

“Thinking Long-Term: Why We Should Bring Back Redwood Forests” by John Reid was published on the YaleEnvironment 350 website on September 25, 2023.

Humboldt Sawmill Company found a number of comments that would benefit from additional correction, clarification or commentary which are presented on the right side of the page in green italics.

Substantial factual information on Mendocino and Humboldt Redwood forests and its practices are available at www.mendoco.com.

<p>Text of Article <i>Text of article begins below, spaces placed to allow facts to line up with text of article.</i></p>	<p><i>Humboldt Sawmill Company Facts, Corrections, Clarifications, and Commentary</i></p>
<p>[BEGINNING OF ARTICLE BELOW]</p>	<p><i>Humboldt Redwood Company (HRC) was created in 2008 from lands purchased in Humboldt county with the publicly declared mission to be good stewards of the forest and at the same time run a successful business. We have made significant progress in that regard:</i></p> <ol style="list-style-type: none"><i>1. Adopting policies to make HRCs forestlands FSC® (C031337) certified (since 2009);</i><i>2. Adding more than <u>1 billion board feet</u> of redwood and Douglas fir trees by lowering the rate of harvest;</i><i>3. Defining of old growth down to the level of an individual tree, along with implementation of a policy to protect all individual old growth trees across our property;</i><i>4. Elimination of traditional clear cutting from our property;</i><i>5. Long term investments to improve habitat for fish across the property by controlling or holding back more than 525,000 cubic yards of sediment (more than 52,000 dump trucks of dirt) from the coastal streams flowing through our forest;</i><i>6. Stormproofing approximately 800 miles of forest roads on our ownership.</i>

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Lyndon Johnson signed the bill that established the Redwood National Park in California 55 years ago. It was a long time coming, with proposals blocked in the 1920s, 30s, and 40s by an industry that was beavering through the most valuable timberlands on the planet. When the National Park Service recommended a park again in 1964, bipartisan support in the Senate, a nod from President Johnson and, I believe, the trees' own power to inspire eventually got a deal through Congress.

The national park was not the first redwood park. Several small California state parks had been created decades earlier. But it was the first from which most of the old growth had already been removed. Created in two phases, in 1968 and 1978, 75 percent of our national park had been razed. Overall, the public owns over 100,000 acres of injured, young forest on federal and state land. Land managers are trying to actively nurture some of them into new old growth. Tactics include one-time thinning of dense stands, prescribed fire, closing roads, dropping trees in streams to make salmon-friendly pools, ongoing selective logging to favor a few large trees, and just leaving the forests alone.

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7. *Operating as an open and transparent business; including an open invitation to take interested individuals anywhere in the forest;*
8. *Completing a substantial rebuild of our Scotia sawmill, assuring that Humboldt County will have infrastructure in the processing of wood products for many years to come; and*
9. *Employing more than 300 employees contributing a payroll of more than \$23 million and another \$75 million paid for contractors, supplies and raw material purchases flowing through the local economy*

Humboldt Redwood Company was established on the premise it is possible to manage our forest with a high level of environmental stewardship while operating a successful business. This entails all the "tactics" described in the article. We actively thin our forests for sustainable forest products while reducing excess fuels that will contribute to the intensity of a wildfire event. Prescribed fire is being used to a greater extent with newly passed laws encouraging this practice. We have over 3,000 acres of old growth retained on our ownership and as per our old growth policy we protect these stands down

Restoration has drawn recent attention and picked up momentum with the launch of Redwoods Rising, an ambitious recovery program. Operations began in 2020 and have been gaining urgency, as the impacts of climate change have become a part of everyday life in the region, and a growing body of science has shown that old-growth redwoods store more aboveground carbon than any forest on Earth, up 2,600 tons per hectare. That’s three to five times as much as even the oldest secondary forests. “The only vegetation that grows faster is sorghum and sugarcane,” says University of Washington scientist Robert Van Pelt.

But a redwood forest still takes a long time to grow, and, in an era when short-term thinking threatens the very livability of our planet, it’s extraordinary that people are investing careers and great sums of money in these projects. Redwoods get big after a few hundred years but take much longer to develop their most unique features, such as dazzling canopy gardens of ferns, berry bushes, small trees, and fauna normally found on the forest floor. Van Pelt and colleagues point out that in a bona fide old-growth ecosystem some of the trees are old enough to fall over and decompose, forming “a silvatic mosaic much older than its oldest trees.”

While redwood forest restoration is largely a gift to the distant future, some life comes back quickly. Ben Blom, director of stewardship and restoration for Save the Redwoods League, says that coho salmon can reappear a year after roads are repaired and stop bleeding sediment into creeks. The response can be equally swift as sunlight returns to the floor of a thinned forest, diversifying understory plants.

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to the individual tree (<https://www.hrcllc.com/old-growth>). We have also been involved for several years in projects placing logs in streams for salmonid habitat improvements as well as other aquatic habitat projects (<https://www.youtube.com/watch?v=nhYcKI1Qe74>).

Long term investments to improve habitat for fish across the HRC property includes controlling or holding back more than 525,000 cubic yards of sediment (more than 52,000 dump trucks of dirt) from the coastal streams flowing through our forest. These investments have also upgraded over 800 miles of roads to a “storm proofed” condition

Unfortunately, these laudable recovery efforts are currently confined, like the old growth, to tiny islands scattered within a battered forest landscape. Redwoods Rising, a partnership between the Redwood National and State Parks and the Save the Redwoods League, reaches just 600 acres annually. The ancient redwood forest once occupied 2 million acres of fog-bathed coastal hills, from central California to the Oregon border. Of that, around 400,000 acres of land have been paved, urbanized, and otherwise irrevocably converted. Of the remaining 1.6 million acres still growing trees, only 5 percent has never been logged and contains the iconic forest giants, the tallest trees on the planet. Over 75 percent of redwood lands are privately owned and, in general, logged repeatedly. Trees that can live 2,000 years are cut after just a few decades of life.

California and the country should bring back a redwood landscape, not just groves. Save the Redwoods League calls for protection and restoration of 800,000 acres, representing half the remaining 1.6 million. They estimate that over 300,000 acres are already in some sort of conservation status, so an additional 500,000 acres need protection. We should do it. As experts noted in the respected scientific tome, *The Redwood Forest*, "Ultimately, only within intact ecosystems will the redwoods endure." Big, unbroken redwood forests, they explained, would be resilient to climate change; cover diverse habitats; and provide space for species with large ranges, like rare Pacific fisher and Humboldt marten. Large reserves also secure the headwaters of rivers where salmon will hopefully once again spawn in huge numbers, delivering crucial pulses of oceanic protein to the forest.

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entailing the upgrading and decommissioning of over 2,200 stream crossings of roads.

HRC sustainably manages its forest in compliance with a Habitat Conservation Plan (HCP). Under the protections provided by the HCP, marbled murrelets continue to nest in the Marbled Murrelet Conservation Areas (MMCA), a system of reserves made up of the largest redwood old growth forest stands on HRC lands. Second growth included in the MMCA is expected to develop old growth structure over time and will provide additional habitat for murrelets, spotted owls, Pacific fisher, and other species. Similarly, the large riparian buffers are designed to provide tree canopy over streams for

Big redwood trees hold carbon better than small ones because they have a higher proportion of rot-resistant heartwood. Big forests hold carbon better than small ones because their interiors are protected from wind and fire and stay connected to water sources. “If you drive down the Avenue of the Giants, you see almost every tree has a dead top,” said Van Pelt, referring to the “beauty strip” of ancient redwoods, protected in the mid-20th century along 31 miles of Highway 101 to hide clearcuts from passing motorists.

While the carbon and biodiversity scorecards validate the idea of regrowing a big old growth forest, it is arguably even more important as an ethical reversal of the widespread destruction and often token conservation measures that have marked the first 180 years of non-Indigenous occupation of the region.

Recovery needn’t preclude logging. One recent morning Mark Andre, a forester who manages the city of Arcata’s Community Forest, met me on a suburban street where dogs and their walkers issued from cars. A ponytailed elder in yellow sneakers leading an ancient golden retriever greeted Andre as we walked into an area that was selectively logged in 2012. I couldn’t tell. It was one of the most sublime forests I’ve seen outside the old growth. Very large trees arrowed up into the fog out of a steep canyon. Sword ferns and huckleberries crowded their trunks, and a red-breasted nuthatch offered its squeeze-toy call into the otherwise hushed woods.

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maintenance of cool water temperatures, filter strip properties, and abundant large wood for protection and enhancement of salmonid habitat. Management of these buffers over time will increase the amount of old forest characteristics along these streams. In addition, the HCP provides protections for the bald eagle, peregrine falcon, western snowy plover, bank swallow, red tree vole, amphibians and reptiles, and rare plants.

From our inception we have encouraged transparency and we have a publicly stated policy of taking anyone to anywhere on the property to see our practices firsthand. If you are unable to make the trip you may find videos of our activities in the forest at <https://www.hrcllc.com/videos>

Please contact HRC through our website to arrange for a tour. You can find more information at www.mendoco.com

“We’re monkeying with it to make it more like old growth, but it’s still not the same. It has maybe a couple hundred years to go,” Andre explained. The city’s forest was clearcut over 100 years ago. Trees have grown back vigorously. The only thing missing two centuries from now, says Andre, will be the massive fallen logs of Van Pelt’s “silvatic mosaic.” To thin the forest, since the 1980s, Arcata has cut enough redwood to build a deck the size of 200 soccer fields. The city’s environmentally vigilant public supports the harvest because its ultimate aim is to recreate a primeval forest.

Arcata Community Forest is a cozy 2,500 acres, but Andre said it could scale. “I don’t see a maximum for this style of management.” He cited many other local governments and Native American tribes doing it. The Yurok are California’s largest tribe and live in the heart of the redwoods along the Klamath River. They have been steadily re-acquiring their ancestral lands and now manage 70,000 acres for timber, traditional foods such as acorns and hazelnuts, basket making supplies, old trees, and the salmon that are seen as kin.

Still, the 75 percent of redwood lands in corporate hands are an impediment to healing half the forest. Even those certified as sustainable by the Forest Stewardship Council are never going to grow old. I asked Save the Redwoods CEO Sam Hodder what the league’s strategy is to overcome this obstacle. “Be ready,” he said, when willing sellers come along. Unfortunately, he added, the big redwood timber companies aren’t willing because they’re making too much money.

The timber companies weren’t willing in 1968 either. They lobbied Congress to drop the park while cutting its ancient trees as fast as possible.

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Certification through the Forest Stewardship Council® is an important component of our business. It is also important to ensuring we are achieving ecological restoration goals. The standards for FSC® (C031337) were established by leading environmental organizations and include specific protections for old growth. HRC performance against FSC® (C031337) standards is audited annually by a third party and the reports are publicly available here:

<https://www.hrcllc.com/certification-reports>

A last-minute “legislative taking” amendment slipped into the bill by Senate staff was needed to immediately stop the logging. When companies are unwilling, that’s what eminent domain is for. And while it’s true that large industrial holdings are better for nature than a landscape of ranchettes with fences, driveways, and houses, it’s also true that redwood companies already have real estate divisions with catchy names like getredwoodland.com selling off parcels.

Financially, the battered redwood lands of Northern California are well within our means. In 1998, San Francisco’s prominent Fisher family bought 235,000 acres for \$200 million to form the Mendocino Redwood Company. That’s \$375 million in today’s money. A deal that good is probably not available today, but adding a half million public acres should be doable for a sum in the low billions. Between 1993 and 2020, Californians approved 32 bond issues with an average price tag of \$5 billion. An ambitious conservation plan that melds science, culture, economics, and local knowledge could open our wallets for trees that will pay back in many ways for a very long time.

Headwaters Forest Reserve is an area of 7,742 acres set aside in 1999 near the city of Eureka in Humboldt County. It holds the last major chunk of redwood old growth saved, 3,088 acres. Like the national park, it’s less than half unlogged forest. Unlike the national park and nearly every other redwood preserve, its parking lot isn’t right next to the big trees. To reach them you walk three miles through a pleasant secondary forest of maples, hazel, alders, stinging nettle, and tall redwoods regrowing along Elk Creek.

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Occasionally, HRC buys and sells forestlands in alignment with our objective to manage to a high environmental standard while simultaneously operating as a successful business. Currently on our website we have five small parcels for sale that total 1,300 acres, 0.3% of the 440,000 acres owned.

The next two miles switchback up through more new redwoods growing around massive spectral stumps.

Then, high on the slope, there are big trees — impossibly big — standing about on the sides of small valleys and in their bowls. The beginning of the old growth is like a threshold between beauty and magic. The giants make time visible. Which makes me think a thousand years forward. If an entire landscape of this should exist in the year 3023, students of our culture may be tempted to conclude that, in our time, forests were sacred.

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- 7. Operating as an open and transparent business; including an open invitation to take interested individuals anywhere in the forest;*
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County will have infrastructure in the processing of wood products for many years to come; and

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HRC and MRC is regulated by seven (7) state and federal agencies, including CalFire. Additionally, HRC and MRC voluntarily subjects themselves to third part verification of forest practices under the guidelines of the Forest Stewardship Council® FSC® (C031337) and has done so since 2009. We publish our inventory and many other details of our forest management on our website. It is straightforward to find information on our management of the forest.

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