UC Merced

The Vernal Pool

Title

Limitless Giants

Permalink https://escholarship.org/uc/item/8719w5qb

Journal The Vernal Pool, 4(2)

Author Garibay, Xotchitl

Publication Date 2018

DOI 10.5070/V342038770

Copyright Information

Copyright 2018 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at https://creativecommons.org/licenses/by-nc-nd/4.0/

Peer reviewed|Undergraduate

Limitless Giants By Xotchitl Garibay

"The soft breeze brushes softly against the sturdy branches which are attached to the towering red giant. Only the birds can reach the top and hide among its green leaves. At the end of each branch rests the cones who act as cradles to the developing seeds. The branch holds tightly onto their cradles until one day it grows so big and strong that it cannot longer hold on and have to them let go. On its way down, the seeds begin to spiral out and leave for their own adventure. But only those that manage to escape are able to begin their lives while the other seeds remain inside the cone. The ones that remain inside over time can escape when a gentle breeze pushes the cone around or an animal scurry by and crushes the cone open. Once this happens then the seeds are finally able to become what they have been destined for: to be the tallest sequoia tree they can be."

"What happens next, Xotchitl?"

His voice echoes into my ear, so full of life, reminding me where we are sitting. It was his first trip to Yosemite National Park, a cold November morning with a heavily clouded sky not giving the sun a chance to pierce through its murky veil. We are sitting near the foot of a tree as the other members of our party are using the restroom before venturing out to the waterfalls.

"Well, Eddie, in order for a seed to start growing, something has to happen first. While they search around the ground for a place to make their new home, something scary happens. On a stormy day where thunder can be heard in the distance, all the animals begin to seek shelter from the rain, but also from what rain brings: lightning."

Little by little the members of our party join us, their arms wrapping tightly around their bodies to retain whatever heat they could. As Eddie and I rise to our feet, his small hand, protected by his Spiderman mittens, reaches for mine while my brother Tito takes off to the trailhead leaving the rest of us to catch up to him.

"My teacher said that lighting is a very scary light with electricity. Are the seeds scared of the lighting?"

His eyes are filled with anticipation as we walk the short distance to Bridalveil Fall from the restrooms. The wind has begun to pick up quite a bit as it moves about debris that had been left by the countless amount of people who walked the same trail to the same view every hour of every day of the year. It is a shame to see such natural beauty desecrated by man's inability to carry trash and dispose of it properly.

"Well, with lighting, when it strikes, can cause a fire. Since for a long time we have been trying to prevent fires, there has been more plants than ever which are taking up water from each other and making it a lot harder to survive. This loop is usually stopped by fires. So while fires may be scary and can kill, we still need them and so do the sequoia trees and its seeds. When lighting strikes a dead tree and causes the fire, the seeds are not afraid. Instead they are happy because to them, the fire is like a big warm blanket that surrounds the seed. The official term for this is called germination, and what it does is when the blanket wraps around the seed, it breaks open its tough shell so that the seed can bury itself into the ground and sprout its roots."

As we reach the base of the first waterfall we are greeted with a lingering amount of people. The water gushing forward created a mist that coated our party, soaking our top layers and causing the small formations of puddles. Without looking, he steps in one and almost slips. Luckily since I still held his hand, he avoided a collusion into the slippery, shimmering rock pavement.

"So fire is not bad it is actually a good thing, right?"

His face revealed how he was trying to process this new information, the small gears ticking inside of his head.

"That is exactly right. Fire may be scary but the plants need it to clear out undergrowth so that they can get sun and water from rain can reach the roots," I explain as we walk back to the car.

We had seen the waterfall, the first one he had ever seen, but I knew it was nothing in size compared to the one we were heading to next: Yosemite Falls. While we try to navigate the new traffic patterns in the Valley, we pass by Ahwahnee Meadow and what remains of the prescribed burn around mid-September.

Turning to Eddie, I explain, "Did you know that these natural fires burned thousands of acres a year? Well for a long time these fires were put out and a lot of plants that grew by the trees which is known as undergrowth, which meant that those plants were taking all the water away from the trees. So, the Yosemite Fire Management Program decided to make fires on purpose to get rid of the extra plants, so the trees can get water. The American Indians used to do this too because with fire. It recycles nutrients into the soil which encourages the germination and regrowth of plants, shrubs and trees. That why it looks like there was a big fire over there, but it was on purpose."

We finally managed to secure a parking spot at the Yosemite Valley Lodge and as we began to file out, we noticed how the clouds were lazily inching closer to the ground. It was only a matter of time when they reached us and brought along the muchneeded rainfall.

Walking side by side amongst the hordes of people and their chattering teeth, he looks up and asks, "so what happens after the fire, is there other bad things that happen to it?"

I chuckle as I try to retain my own body heat which was escaping in short breaths like smoke signals from a fire.

"Well, just like when we grow up to be adults, sequoia trees have it hard to. There has been a big drought going on for a long time in California and because of it, a lot of trees have died. But along with the drought, there are these other bugs that eat trees from the inside and they are called bark beetles. The trees need water, so they can grow and make a...force field that is called sap. This sap runs just underneath the tree bark and traps bugs from eating and killing it from the inside." He perks up and asks, "Like cancer?"

Chuckling I respond, "Sure you can think of it that way. Now, the reason the drought is such a big thing is if there is not enough water then the trees can't make sap, meaning the bugs can kill it even faster, just like cancer when it is not properly treated. The sicker it gets, the faster it will die."

As we begin to enter the trailhead to Lower Yosemite Falls, we come across a mother doe and her two fawns munching on the barely visible flora behind the wooden fence with signs stating restoration in progress. He had never seen such an amazing creature up close and he grabbed Cachus's phone to take a video of the magnificent creatures. As they begin to leave and take shelter from the coming change in weather, he joins me by my side showing off ecstatically his footage.

Taking my hand, we begin to walk on the trail when he looks up and asks, "Do you think the deer hide in the sequoia trees like the squirrels do?"

Smiling, I shake my head and respond, "I don't think they climb up trees like that but if anything, they might try to hide in the sequoia trees that have fallen and hallowed out." By now we are passing by the old saw mill.

Turning to him, I smile and point out the mill, "See that over there, that's where they used to cut trees like the sequoia trees to make stuff from. But the thing about sequoia trees is that their wood is not very good to make furniture, so they used to make it toothpicks and pencils out of it. It is sad though because, so many people cut these trees down and did not know this. So, before Yosemite was protected by the President, people put railroad tracks to take the lumber out. With much easier way of transporting such heavy things, the number of sequoia tress really started to get smaller."

We had finally reached the base of the highest measured waterfall in North America, Yosemite Falls. Unlike most days during the summer, which was littered with people avoiding the warnings of injury and possible death for climbing over the rocks to get closer to the water, today was calmer with people obeying the signs for once. The falls which was a small stream like a leaky faucet only mere weeks ago had once more claimed its title in full force. Awestruck, Eddie had been absorbed by the natural world around him. And little by little the rain began. Surrounding the Valley, the clouds where only feet above our heads and the rain was not far away from becoming snow. Placing my hands on his shoulder, he maintains his gaze on the flowing beauties as a shudder runs down his spine and I could not tell if it was either from the suddenly colder weather or from acknowledging his size in comparison to the falls.

"Do sequoia trees ever grow that big?" he asks.

I shrug and respond, "I am not too sure. We have cut so many of them down that we don't really know how big they can truly grow up to be."

By this time, we begin to get ready to return to the car and the rain had begun to turn to sleet.

He looks back up to me with a sad expression and asks, "if the snow comes and makes all the animals go away, does the sequoia tree get very lonely?"

The moment we climbed back into the car, the ice had turned to snow. Eddie could not keep his face off the window, his first time being able to not just see snow but seeing it fall and cover the ground for the first time is an experience not many get especially for those who have lived their entire lives in sunny southern California. As my father attempts to navigate us out of the Valley with no snow tires or tire chains on, all that is left is to continue my story.

"The seeds have come a long way, from fire to bark beetles to being cut down to winter. Not all of them get to live long but those that are able to survive only grow bigger and taller. There are not many sequoia trees left in Yosemite but slowly they will come back. So now, no matter what happens, rain, sun, snow or fire, the trees will always keep growing. When will they stop, nobody knows because for them, the sky is literally the limit."

"Can we come back to see one of them? One of the really, really, really big ones?"

"Sure. I think they would be very happy to meet you."