Mountain Echo

THE NEWSLETTER OF SEMPERVIRENS FUND

SPRING 2016

PUMAS AND PEOPLE





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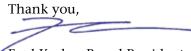
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Breaking New Ground

LETTER FROM THE BOARD PRESIDENT

On behalf of the Board, I am thrilled to announce that after an in-depth search we have hired our new Executive Director, Sara Barth. Sara comes to us from a leadership role with The Wilderness Society where she spent over a decade working to protect our nation's wildlands. She brings a strong record of conservation innovations and accomplishments, extensive experience in organizational leadership, and political savvy — a wonderful combination to guide our organization.





Fred Keeley, Board President

LETTER FROM THE EXECUTIVE DIRECTOR

I am honored to join Sempervirens Fund and work with the Board, staff and all of you dedicated donors, partners and volunteers as we collectively continue the legacy of innovative acquisition and stewardship activities essential to the long-term sustainability of the Santa Cruz Mountains redwood forests.



For my entire career, I have worked in nonprofit and governmental sectors to advance land and wildlife conservation in the U.S., with much of this

work focused on California. At The Wilderness Society, I oversaw regional conservation programs, working around the country as well as serving as a member of the national leadership team. I previously worked on conservation efforts for World Wildlife Fund and National Wildlife Federation and was an environmental advisor to U.S. Senator Barbara Boxer. Having worked at national, state and local levels, I see great opportunities for tangible and enduring conservation gains at the local level, and as a highly effective player Sempervirens Fund is poised to help achieve these gains — both in local conservation and by creating models that can be replicated elsewhere.

My family and I take every opportunity we can to enjoy the majesty of the redwoods, and we recognize how fortunate we are to live so close to these remarkable, globally significant forests. I am excited to bring my passion, energy and experience to work with all of you to protect and steward these extraordinary lands.

I look forward to meeting you in person at our Anniversary Picnic on May 14th to celebrate breaking ground on the new Castle Rock State Park entrance (see back cover for details) or at another event soon.

Sincerely, Sara Barth, Executive Director

PUMAS AND PEOPLE IN SAN VICENTE REDWOODS Finding the balance between wildlife and recreation

By Mike Kahn, Communications and Outreach Manager

Veronica Yovovich from the Puma Project shows OpenRoad television host Doug McConnell how this telemetry device works to track pumas.

irst, let me calm your fears or burst your bubble depending on your disposition. You are probably never going to see a puma in the wild, and if you do it will last a few seconds as you see a flash of its tail running away.

"Pumas tend to be fearful of humans, so most of the time they just avoid us," says Veronica Yovovich. "Some people can live in the Santa Cruz Mountains their whole lives and never see one. They're called ghost cats."

Veronica is an Environmental Studies graduate student at UC Santa Cruz and a researcher with the Santa Cruz Puma Project, a partnership between UCSC and the California Department of Fish and Wildlife.

It was a warm winter day in early February on our 8,532-acre San Vicente Redwoods property. I had the pleasure of being out on the land with Veronica to facilitate a television shoot about "living with lions" for NBC Bay Area's *OpenRoad with Doug McConnell*. Pumas (*Puma concolor*) are the native mountain lions, also known as panthers, cougars or catamounts.

"Beep, beep, beep."

"Do you hear that?" Veronica said softly, as she waived her telemetry device that looks like an old rooftop TV antenna. "That's 38F, an adult female puma. She has a collar for monitoring, and each collar has its own frequency, which is why I know it's her."

Veronica explained that pumas are important as apex predators (those at the top of the food chain) in helping maintain a healthy ecosystem. Ninetyfive percent of the puma diet is deer (a prey species). This naturally regulates the deer population, which in turn regulates the numbers and types of plants that deer feed on. Losing the pumas will throw the balance out of whack.



(left) Puma cub 23F. Scientists don't assign nicknames to pumas in order to maintain objectivity, but this little one sure is cute anyway! (right) This photo was taken by a trail camera trap used for both scientific research and property security.

There are estimated to be 40 pumas in the Santa Cruz Mountains, and puma 38F is one of four pumas known to regularly use San Vicente as part of its territory. I'd say San Vicente was 38F's home but that terminology is problematic since female pumas have a home range of 40–80 square miles, and males range 100–150 square miles. Note that males fight to defend their territories and have only small overlaps with other males, while females can overlap with other males and females.

The extensive range pumas need for territory, hunting and breeding is one reason why it's so important to have large intact habitat with connected wildlife corridors. Roads and new development that fragment habitats are the biggest threats to pumas. Fortunately San Vicente Redwoods is adjacent to over 10,000 acres of protected lands including Swanton Ranch and Coast Dairies, making it a rich contiguous wildlife habitat — an important component of our Great Park vision.

Puma Project research on San Vicente Redwoods helps identify where pumas are most active — their main through routes, their denning sites and communication hubs (yes, they do "talk" to each other via scrapes, scent and caterwauling) — and this data is informing the location of public access trails planned for the property.

Public access is still at least a year away due to the planning and permitting processes, but once more people are on the property Puma Project researchers will monitor the impact on the puma population. Birds, bats and fish will also continue to be monitored by other researchers. Any significant impacts will inform changes to the adaptive management plan, helping to ensure ecosystem health over time.

I didn't see any "ghost cats" that day but it is heartening to think that these magnificent creatures are on the land and have a chance to thrive alongside human populations, thanks to the support of people like you.



This map shows a sample of cumulative tracking data for collared mountain lions in the Santa Cruz Mountains, with colored areas indicating their home ranges.

To learn more about pumas and San Vicente Redwoods, including videos and safety tips, please visit www.sempervirens.org/pumas. *‡*



THE GREAT PARK CAMPAIGN

Protecting and Connecting the Redwood Forests

FINAL REPORT – SPRING 2016

With your help... we did it!



Together, we did it!

Jacqueline Wender and Diane Talbert

Four years ago Sempervirens Fund defined a new, unprecedented vision for the Santa Cruz Mountains — the Great Park. To embark on that vision, we set an ambitious goal to raise \$22 million in a Great Park Campaign. The purpose of this campaign was to provide Sempervirens Fund with the financial resources to (1) protect and steward key redwood forest lands; (2) develop a new entrance to Castle Rock State Park; and (3) continue the education, outreach and fundraising activities that connect people, young and old, with the redwoods. These initiatives are, in essence, the core of Sempervirens Fund's mission to preserve and protect redwood forest habitat in the Santa Cruz Mountains.

We asked you to stretch high (and to dig deep!) to help reach our goal, and you did. We are very grateful.

As of December 31, 2015, we met our \$22 million campaign goal. Thanks to you, we protected 9,284 acres of redwood forests. We completed plans for the new entrance at Castle Rock State Park and will start Phase I construction by late summer. And we made new friends, strengthened important partnerships, and cultivated a new generation of redwood enthusiasts along the way.

Our deepest thanks to each and every one of you for what you have made possible! Thanks to our fellow Board and Campaign Committee members. Thanks to our staff and volunteers. And a thousand thanks to all of our donors for propelling the vision of the Great Park forward. Together we are re-establishing a healthy, connected and protected redwood forest ecosystem in the Santa Cruz Mountains that provides a safe haven for local wildlife, clean air and water for all, and a place for recreation and rejuvenation for ourselves and our families, for today and long into the future.

Diane Talbert

Jacqueline Wender

Great Park Campaign Committee Diane Talbert, Co-Chair • Jacqueline B. Wender, Co-Chair • Allan Brown • Mary Ann Draeger • Kevin Flynn • William N. Harris • Walt Hays • Cliff Hodges • Fred Keeley • Pamela Koch • Betty Lo • Dan Martin • Micki Miller • Marina Park • Regina Phelps • Kent Putnam • Emily F. Thurber • Cole Wilbur

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Mission: Possible

Sempervirens Fund's mission is not news to you; for more than 115 years we have been protecting the redwood forests, wildlife habitat, watersheds, and other natural and scenic features of the Santa Cruz Mountains and we have been encouraging the public to appreciate and enjoy these resources. What we celebrate today is our recent great success in realizing this mission.

The Great Park Campaign focused our collective financial resources, time, and passion on protecting and caring for forest, watershed, and wildlife habitat lands to strategically connect and re-establish a beautiful and healthy redwood forest between Silicon Valley and the Pacific Ocean: a long-range vision we call the Great Park. To propel that vision forward, in four short years of the Campaign we protected eight properties totaling 9,284 acres in San Mateo and Santa Cruz Counties, with a combined value of over \$35 million. That's almost one quarter of the 40,000 acres identified as priority conservation zones within the Great Park! And we completed important stewardship work, including repairing degraded roads that were adding sediment to fish-bearing streams, creating fuel breaks for fire protection, and removing invasive species that overrun native ecosystems.

Now the protected coast redwood forests on these properties can continue to clean our local air and water; capture and transform CO_2 (the excess of which is one of the leading causes of global climate change); and provide food, shelter, and safe passage for a wide range of wildlife. Trail planning is underway for the 8,532-acre San Vicente Redwoods property, which will provide new opportunities for the public to explore and enjoy the redwoods.

As of this writing, Sempervirens Fund is close to breaking ground on the Phase I improvements at the Castle Rock State Park entrance. Site preparation has begun, including installing a boundary fence, removing an old swimming pool and conducting a bat and bird survey on the property. Construction is expected to begin in earnest by late summer to include a 90-space parking lot, trail connections, amphitheater, bicycle racks, picnic areas, restrooms, natives landscaping and more. These improvements will enhance access to this beloved state park, help generate revenue to sustain it into the future, and celebrate Silicon Valley's gateway to the redwoods.

To do all of this, we have strengthened relationships with our conservation partners, attracted new donors to support our mission, and made new friends. We are reaching different audiences via digital media, television, and print media and are educating the public about the importance of the coast redwoods for the planet, for wildlife, and for ourselves. These relationships and an informed public are the roots of our work, and like the redwoods we have protected, those roots are strong and flourishing.



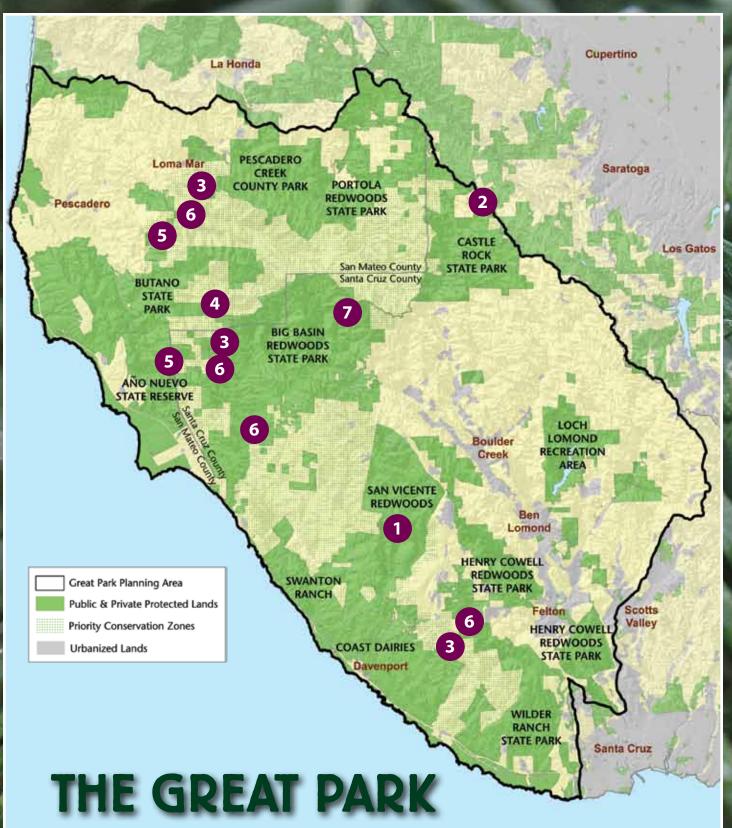
Bobcat cub



Trillium ovatum



San Vicente Redwoods



VISION FOR THE SANTA CRUZ MOUNTAINS

The Great Park is Sempervirens Fund's long-term vision for a healthy redwood forest ecosystem in the Santa Cruz Mountains, where wildlife and people can continue to thrive long into the future. Our goal is to ensure that the region's most critical natural features such as watersheds and redwood forests remain intact and are well cared for, regardless of who owns the land. Sempervirens Fund purchases or accepts donations of land for conservation by working cooperatively with willing landowners.



The massive, 8,532-acre San Vicente Redwoods property is permanently protected, as are its redwood forests, creeks, wildlife habitat and corridors, cultural resources, and public recreation potential.



A new entrance and a bright future for Castle Rock State Park have begun. Phase I of the Castle Rock Gateway will provide a welcoming entrance plaza, ample off-street parking, restrooms, picnic areas, amphitheater, group meeting spot and new trailheads in an environmentally friendly, state-of-the art facility.



Protected lands in the Whitehouse Creek, Laguna Creek, Butano Creek, and Pescadero Creek watersheds continue to provide important habitat for aquatic species, including coho salmon, steelhead trout, and California red-legged frog.



Road deconstruction, culvert repairs, fuel reduction, invasive species removal and other stewardship activities are complete or underway on Sempervirens Fund properties across the Great Park area.



Outdoor education continues on more than 400 acres of protected redwood forests at two Girl Scout mountain camps.

Old growth redwood and Douglas fir trees continue to provide safe haven and important foraging and nesting habitat for the endangered (and elusive) marbled murrelet.

6

Google Trekker imaging device



New audiences are learning about our mission and work via our newly designed website, expanded social media presence (Facebook, Twitter, Instagram, YouTube) and new partnerships (Hilltromper, OpenRoad, Google Trekker, Santa Cruz Warriors, State Parks Backpacking Trips, and others).

Campaign Performance

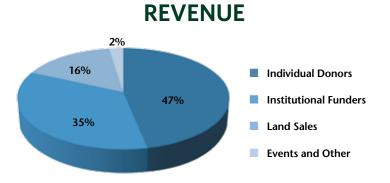
Sempervirens Fund is leading the way to preserve and protect the redwood forest habitat of the Santa Cruz Mountains based on a fiscally responsible use of funds and more than 115 years of on-theground experience.

Our conservation legacy continues with the successful completion in December 2015 of the \$22 million Great Park Campaign. The goals of the campaign were threefold:

- Forest Protection and Stewardship Projects \$12.4 million. Acquire more land and easements within the Great Park region, restore and care for the land.
- 2. Castle Rock State Park Improvements \$5 million. Provide new, sustainably designed facilities that will bring more people and revenue to the park. Develop a new economic model to keep the park open long-term.
- **3. A Strong and Effective Sempervirens Fund \$4.6 million.** Support education, outreach and operations to connect more people with the redwoods and our mission.

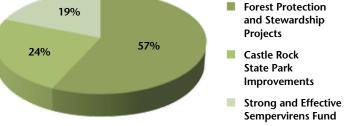
Mike Kahn/SV



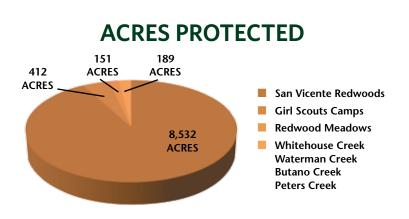


These figures represent the participation of 9,765 donors making 28,552 individual gifts.

EXPENSES Forest



The three original Campaign goals are fully funded and have been managed in a fiscally responsible way.



Sempervirens Fund and its conservation partners successfully placed more than 9,200 acres into permanent protection at eight different sites through a combination of fee acquisition and the purchase of timber rights and conservation easements.

Sempervirens Fund Contributors Creating the Great Park

Sempervirens Fund salutes the more than 9,700 donors who made contributions to the Great Park Campaign between July 1, 2013 and December 31, 2015. This includes all those who dedicated trees and groves through our Tribute Program. Every gift, small and large, helped us achieve our goal. On behalf of the forests and all who inhabit and cherish them, **thank you!**

\$1,000,000 and above

\$200,000 - \$500,000
\$100,000 - \$199,000
\$50,000 - \$99,000
\$25,000 - \$49,999
\$10,000 - \$24,999
+, + ,

Please contact Carrie Drake at (650) 949-1453 x203 or cdrake@sempervirens.org for these contributor listings.



Institutional Support *We gratefully acknowledge the extraordinary generosity of the following institutions whose grants and gifts of \$10,000 and above have propelled The Great Park vision forward.* Anonymous (3) • Betty Lo Foundation • California State Coastal Conservancy • California Wildlife Foundation/California Oaks • The David and Lucile Packard Foundation • The Dean Witter Foundation • Edward Joseph Daly Foundation • Gordon and Betty Moore Foundation • Heising-Simons Foundation • The Jeangerard Foundation • Joseph and Vera Long Foundation • L & L Borok Foundation • Land Trust of Santa Cruz County • The Mervyn L. Brenner Foundation, Inc. • The Nature Conservancy • Portola and Castle Rock Foundation • The Raintree Foundation • Recreational Equipment, Inc. • Resources Legacy Fund • RHE Charitable Foundation • S.D. Bechtel, Jr. Foundation • S.W. Construction, Inc. • The San Francisco Foundation • State of California - Department of Transportation - 2660 • Wildlife Conservation Board • The William H. and Mattie Wattis Harris Foundation

Board of Directors, 2011–2015 Sempervirens Fund appreciates the dedication, leadership and perseverance of the Board members who have served during the Great Park Campaign. Without their generous gifts of time, expertise and financial resources, the campaign would not have been possible. Fred Keeley, President 2014–current • Diane Talbert, President 2012–2014 • Dan Martin, President 2011 • Howard Chao • Philippe S. Cohen • Richard L. Conniff • Kevin Flynn • Pamela Koch • William N. Harris • Betsy Herbert • Robert L. Katz • Carl King • Amanda Montez • Craig Neyman • Marina Park • Regina Phelps • Kent Putnam • Austin Swift • Emily F. Thurber • Jacqueline B. Wender • Stephen N. Wyckoff

Donated Services Thank you to the following professionals who have donated their time and service to help us acquire and protect the land. Callander Associates • Nelson J. Lee • McKenna Long & Aldridge LLP Sheppard Mullin Richter & Hampton LLP • Hamey Woods

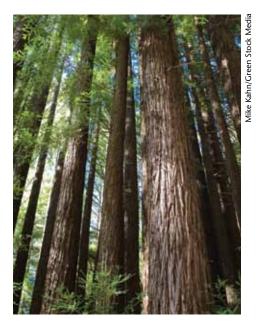
Partners *We are honored to work with these trusted partners who complement and support our work.* Amah Mutsun Tribal Band • Amah Mutsun Land Trust • Bay Area Open Space Council • Big Creek Lumber • Bonny Doon Fire Safe Council • Bureau of Land Management • CalFire • California Council of Land Trusts • California Department of Fish and Wildlife • California State Coastal Conservancy • California Wildlife Conservation Board • Callander Associates • California Department of Transportation • California State Parks, Santa Cruz District • CAW Architects • County of Santa Cruz • Girl Scouts of Northern California • Google, Inc. • Jasper Ridge Biological Preserve • Land Trust Alliance • Land Trust of Santa Cruz County • Living Landscape Initiative • Jodi McGraw Consulting • Midpeninsula Regional Open Space District • The Nature Conservancy • Peninsula Open Space Trust • Portola and Castle Rock Foundation • Resource Conservation District of Santa Cruz County • Redwood Meadows Ranch Homeowners Association • Resource Conservation District



of San Mateo County • San Lorenzo Valley Water District • San Mateo County Parks • Santa Cruz County Parks Department • Save the Redwoods League • Sempervirens Fund Docents and Volunteers • South Skyline Fire Safe Council • Swanton Pacific Ranch • UC Santa Cruz Natural Reserves • Vance Brown Builders

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Cover: San Vicente Redwoods, photo by William K. Matthias



What Are Old-Growth Redwoods?

Coast redwoods *(Sequoia sempervirens)* are identified as being old-growth trees when they are several hundred years or more into what can be an incredible 2,000 years plus lifespan.

Sometimes it can be hard to differentiate between an old-growth redwood and a large second-growth tree that has grown after a major disturbance such as a massive fire or logging.

However, during their long lifespans old-growth trees develop distinguishing characteristics caused by recurring natural disturbances (i.e., fire, flood, windstorms, impact from falling trees or branches, etc.), including:

- Live crown has irregular outline
- Broken-off or spike top is present
- Epicormic branching¹ or reiterations² are present
- Large horizontal branches (>8") are present in the upper half of the tree
- Basal hollows ("goosepens"), broken limbs or other "injuries" are present
- Burn scars are visible on the trunk

ke Kahn/



¹Multiple, small branches arising from the same point on the trunk.

²A tree-like branch growing from a dormant bud in the trunk or in a large limb.



Why Do Old-Growth Forests Matter?

Old-growth forests...

- Maintain soil fertility necessary for longterm forest health
- Provide the cleanest water for both fish and people
- Provide essential, specialized habitat for endangered species³
- Provide optimal infiltration of rainwater and minimize flooding
- Create good stream habitat for Steelhead and Coho Salmon
- Induce summer fog drip that increases dry season stream flow compared to secondgrowth stands
- Store elemental carbon, thus helping to counter global warming
- Provide natural grandeur and inspiration to the human spirit

Thanks to Steve Singer, forest biologist and a member of Sempervirens Fund's Science Advisory Panel, for providing this information.

³Old-growth trees provide essential habitat for the marbled murrelet, an endangered seabird that nests only on large branches or broken treetops. Other species like the pileated woodpecker and Vaux's swift also depend on old-growth trees.

PROJECT HIGHLIGHT The Potential for a **Forest Carbon Bank**

Thanks to a grant from the Coastal Conservancy, Sempervirens Fund has just completed a pioneering feasibility study for creating a local forest carbon bank in the Santa Cruz Mountains to slow climate change and protect redwood forests in private ownership. The study analyzed barriers preventing small forest landowners from entering the carbon market and proposed potential solutions. It also created a model to estimate carbon stocks on all private forest land in the study area, a first-of-its-kind analysis for our region. The study results suggest that in order for this carbon bank to be financially viable a new methodology must be developed to aggregate the carbon benefits of small properties efficiently. The study outlined next steps to explore how aggregation could be achieved by collaborating with an existing carbon registry and utilizing the latest scientific tools for forest analysis. Further market research on buyer demand for carbon credits and landowner motivations to participate are also needed. Sempervirens Fund is currently seeking funding to take these next steps as there is promise here to add another tool to our conservation toolbox.





PROJECT HIGHLIGHT Success! Gazos Creek Wildlife **Corridor Restoration Project**

A 40-acre property we purchased in 2007 at the south fork of Gazos Creek, adjacent to Big Basin Redwoods State Park, is a great example of a now protected forest that needed restoration. The property, though mostly redwood forest, contained a deteriorating 1,300-foot dirt driveway, a burned down house and a standing garage. Thanks to your generous support, a gift from the Merrimac Fund and help from our partners at the San Mateo County Resource Conservation District, we have been able to remove all of the man-made structures and transform the land under the driveway back to its original purpose as a healthy functioning stream channel flowing into Gazos Creek. The restoration included planting native trees and shrubs, grading to return natural contours to the land, and adding special rocky areas which all prevent erosion that was sending huge amounts of dirt and debris into the creek. Now the water quality is improved, providing endangered steelhead trout with a healthier habitat, and the soils supporting the massive root systems of the redwoods growing next to the creek are more secure.



The Michele Garside Magical Grove

Dr. Michele Garside (second from left), a longtime supporter of Sempervirens Fund, wanted to contribute to the Great Park vision and decided to do so by creating a living legacy. "I dedicated a grove of redwoods knowing that I could personally choose the location and enjoy a special place to celebrate the wonders of nature and the interconnectedness of all life."

Michele invited friends who share her love of the redwoods to join the dedication ceremony of

the Michele Garside Magical Grove. To her delight, her friends agreed to also dedicate individual redwood trees in the grove to symbolize the uniting bonds of their friendship.

For an expanded view of Michele's unique story visit www.sempervirens.org/magic.

To learn how you can establish a named redwood grove or tree, please contact Amanda Krauss, Tribute Program Manager, at (650) 949-1453 x204 or akrauss@sempervirens.org. \ddagger



New Growth at Sempervirens Fund

Ian Rowbotham joined Sempervirens Fund in February as our new Land Stewardship Project Associate. He will be working on stewardship projects with Laura McLendon who was recently promoted to Director of Land Conservation, overseeing both land acquisition and stewardship. Ian will help conduct all aspects of land stewardship activities, including developing and implementing strategies to effectively manage, steward, and monitor our 10,700 acres of properties and easements. He brings to this role a broad research background in marine and forest issues, Stanford undergraduate and graduate science degrees, and a passion for the outdoors. He has worked for the Monterey Bay Aquarium, National Audubon Society and Sierra Club. Ian is a Bay Area native, hopeless chocoholic and avid sports fan. **‡**



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Celebrate With Us

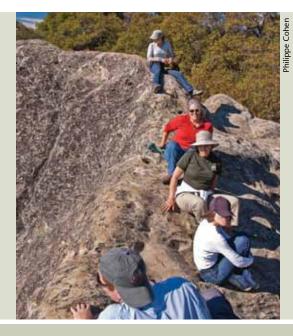
Sempervirens Fund 116th Anniversary Picnic

Saturday, May 14, 2016, 11am – 3pm 15435 Skyline Blvd., Los Gatos

Join us to celebrate the 116th anniversary of Sempervirens Fund and the groundbreaking for the new Castle Rock State Park entrance.

Enjoy a day of fun including a BBQ lunch, live music, site tours, kids' activities, giveaways and more! Tickets are \$25 for adults, \$10 for students, and youth 18 and under are free.

For details, directions and tickets visit www.sempervirens.org/picnic or call (650) 949-1453 x200. **Buy your tickets today!**



The Power of My Banana Slug Slime

I use my slime to breathe, to move and to attract water. In fact my slime absorbs 100 times its volume in water. It helps me move along the ground under the redwoods and even climb up trees. My slime is a liquid crystal that acts both like a lubricant and an adhesive. So the next time you see my glistening



slime think about all the great things it does for me. Learn more about me by visiting www.sempervirens.org/slime.

Front cover: Pumas co-evolved with wolves and their natural defense is to climb a tree to get away from potential canine combatants. Photo courtesy of Santa Cruz Puma Project.

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