

Save The Redwoods | Spring Bulletin '09

Save Redwoods, Save Fish from Extinction



Cover image: The Smith River runs turquoise through Mill Creek forest in Northern California, providing outstanding habitat for salmon, an integral part of the coast redwood ecosystem. Read the related story on page 4. (Cover photo: Larry Ulrich)

Left image: Rhododendrons splash redwood forests with color in April and May.

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Dear Save the Redwoods League Friends,

A million people visit Muir Woods National Monument each year to marvel at its ancient coast redwoods—just a short drive from San Francisco. Recently, my family and I were among those visitors, but we weren't looking at the trees. Instead, we witnessed an ancient natural process: coho salmon fighting their way upstream to spawn where they were born.

These fish are integral parts of the redwood forest. Unfortunately, a recent report says California's native salmon and trout species are nearing extinction. The good news is that your support of Save the Redwoods not only protects habitat for redwoods, but also clear, cool streams that salmon need to reproduce. Read about this work on page 4. Our vital work depends on support from our members and partners, whom we thank for their generosity, especially in these trying economic times. Learn in this newsletter about our other latest successes, and take satisfaction in knowing your donations have helped to save the redwoods for current and future generations.

We also thank you for your ongoing feedback. In response to your requests, we have improved this newsletter. Inside you'll find larger photos and more information. To save paper, we have mailed the *Bulletin* with fewer inserts and without an outer envelope. We think you'll be pleased with the results.



Ruskin K. Hartley Executive Director



Welcome to Our New Board President

Save the Redwoods League has a new Board of Directors President: Pete Dangermond. Most recently Vice President of the Board of Directors, Dangermond has served on the League's Board of Councillors since 1986. The former California State Parks Director brings to his presidency 40 years of professional experience in parks and recreation, wildlife conservation and open space preservation.

Restoration



Save Redwoods, Save Fish from Extinction

Photo: Endangered coho salmon are among the species helped by Save the Redwoods League redwood protection work.

Our Members' Support Helps Salmon in Crisis

Big trees and big fish—coast redwoods, salmon and trout, that is—go together, said a renowned expert on California's water systems and native fish. All are integral parts of the redwood forest. Like the redwoods, these native fish need protection: After 150 years of damming, water diversion, logging and development, 65 percent of these fish species face extinction. The warning about the fish is in a recent report, "SOS: California's Native Fish Crisis," sponsored by California Trout (CalTrout), a Save the Redwoods League partner. A team led by Peter B. Moyle, a professor of fish biology at the University of California, Davis, produced the report, which has drawn extensive news media coverage.

Fortunately, several species in this threatened family of fish, called "salmonids," have Save the Redwoods League as an ally. Our members and partners can take satisfaction in knowing their support helps save two majestic icons of the West: the coast redwoods and salmonids.

The Redwood-Salmonid Connection

Virtually all redwood forests have (or once had) streams in which salmonids run and spawn. That is, these fish, which hatch in freshwater and live most of their adult lives at sea, return to their native streams to release and fertilize their eggs.

Coast redwoods play a major role in providing salmonid habitat. These fish thrive in cool, clear streams. Redwoods keep streams cool by providing shade. Redwood root systems prevent landslides and slow surface erosion that would otherwise cause sediment to suffocate salmonid eggs in the gravel. Redwood branches and trees fall into streams, creating calm, deep pools where fish hide from predators and take refuge from fast currents. The great trees also control the flow of nutrients and pollutants reaching streams.

Protecting salmonids is an important factor in the League's science-based Master Plan, which prioritizes coast redwood forests and associated lands for protection and restoration.

Threatened salmonids are important to save for many reasons. Salmonids support, or have supported, major recreational and commercial fisheries, providing significant economic and cultural value to Californians, according to the SOS report. These fish also supply forest beings with food. At one end of the food chain, creatures such as black bears and bald eagles eat the fish; at the other end, plants benefit from the decomposing carcasses of the fish, which die in the streams after they spawn.

Looking at the larger picture, "everything is connected in some way," said Rod McLeod, a fish biologist with the California Department of Fish and Game's Mill Creek Fisheries Monitoring Program, a Save the Redwoods League partner. "You can't just eliminate one of the ecosystem's components and expect that nothing else will be affected," he said, referring to threatened California salmonids. "Sometimes it takes a long time to see what the effects of the loss are, and then it's too late."

Why Are the Fish in Trouble?

Many factors threaten California's native fish populations, including logging and real estate development, according to the SOS report. Redwood logging can harm fish by eliminating roots, thereby accelerating erosion and the flow of sediment and pollutants into streams. Logging also can reduce the shade necessary to keep streams cool, and result in fewer trees and branches that can provide fish with refuges.

Save the Redwoods League helps protect salmonids partly by reducing or preventing logging and real estate development on redwood forestlands and the landscapes that support them. The major way we protect these landscapes is by using our members' donations to purchase the land and transfer it to a public agency for permanent safeguarding as a park or reserve. We are also guiding a project to restore a logged redwood forest, which benefits the beings that depend on this type of ecosystem. »

Restoration

Forest Restoration Project Protects Salmonids

Our Mill Creek Ecological Restoration Project is under way in a 25,000-acre temperate rainforest on California's North Coast, just south of the Oregon-California border. The forest is home to ancient redwoods, hundreds of native plant species and two critical salmon-bearing streams.

In 2002, a coalition of public and private partners, including Save the Redwoods League, CalTrout, the Smith River Alliance, Wildlife Conservation Board, the California Department of Fish and Game and the State of California Coastal Conservancy purchased Mill Creek and transferred it to California State Parks for permanent protection. The forest is part of Del Norte Coast Redwoods State Park, which is managed as part of Redwood National and State Parks.

"The project is a unique opportunity to restore old forest characteristics to an entire redwood landscape using a coordinated, interdisciplinary approach," said Dan Porter, Director of Science and Planning for Save the Redwoods League and Coordinator of the Mill Creek Advisory Committee, the group that guides the land's restoration. "The Mill Creek project is a model for forest restoration worldwide. Our vision is to restore this forest to a more natural state so it looks, feels and functions like an old-growth forest," he said.

Since 2003, Save the Redwoods League partners have thinned more than 1,600 acres of young, dense forest stands to promote characteristics of old forests such as large trees. Partners also have removed 36 miles of severely eroded logging roads and monitored salmonid

Extinction Risk Rankings of Salmonids That Live in Redwood Country

Species	Status	Status Ranking
Chum & Pink Salmon	1	1 Highly vulnerable to extinction in native range in the next 50 years
Coho Salmon	1-2	2 Vulnerable to extinction in native range in next 100 years
Cutthroat Trout	2-3	3 No immediate extinction risk, but populations declining or small and isolated
Chinook Salmon & Steelhead Trout	2-4	4 No extinction risk; populations are large and appear to be stable

Source: "SOS: California's Native Fish Crisis," 2008, by CalTrout. According to the SOS report, the statuses and types of salmonid species vary by location in California.



Help Restore Mill Creek Forest

While Save the Redwoods League and our partners have made progress in restoring Mill Creek to its magnificent natural state, much more work lies ahead. Your donation will support this important and costly work. Please visit **savetheredwoods.org/donate** and choose "reforestation" in the gift designation area to support Mill Creek, or mail your gift in the envelope included with this newsletter. Please mark your gift with the words, "Mill Creek."

Photo: Phil Schermeister

Fish biologist Rod McLeod conducts surveys of spawning fish in a Mill Creek tributary. "I've always liked nature and fish in particular," said McLeod, who has worked in fisheries since he was 14. "I believe all wildlife should be preserved."

populations. The monitoring reveals good news: "Mill Creek is a coho stronghold," said Porter. "With the upper watershed now protected and recovering, the superb habitat in the lower watershed can remain intact," he said.

Although coho salmon are state- and federally listed as an endangered species, they are found in most major Mill Creek tributaries. McLeod's latest report on the Mill Creek fish monitoring shows population estimates for young coho in 2005 and 2006 on the West Branch and East Fork of Mill Creek were the largest in the study's 13 years.

It will take more years of monitoring to estimate how much of an effect the restoration work has on coho numbers, said Chris Howard, previous coordinator of the Mill Creek fish monitoring project. Results of the monitoring help California »



Photo: Dody McLeod

Memories of Favorite Redwood Parks

I love strolling the Stream Trail in Redwood Regional Park in Oakland, California. Sometimes I just sit at a picnic bench under these huge redwoods and listen to the wind in the top branches. And I listen to the quiet—no cars, no planes, no crowds—just the brush of the tree branches and my own breathing.

-Patricia, member since 1992



Restoration

State Parks decide where to place fallen trees across the fast-flowing East Fork to create salmonid refuge pools. Spawning salmonids have moved promptly into new pools created after fallen trees were placed, McLeod said.

According to the Mill Creek monitoring report, the steelhead

population has generally decreased annually since 2001 and seems to have stabilized. Chum salmon were last observed in 2002, and pink salmon have not been recorded. But cutthroat numbers have been relatively stable since 1995, and juvenile chinook numbers in 2007 in the West Branch were at their highest since monitoring began in 1994. These salmonid numbers offer some optimism amid a grim outlook for California's native fish species. Thanks to support from Save the Redwoods League members and partners, there is hope that big trees and big fish will endure together.



Get Involved

Learn more about the Mill Creek forest restoration. Visit **savetheredwoods.org/restoration**. Visit Mill Creek. The forest is open to the public on Saturdays and Sundays for hiking, biking, horseback riding and nature exploration. Interpretive programs are offered in the summer. For a map and further information, call or visit Redwood National and State Parks' Crescent City Information Center, 1111 Second Street, (707) 465-7306, or visit www.nps.gov/redw.

Photo: Phil Schermeister

Protection

3 New Deals Save Old Giants, Views, Watersheds



Thanks to our members' and partners' support, Save the Redwoods League recently completed these new agreements to protect California redwoods and their supporting landscapes from logging and poorly planned real-estate development.

Agreement Safeguards 20 Acres of Ancient Sonoma Redwoods

A \$480,000 land conservation agreement with The Annapolis Milling Company now protects one of the last remnants of ancient redwood forest in Sonoma County. The agreement ensures that the 20-acre stand just south of Soda Springs Reserve is permanently protected from possible timber harvest and vineyard conversion. With this arrangement, we have progressed toward our goal of securing permanent protection for all old-growth redwood forests in the redwood coast's central region.

Acquisition Protects Ancient Humboldt Grove

With support from our members and the Resources Legacy Fund Foundation, Save the Redwoods League purchased about 46 acres of young and a few ancient redwoods surrounded by Humboldt Redwoods State Park. This \$650,000 acquisition protects the watershed and wildlife habitat in and around the old-growth redwood forest in the park's historic Bolling Grove. We protected the ancient Bolling redwood grove in 1921, among the first of our more than 300 transactions that built the state park, which now includes 50,000 acres.

Key Watershed Gains More Protection in Redwoods Corridor

Our acquisition of about 160 acres expands wildlife habitat in our Corridor from the Redwoods to the Sea between Humboldt Redwoods State Park and the King Range National Conservation Area (KRNCA). The \$370,000 acquisition in the KRNCA was an inholding, or privately owned land inside the boundary of protected park lands. This purchase strengthens protection of the Mattole River watershed, home to rare or threatened animals, including coho salmon and two frog species. We acquired this property with support from our members, the Resources Legacy Fund Foundation and the Wilderness Land Trust. The land was transferred to the US Bureau of Land Management for permanent protection.

Research

Helping Redwoods Survive Climate Change



If you're out hiking and see a trim man in a hard hat ascending a redwood, it just might be the recipient of a 2008-9 research grant from Save the Redwoods League. Todd Dawson, a plant physiologist and ecologist at the University of California, Berkeley, is focusing on the biggest challenge of his adventuresome career: helping coast redwoods and their inland relatives, giant sequoias, weather the storm of climate change.

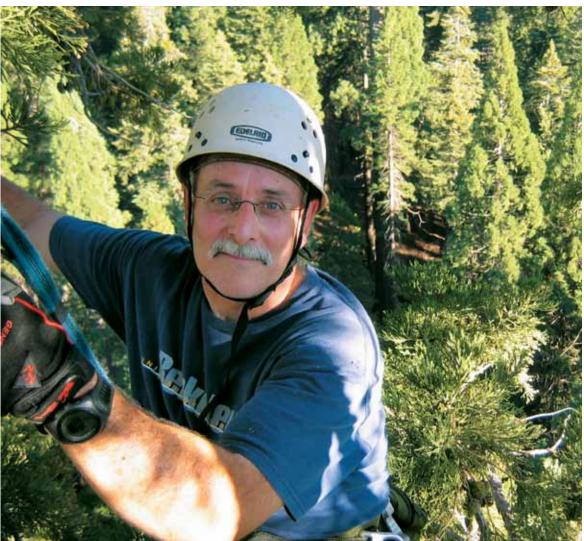
Dawson's 2008-9 League grant will take him and his colleagues to the southern Sierra Nevada, where rising temperatures are shrinking the snow pack, leaving less water for vegetation in the summer. They'll be studying the inner workings of three giant sequoias near Kings Canyon National Park.

From lofty perches, the researchers will study how the trees take in water from the soil and carbon dioxide from the air. Then they'll compare how different microclimates and the form of the trees—including the number, length, and height of branches—affect these and other functions. The research will help determine what the trees need to thrive and how damaged forests might be restored. Read about possible solutions to save giant sequoias facing climate change. Learn about other threats to the giant trees, Dawson's other redwood research and what motivates him. Visit savetheredwoods.org/ climate_change.

Todd Dawson, a plant physiologist and ecologist at the University of California, Berkeley, studies in the redwood canopy with the support of a research grant from Save the Redwoods League.

Share Your Memories of Favorite Redwood Trips

Thank you to all Save the Redwoods League members who recently shared their favorite redwood parks. To share your memories, please e-mail them with "Redwood Trips" in the subject line to memories@savetheredwoods.org, or send them in the attached envelope. Please include your full name. We may want to share your memories in a League publication. If you would prefer that we not share your story, please let us know.



Researcher Todd Dawson

2008-9 Research Program Grantees

Save the Redwoods League in January 2009 awarded the following research grants totaling more than \$96,000 to advance general understanding of redwoods, their environments and their related communities of organisms. This research will help determine what the trees need to thrive and how damaged forests may be restored. The Research Grants Program has made these annual grants since 1997 to a variety of scientists.

• Linking Structure and Function in Giant Sequoia Trees, Todd Dawson, University of California, Berkeley (UCB)

- Redwoods Mortality and Sprouting Response to Summer 2008 Fires, Kevin O'Hara, UCB
- Insect Diversity and Niche Specialization in Giant Sequoias, Patricia Raggio, California Department of Parks and Recreation, Central Valley District
- Barred Owl and Spotted Owl Resource Selection in Coast Redwood Forests, Kristin Schmidt, Redwood National and State Parks
- Effects of Forest Restoration on Mesocarnivores in the

Redwood Region, Keith Slauson, Redwood Sciences Laboratory, USDA Forest Service

- Long-Term Dynamics
 Following Fuel Reduction
 Treatments in a Giant
 Sequoia-Mixed Conifer Forest,
 Scott Stephens, UCB
- Evaluating the Importance of Redwood Forests as Wintering and Mating Habitat for a Continental Migrant: The Silver-Haired Bat, Theodore Weller, Redwood Sciences Laboratory, USDA Forest Service

Community

A Family Tradition of League Support



Many people say they love redwoods. But for Charlotte Cranmer, the redwoods are a necessity in her life. The compelling reason is that redwoods have been an important part of her family's heritage for almost 150 years. Her great-grandfather, William Lord, an 1860s gold miner, built a home that still stands in Arcata, California, in the heart of rugged redwood country. Cranmer's grandparents, Oscar and Lottie Lord of nearby Eureka, were active League members from the 1920s to the 1950s, and her mother, Miriam Lord Marks, also was a League member.

Now Cranmer supports Save the Redwoods League, along with her husband, Thurston Womack, a retired professor. The two were widowers when they re-met at a 1998 Save the Redwoods reception. Until that reception, they had not seen each other since she was his journalism student at Humboldt State University in the 1950s. They were married in 2001.

"Our mission is the same as the League's," she said, referring to herself and Womack. "We must preserve the redwoods."

The couple has supported the League and its mission in many ways: They dedicated the Lord Family Grove in Humboldt Redwoods State Park. They continue to encourage younger generations in and outside of their families to protect redwoods. And they have supported our largest acquisition, 25,000-acre Mill Creek forest, a former logging site that we and our partners are restoring (see Mill Creek-related story, "Save Redwoods, Save Fish from Extinction," on page 4). Progress in the Mill Creek restoration is especially gratifying, Cranmer said, because she can see the forest healing.

"Our mission is the same as that of the League," she said, "We *must* preserve the redwoods." *****

Charlotte Cranmer and Thurston Womack (above) are longtime members of Save the Redwoods League.

5 Ways You Can Help Save Redwoods

DONATE

to Save the

Redwoods

League.

PLAN

an estate gift

for Save the

Redwoods

League.

TALK

to your friends about the League's work. VISIT

the redwood forest with friends and family.

EXPLORE

volunteer opportunities in redwood parks.

To learn more, visit savetheredwoods.org/help or call us at (888) 836-0005.

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Memories of Favorite Redwood Parks

Last year I went to the Rockefeller old-growth forest in Humboldt Redwoods State Park. It was late in the season. No one else was there that day—just me. Walking, pausing and reflecting among those magnificent giants was a truly uplifting spiritual experience. I shall return for more.

-Edward, member since 1983

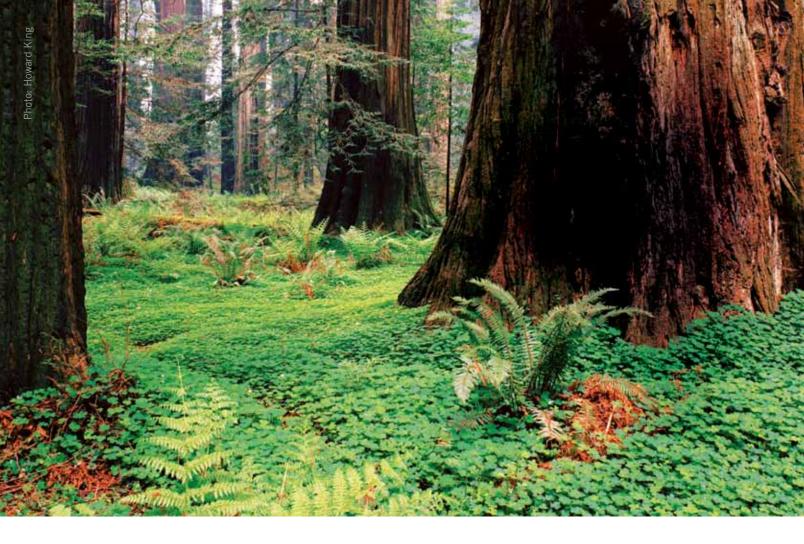
Onto the Trail

Muir Woods National Monument

"We moved to the S.F. Bay Area in the early '80s, during a recession. We were struggling to find jobs and a place to live. My husband suggested a drive up the coast to give ourselves a break, and we ended up at Muir Woods. It was so quiet and beautiful there—we were amazed at the majesty of the redwood trees. The experience was so soothing. It renewed our belief that we would be OK. We were. We lived there for 20 years."

– Loa, Member since 2000







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