Santa Cruz Mountains. Water circulates from the soil, up their trunks, into the clouds and back to the ground. Many forces are at work to pull water up the trunks of these tallest trees in the world. There is pressure from below as roots absorb water from the soil. The cohesive properties of water keep it moving

up the water column in the tree's sapwood, much like water in a straw. Perhaps the most critical force is supplied by transpiration, as pores in the tree's foliage release water vapor into the air, thus pulling more water up the tree.

During the current drought, the local redwood forest continues to tap fog as a water source, and its deep, loamy soils slowly release the water it captured from earlier rain. No doubt the redwood forest has softened the effects of the current drought.

## Can redwoods survive climate disruption?

The iconic coast redwoods have demonstrated legendary resilience to some severe onslaughts, including massive clear-cutting over the last 200 years. Today, coast redwoods are threatened by home-building, invasive species, conversion into vineyards, logging, fire suppression and habitat fragmentation. Now they face the additional threat of accelerating climate change.

Scientists are studying how rapidly changing climate conditions (such as increased temperatures, drought and altered precipitation patterns) may outpace a forest ecosystem's ability to adapt,

especially where that forest is already stressed or degraded.

Climate change is expected to bring warmer and windier conditions to northern California, along with increased wildfire frequency and severity, according to a 2004 study by U.S. Forest Service and Lawrence Berkeley National Laboratory scientists. The study was right on target for Santa Cruz County, where the 2009 Lockheed Fire burned 7,800 acres in Bonny Doon and Davenport, including 2,400 acres of redwoods. Fortunately, the California Department of Forest and Fire Protection (CalFire) post-fire report found that the Lockheed fire “will not have long term detrimental ecological effects to the redwood forest type.”

Fog may also be on the decline. Dawson’s preliminary evidence showed a 30 percent decrease in the number of fog days in the region over the past 60 years.

## How can we help redwoods survive climate disruption?

Forest scientists emphasize the need to increase the adaptive ability of forests to withstand climate disruption. To help redwood forests, we can:

- minimize soil disturbance,
- protect and buffer old-growth reserves,
- reduce forest road densities,
- increase wildlife connectivity.

Sempervirens Fund is forging ahead with all of these stewardship activities in San Vicente Redwoods, which connects 27,500 acres of contiguous protected land and shelters some 90 ancient redwoods that will be protected in special reserves.

By acquiring, protecting and caring for local redwood forests, Sempervirens Fund helps manage redwood ecosystems to increase their resilience to drought, accelerating climate change and human disturbances. We are working with our donors and partners to create the Great Park to ensure that redwoods continue their extraordinary contributions here for thousands of years to come. 🌲

# Can we pay the redwood trees for turning CO<sub>2</sub> into oxygen?

Sempervirens Fund is on the road to find out. With help from a Coastal Conservancy grant, Sempervirens Fund is studying the possibility of a “carbon bank” for the local redwood forests.

The redwood forest naturally captures and transforms massive amounts of carbon each year. A carbon bank makes it possible for buyers of carbon offsets to put money into the bank, which pays for redwood conservation projects. This brings more funding to redwood conservation projects while slowing the pace of climate change. It also provides an economic incentive to landowners for protecting redwoods.

## Lompico Forest Carbon Project

Our Lompico Forest Carbon Project was one of the first carbon offset projects that is purely forest protection. The project demonstrates the importance of forest preservation in stabilizing the climate and establishes a test case for developing a redwood carbon bank.

Before Sempervirens Fund stepped in and bought the Lompico redwood forest in the Santa Cruz Mountains in 2006, the landowner planned to cut down 60% of the redwoods on the 425-acre property. Sempervirens Fund partnered with PG&E to pioneer a carbon offset program that provides as much climate protection as taking 2,700 cars off the road for one year.

Sempervirens Fund sells carbon credits (greenhouse gas emission reductions) on an annual basis as the redwood trees continue to grow. The project, which follows stringent standards of carbon accounting set forth by the Climate Action Reserve, was established to allow PG&E customers to offset some of their carbon footprint and support a healthy climate, while protecting the local redwoods.

By permanently protecting the trees, Sempervirens Fund ensures that this forest continues to benefit our atmosphere and the Earth. 🌲







# A Redwood a Day to Keep the Doctor Away?

Have you noticed that being in the redwood forest makes you feel better? You're not alone — and it's not your imagination. Scientists of various stripes are now doing rigorous studies to confirm this and to understand what may be happening. Spending time in nature has been shown to improve cognition, creativity and immunity while reducing depression, anxiety and stress.

According to Alan C. Logan, author of *Your Brain, On Nature*, "Spending just 20 minutes in vegetation-rich nature [like a redwood forest!] has been shown to improve vitality. Given that vitality is defined in the psychological lexicon as emotional strength in the face of internal and external oppositions, and living life with enthusiasm and zest, the implications for personal and planetary health are enormous."

Japan has a practice called *shinrin-yoku*, translated as "forest bathing," which is considered normal preventative medicine. Approximately one-quarter of the population engages in forest bathing in some way. Between 2.5 million and 5 million visitors walk the 48 designated Forest Therapy trails each year.

The term was coined by the Japanese government in 1982, although inspired by ancient Shinto and Buddhist practices. It describes an intention to let

nature enter your body through all five senses, according to Florence Williams, author of "Take Two Hours of Pine Forest and Call Me in the Morning."

Japan has a significant body of research demonstrating that spending time in forests can reduce stress (reduce levels of cortisol) and improve mental outlook. This may be especially helpful in a culture that has a term specifically for death by overwork (*karoshi*).

Japanese scientists are working to measure what's actually happening inside our bodies when we're in the natural world. For example, one research team took more than 600 people into the woods and found that forest walks— compared with city walks — resulted in a 12.4 percent decrease in the stress hormone cortisol, a 1.4 percent decrease in blood pressure and a 5.8 percent decrease in heart rate. Forest walkers also reported cheerier moods and lower anxiety.

Another scientist has studied nature's effect on the human immune system. A group of middle-aged Tokyo businessmen went into the woods for three days of hiking. Blood tests showed a 40 percent increase in their "natural killer" or "NK" immune cells (which provide rapid responses to virally infected cells and tumor formation). A month later, their NK count was still 15 percent higher than the starting point. During city walking trips, NK levels didn't change. Further research revealed that a one-day trip to a suburban park increased the levels of both NK cells and anticancer proteins for at least seven days afterward.

Some scientists point to the role of trees, specifically phytoncides, which are airborne chemicals that plants emit to protect them from rotting and insects. While there may be up to 100 phytoncides in the countryside, virtually none are found in city air (other than in parks). When phytoncide vapors were blown into hotel rooms under a controlled experiment, participants sleeping there were found to have a 20 percent increase in NK cells after just three nights.

American psychologists Paul and Ruth Ann Atchley of the University of Kansas and David Strayer of the University of Utah studied the impact of nature



Photo © Kai Siedenburg



experiences on creativity and found that after three days of hiking and camping in the wilderness, participants in an Outward Bound course improved their scores on tests of creativity by 50 percent.

Researchers Rachel and Stephen Kaplan at the University of Michigan point out that while vigorous exercise outdoors provides cardiovascular benefits, running with music or other distractions may make you more irritable and impatient later, and less able to stay on task, focus, and plan than someone who spent their outdoor time paying attention to nature.

To get the most benefit from spending time in nature, it's important to pay attention to your surroundings. This is a good time to turn off your electronic devices and put aside your mental To Do list so that you can focus on where you are and what is happening around you. (See **Tips for Tuning into the Forest**, sidebar.)

It turns out that even seeing images of nature scenes can enhance brain-wave activity, akin to the effects of meditation. New brain-imaging techniques show that seeing pictures of nature activates the areas of the brain associated with emotion, empathy and pleasure.

In addition to providing very real benefits for our health and happiness, spending time in nature leads to Earth-centric values and activism — like helping to protect and care for the redwood forests.

Is it time to stop reading and head out into the redwoods? 🌲

## Tips for Tuning into the Forest

1. **Go out alone or share your intention for some quiet time with your companions.**  
If you're in a social situation, you can try these tips for part of your walk and also allow time for conversation.
2. **Wear soft, comfortable shoes** (rather than hiking boots) so you can feel the forest floor and move more quietly in the forest.
3. **Shift your attention outward with all of your senses**, especially smell, hearing and touch. Try closing your eyes to reduce the dominance of your eyesight.
4. **Stop and focus awhile on one small nature element**, like one leaf or one stone.
5. **Breathe in relationship with one tree.**  
Pause in front of a tree. As you exhale, offer your carbon dioxide to this tree. As you inhale, receive the oxygen given by the tree.
6. **Let your curiosity run wild.** As you notice more and more in your surroundings, muse on questions that arise. You may find it's more fun to wonder than it is to know all the answers!

## Skyline-to-the-Sea Trail Celebrates 45 Years

One of Sempervirens Fund's proudest achievements is the creation of the 31-mile Skyline-to-the-Sea Trail, begun in 1969.

The trail is beloved for its incredible diversity — and its gradual downhill slope. It's also a rare opportunity to backpack through the region and sleep out in the wilds.

Whether you hike just part of the trail or venture all the way from the skyline to the sea, it's a great way to discover the local redwood forests.

You can find details on our website, [www.sempervirens.org](http://www.sempervirens.org).

To order trail maps, call our office at (650) 949-1453. To make camping reservations (a must!), call 831-338-8861.



# Recent Progress

Sempervirens Fund's work is guided by our Great Park vision and scientific knowledge of regional conservation priorities, to make sure our donors' contributions bring the greatest possible benefits — a healthy forest and more ways for people to get out and enjoy the incredible land, waters and wildlife here.

While we have been protecting the local redwood forests since 1900, today three things are crystal-clear. First, our consistent focus on putting back together the once-vast local redwood forest brings consistent results. Second, our regional approach to protecting, restoring and managing the redwood forests is crucial to ensure a healthy ecosystem and top-notch public access. Third, our local treasure has national and global significance.

## Van Kempen - Peters Creek Acquisition Protects 33 Acres of Forest

In May, Sempervirens Fund protected 33 acres of redwood forest in the heart of the Santa Cruz Mountains, in partnership with Save the Redwoods League. The property is near Portola Redwoods State Park and the stunning Peters Creek Old-Growth Forest. It is an especially valuable addition to the Great Park because of its magnificent redwoods, recreation potential and location near protected land.

The newly acquired land helps protect Pescadero Creek, home of coho salmon and steelhead trout, both of which are considered threatened species. The property provides excellent habitat for a variety of wildlife, including endangered marbled murrelets, which nest high in the redwoods. Its location next to other protected lands improves the opportunities for wildlife migration, which is especially important as the climate changes.

Because of its proximity to Silicon Valley, this property was at high risk of being cut up for luxury estate homes. The landowner, Patricia Van Kempen, worked with Sempervirens Fund to protect this special place forever and made a generous donation in honor of her father, who recently passed away.

## CEMEX Redwoods Gets a New Name: San Vicente Redwoods

The 8,500-acre CEMEX Redwoods got a new name this summer. Sempervirens Fund and our partners named the land San Vicente Redwoods after the pristine creek that runs through the property from Skyline Ridge to the Pacific Ocean, and supplies



Photo © Karl Kroeber

San Vicente Redwoods

drinking water to the coastal town of Davenport (north of Santa Cruz). San Vicente Creek nourishes the forest and provides critical habitat for coho salmon, rainbow trout and a variety of birds.

The local community heartily embraces the San Vicente Redwoods name, which evokes the history and local identity of the land. The new name will soon appear on maps, printed materials and legal documents.

San Vicente Redwoods adds a critical piece to the Great Park. It is the single largest private parcel of redwood forest in the Santa Cruz Mountains and adjoins several protected areas, including Coast Dairies. Thanks to Sempervirens Fund and our partners, San Vicente Redwoods is permanently protected for wildlife habitat, recreation and ecologically sustainable timber harvesting. Now, we're helping this gorgeous and important forest regain its natural strength and beauty, while planning a variety of trails so that people can experience its wonders first hand.

Sempervirens Fund's tracking cameras have glimpsed mountain lions, foxes, deer, bobcats,



skunks, wild turkeys and redtail hawks. The land also hosts California red-legged frogs, the endangered Santa Cruz wallflower, the endangered Anderson's manzanita and two insects only found in this area — the Mount Hermon June beetle and the Zayante band-winged grasshopper.

## Castle Rock's New Facilities Moving Ahead

We're moving steadily forward with plans to create new facilities at Castle Rock State Park which will bring both new and loyal visitors — along with much-needed dollars — into this beautiful ridgetop park. Castle Rock gives Silicon Valley residents convenient access to the redwood world and the Skyline-to-the-Sea Trail for Silicon Valley residents, yet barely survived recent State budget cuts and park closures.

Thanks to your generosity, we are making headway in our fundraising efforts for enhanced visitor facilities including new parking, payment kiosks, trail connections, amphitheater and more. In August, the Santa Cruz County Planning Commission unanimously approved our project design. If the County Supervisors approve our project this fall, we could break ground on these exciting improvements as soon as next summer.

## National Monument Status Possible for Coast Dairies

Earlier this year, the U.S. Bureau of Land Management took ownership of the Coast Dairies property: 5,750 acres of coastal bluffs and prairies that link San Vicente Redwoods with the Pacific Ocean. Together the two properties make up 14,250 acres of contiguous protected lands.

Federal ownership has opened up the chance to designate the Coast Dairies property as a National

Monument. The U.S. President has the authority to designate lands of historic, cultural or natural significance without congressional action, bringing added protection and national recognition to special places like this scenic stretch of coastline. More than 100 national monuments have been created, including Muir Woods (by President Theodore Roosevelt, 1908) and Fort Ord (by President Obama, 2012).

Five large protected areas surround the Coast Dairies property: San Vicente Redwoods; Big Basin, Henry Cowell and Wilder Ranch state parks; and Bonny Doon Ecological Preserve. This provides a tremendous, diverse haven for wildlife.

Sempervirens Fund is joining with the Conservation Lands Foundation and other partners to build local, state and national support for establishing a national monument on the Coast Dairies land. Conservation Lands Foundation has provided funding to hire a dynamic leader to carry this forward.

## New Local Funding for "New Trails, Old Trees"

In and around the Great Park, community members like you are making your voices heard at the ballot box. In June, voters in parts of San Mateo and Santa Clara counties approved a \$300 million general obligation bond to pay for new trails, habitat restoration and more through Midpeninsula Regional Open Space District, one of our key local partners. Sempervirens Fund provided strong support to the campaign to increase public awareness of the local redwood treasures and bring a stable source of funding for important projects, which Midpen identified in a public visioning process. These include: add trails and trail connections, open new preserves, protect redwood forests, preserve farmland, restore wetlands and streams, provide habitat connectivity and reduce fire risk.

Also in June, voters in Santa Cruz County approved Measure F, which slightly increases a parcel fee to support County parks. Sempervirens Fund co-sponsored the Yes on Measure F campaign. This fall, the Santa Clara County Open Space Authority will bring an important parcel tax proposal to the ballot to protect local open space, forests and water supplies and add new trails.

Bobcat © CASBS



## Campaign Update

The Great Park is Sempervirens Fund's vision of a beautiful, healthy, accessible redwood forest between Silicon Valley and the Pacific Ocean, the size of four San Franciscos. The Great Park protects remaining old-growth redwoods as well as second-growth redwood forests within a web of public and private lands. It will provide a safe home for wildlife — like mountain lions, marbled murrelet and salmon — and crucial refuge and recreation for us all.

Sempervirens Fund's Great Park Campaign is powering forward with really impressive results. As of June 30, 2014 (the end of our fiscal year), we've raised more than \$15 million toward the \$22 million goal. That's 70% of the way!

## Widening the circle

The next step is to widen the circle of support for the Great Park vision and the fundraising campaign. In addition to your generous support for Sempervirens Fund, you can help by sharing your love of the redwood forests with your friends and neighbors.

One way that Sempervirens Fund reached new potential donors was via a new online fundraising campaign last May, sponsored by Silicon Valley Community Foundation — called Silicon Valley Gives. The program rallied thousands of people throughout Santa Clara, San Mateo and San Benito counties for 24 hours to contribute a total of \$7.9 million to hundreds of local community organizations, like Sempervirens Fund. Many of our current supporters helped spread the word through email and Facebook. Thank you!

## Become a Redwood Ambassador

As a Redwood Ambassador, you can play a crucial role in spreading enthusiasm about the local redwood forests, Sempervirens Fund's Great Park vision and the fundraising campaign. To learn more and join this group of inspired redwood friends, please contact Anne Dimock, (650) 949-1453 or [adimock@sempervirens.org](mailto:adimock@sempervirens.org). 🌲



Big Basin picnic

### GREAT PARK CAMPAIGN COMMITTEE

Diane Talbert, Co-Chair  
Jacqueline B. Wender, Co-Chair  
Mary Ann Draeger  
Kevin Flynn  
William N. Harris  
Walt Hays  
Cliff Hodges  
Fred Keeley  
Pamela Koch  
Betty Lo  
Marina Park  
Kent Putnam  
Emily F. Thurber  
Cole Wilbur





# New Leaders to speak for the trees



Sempervirens Fund has attracted extraordinary leaders to expand our redwood-protection work. Our new officers are: Board President Fred Keeley and Vice President Jacqueline Wender. Richard Conniff continues as Treasurer and Betsy Herbert continues as Secretary. We also welcome Howard Chao to serve on the Board. All three bring diverse talents and deep dedication to protecting the local redwood forests and creating the Great Park.



**Fred Keeley** is a long-time environmental policy leader, currently serving Santa Cruz County as Treasurer. While serving in the California Assembly, he authored two of the largest voter-approved park and environmental protection bonds in our nation's history. Fred serves on the Board of the National Marine Sanctuary Foundation, the California Ocean Science Trust and Working Partnerships U.S.A. Fred is a former Santa Cruz County Supervisor and long-time Santa Cruz resident.



**Jacqueline Wender** has deep management experience at Stanford and Santa Clara universities, currently serving as Senior Assistant Dean of Administration at the Santa Clara University School of Law. At Stanford, she served as Executive Director of the Overseas Studies Program, Assistant to President Gerhard Casper and Associate Provost for Program Development and Facilities Planning. Jacqueline and her husband Paul live in Menlo Park.



**Howard Chao** is an investor and Senior Asia Advisor with the law firm O'Melveny & Myers in Menlo Park, where his 30+ years of practice have earned him recognition as one of the 50 most influential minority lawyers by National Law Journal. Howard serves on the Board of the Pacific Pension Institute and the Business Council of the Asia Society. He lives in Menlo Park and Santa Cruz.



**Shelley Ratay** joined Sempervirens Fund in February as Deputy Executive Director, bringing extensive land trust experience, a Stanford MBA and a passion for sharing her love of the outdoors with her two young children — and children throughout the community. Shelley has worked for Conservation International, The Trust for Public Land, First Community Housing (a San Jose-based developer of affordable housing and national leader in green building) and Beartooth Capital (a private equity firm that purchases land around the western United States for conservation and investment).



**Patrick Gibbons** joined Sempervirens Fund as Finance Director in May, after managing the finances and operations of Bay Area nonprofits such as Meals on Wheels of San Francisco, San Francisco Parks Trust and Strybing Arboretum Society. Patrick is a San Francisco native, proud father and Giant's fan, and a devoted nonprofit professional.

**Arielle Patton**, a recent graduate from the University of California at Davis, joined Sempervirens Fund in February as Office Manager. Arielle brings great cheer to our front desk, as well as expertise in plant biodiversity and restoration. She grew up on a family olive ranch in northern California and loves outdoor adventures of all kinds. 🌲

# Tributes

## Dedicated Redwood Grove

Casey Cadile  
*Given by Friends and Family*

## Dedicated Redwoods

Daphne Atkinson  
*Given by William N. Harris*

Hari Babu  
*Given by Friends and Family*

Stanley Barnes  
*Given by Friends and Family*

Ethel and Robert Barron  
*Given by Virginia and Jan Talbert*

Helena Beddoe  
*Given by Shazad Contractor  
and Dorothy McKinney*

Miriam "Betty" Bertelsen  
*Given by Friends and Family*

John S. Bojnowski  
*Given by Mark Whatley  
and Danuta Zaroda*

Sally Brennan  
*Given by Friends and Family*

Jean Burke  
*Given by Jean Burke*

Nicole Bryan Byrd  
and Nathaniel Bryan Byrd  
*Given by Jacqueline and Paul Wender*

Casey Cadile  
*Given by Ella Woods*

Michael F. Culbert  
*Given by Diane Culbert*

Liana Sherrine Day-Williams  
*Given by Lucille Day and Richard Levine*

Martin Donald  
*Given by Friends and Family*

Inez S. Garside  
*Given by Michele Garside*

Bo (Leroy) Gimbal  
*Given by Friends and Family*

Maggie Goldsmith  
*Given by Robert L. Katz*

Dr. Robert Hamerton-Kelly  
*Given by William N. Harris*

Mead Hemmeter  
*Given by Friends and Family*

Kristina and Guenter Hoffman  
*Given by Hans Balkie*

Joy  
*Given by Dominique Peytraud  
and Ira Stein*

Felix Juhle  
*Given by Hans and Leah Juhle*

Peter Kasenchak  
*Given by Geralyn Cole*

Florence and Philip La Riviere  
*Given by Frank Delfino*

Katherine Bryan Larson,  
Bruce Larson and Family  
*Given by Jacqueline and Paul Wender*

Robert Lawrey and  
Michael Kauffman  
*Given by Robert Lawrey*

Christopher Levy  
*Given by Joan Brenchley*

Sierra and Sienna Mandanas  
*Given by Peggy Mandanas*

Dr. Barbara L. McGraw  
Mr. Felton L. McGraw  
*Given by Jodi McGraw*

Ruth Blanchard Sherman Morrison  
*Given by Robert and Barbara Walton*

Neal Pardee  
*Given by Marianne Pardee*

Sarah A. Parks  
*Given by Mary Lou Joyner and Daniel Parks*

Danielle Perrine  
Jay Perrine  
Madalyn Perrine  
*Given by Madalyn and Jay Perrine*

Anna M. Phelps  
*Given by Regina Phelps*

Eleanor Pinkerton and Harvey Rose  
*Given by Friends and Family*

Edward A. Plonka, MD  
*Given by Janie Rempel*

Mildred Riveness  
*Given by Doris Strong*

William A. Rohrbach  
*Given by The William H. and  
Mattie Wattis Harris Foundation*

Don Ross  
*Given by Robert and Jean Baer*

Alexander Falcon Rothwell  
*Given by Richard Poliak*

Marion Siu and Gerhild Sahm  
*Given by Marion Siu*

Sidney R. Sogolow  
*Given by Elinor Mansfield*

Kurt and Greta Sonniksen  
*Given by Kelly and Jerry Sepulveda*

Susan (Su) Taylor  
*Given by Ray and Constance Winter*

Patricia Van Horn  
*Given by Kathryn Green*

Scott White and Family  
*Given by Ronald White*

A. Marion Snyder Willan  
*Given by Jim Foran*

Jeanne Williams and Carol Adams  
*Given by Jeanne Williams*

Charles "Engine Charley" Wilson  
*Given by Robert and Jean Baer*

Linda Ann Yule  
*Given by Frank Delfino*

*The following people have been generously honored and remembered by Sempervirens Fund supporters during the time period of July 1, 2013 to June 30, 2014. Through the redwood groves and trees dedicated to them, those named below represent our past accomplishments and the future that these special lands promise for generations to come. Sempervirens Fund humbly recognizes the high esteem our donors have for these people, inspiring their generosity.*



## Legacy Groves

**Andy Barchas**

*Given by Mark and Kay Barchas*

**Kenneth Dean Benson**

*Given by Jack Brain and Associates Inc.*

**Louise Cassano Bradley**

*Given by Jill Ohana*

**Edmund S. Chambers Family**

*Given by Diana Chambers*

**Bill and Martha Crowe**

*Given by Robert and Ann Miner*

**Mr. Robert M. Culp**

*Given by William Allman*

**Leonard Daniel**

*Given by Deborah Daniel-Wayman*

**Armand De Weese**

*Given by Ken and Flo Chotiner*

**Mary DeFranco**

*Given by William and Paula LeBlanc*

**Bev DeLisle**

*Given by Susan DeLisle*

**Donald Samuel Durand**

*Given by Julie Durand*

**Wesley David Edwards**

*Given by Sandra Yarrington*

**Carl W. and Marion J. Fowler**

*Given by Gary Fowler and Karen Bilawski*

**Robyn Frankel**

*Given by Marcy Railsback*

**Harold "Sonny" Goldstein**

*Given by Ken and Flo Chotiner*

**Robert Hamerton-Kelly**

*Given by The Strand Family*

**Capt. Paul L. Holmes, Ph.D, USN**

*Given by William Allman*

**Mary Line**

*Given by Soroptimist International of Visalia*

**Mae Locke**

*Given by Richard and Sharon Breuer*

**Ellen Luhrs**

*Given by Jeanne Duisenberg*

**Shirley MacDonald**

*Given by Judith Ogle and Angela Arzate*

**Madelaine Mammen**

*Given by Anabella Naguit*

**Phyllis Marsh**

*Given by Family Chase*

**Bob Badbuoy Matthews**

*Given by Richard and Pamela Montgomery*

**Rosemary Matthews**

*Given by Margaret Jones*

**Dr. Thomas Mertens**

*Given by Michael Chin*

**Bong Soon Ohm**

*Given by Steffen and Kyung-Nyen Richards*

**Rhuey Reilly**

*Given by John and Elsa Reilly*

**Alice M. Richards**

*Given by Steffen and Kyung-Nyen Richards*

**Claudia Strobel**

*Given by Jack Brain and Associates Inc.*

**William L. Sutton, MD**

*Given by Susan and Bob Leonard*

We have made some changes to our Tribute program. Please refer to our website: [www.sempervirens.org/ways-to-give/dedicate-a-tree](http://www.sempervirens.org/ways-to-give/dedicate-a-tree).



Photo © Dan Quinn



NON-PROFIT ORG.  
U.S. POSTAGE  
PAID  
PERMIT NO. 90  
SANTA CLARA, CA

419 South San Antonio Road, Ste. 211  
Los Altos, CA 94022-3640

**Forwarding Service Requested**



## Connect & Celebrate

**Sempervirens Fund has a fabulous new website** ([www.sempervirens.org](http://www.sempervirens.org)) where you'll find a fresh, easy-to-use resource for discovering the local redwood forests. Watch our new videos, try a new hike, learn more about the redwoods... and send us your questions and ideas so we can make the site better and better! Email us at [redwoods@sempervirens.org](mailto:redwoods@sempervirens.org).



Join the conversation on Facebook. We post beautiful pictures, scientific news, local adventures and more... and you can add yours anytime.



**Mountain Echo** is published by:

### **Sempervirens Fund**

419 South San Antonio Road, Ste. 211  
Los Altos, CA 94022-3640  
Tel: (650) 949-1453  
[redwoods@sempervirens.org](mailto:redwoods@sempervirens.org)  
[www.sempervirens.org](http://www.sempervirens.org)

Carolyn Brown, Betsy Herbert,  
Margie Ryan, Copywriting  
Dan DiVittorio, Design

Contact Sempervirens Fund to republish or  
reference content. ©2014 Sempervirens Fund.

### **Staff**

Reed Holderman, Executive Director  
Shelley Ratay, Deputy Executive Director  
Patrick Gibbons, Director of Finance  
Anne Dimock, Director of Development  
Michael Kawalek, Associate Director of Development  
Laura McLendon, Stewardship Program Manager  
Amanda Krauss, Tribute Program Manager  
Ann Blanchard, Development Associate  
Arielle Patton, Office Manager  
Arlene Markakis, Administrative Assistant

Please remember to notify  
Sempervirens Fund when you  
change your address.

Sempervirens Fund is a nonprofit  
501 (c)(3) organization. Donations  
are tax-deductible to the extent  
allowed by law.