## THE SEQUOIA SUN

Sequoia National Park, California

29 August 2015



Stephen Stock celebrates our successful hike to the shattered granite cirque that holds Heather Lake in the high Sierra of Sequoia National Park.



Heather Lake is fed by melting snow at 9,200 feet above sea level in the Sierra Nevada, so she's clearly wearing a fur bikini.

## A Walk Back to the Ice Age

There are hundreds – maybe thousands – of tarns like Sequoia National Park's Heather Lake in the high Sierra.

They are the legacy of the Sierra's ice ages centuries ago. Rivers of solid ice hundreds to thousands of feet deep crept down the mountainsides, scouring the landscape down to bedrock, carving V-shaped river valleys into deep U-shaped chasms with vertical walls and leaving piles of granite debris sometimes hundreds of feet high when they melted away.

In semicircular mountainside depressions called cirques, years of heavy snow piled up and was pressed into ice under the weight of new snow to create the glaciers. The tarns continue to be replenished by snow melt today.

They are the source of the majority of the rivers that flow down from the Sierra and irrigate California's massive Central Valley, which produces nearly a tenth of agricultural wealth of the entire United States from less than 1 percent

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## A Walk Back to the Ice Age

 Continued from previous page of the nation's farmland.

A couple of months ago, when Emily and I turned back on our Fourth of July hike to Heather Lake, we were, in a sense, following California's water story.

Yesterday, Stephen Stock (a television reporter friend I first wrote about here: <a href="http://bit.ly/1JFXerq">http://bit.ly/1JFXerq</a>) and I returned to the Lakes Trail and made it all the way to our goal, the first of three cirques whose glaciers merged about 9,000 feet up in the mountains and carved what today is the Tokopah Valley.

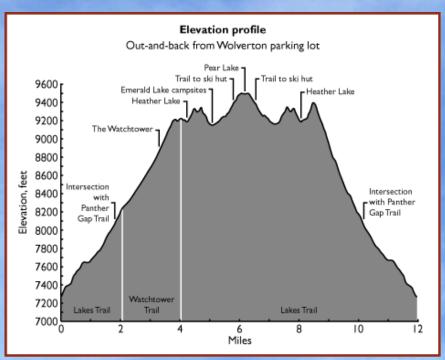
The valley floor, at 7,000 feet, holds the Marble Fork of the Kaweah River.

Some of the water that disappeared with the glaciers flowed into tributaries of the San Joaquin River, which empties into the Pacific through San Francisco Bay. Some soaked into the ground beneath the Central Valley to fill its aquifers.

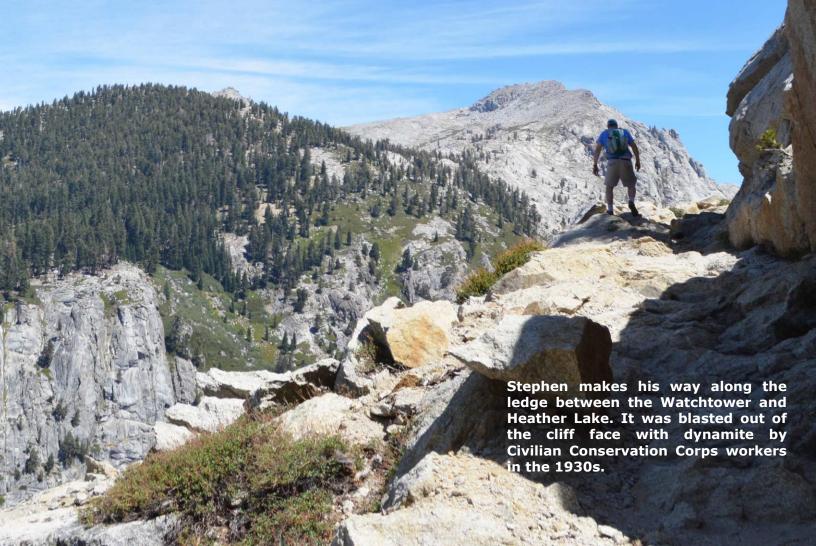
Today the San Joaquin makes it only occasionally to the ocean because so much of its water is diverted to agriculture and the state's thirsty people. Wells have tapped the aquifers and so much water is pumped out each year that the valley floor is sinking an inch per month in some places.

What took centuries to create is being depleted in decades, and there is no plan to restore what has been lost.





This profile of the Lakes Trail shows the roundtrip from Wolverton to Pear Lake, the last of the three tarns. Stephen and I went only as far as Heather Lake, 4.1 miles one way with an outbound climb of about 1,900 feet. The ledge on this page runs from the Watchtower to the 4-mile mark





Stephen's shot of the bear we encountered, above, and my photo of the bear and cub that Emily and I saw in June at a different place on the trail. Stephen shot video of our hike that you can see at <a href="http://youtu.be/0ZCgnRSdXIA">http://youtu.be/0ZCgnRSdXIA</a>

## We could've been a lunch break

We were moving through a dark section of forest. It reminded me of the where Dorothy, the Lion, the Scarecrow and the Tin Man were when they spotted the flying monkeys in the sky.

I was walking in the lead past a huge, dark pine on my uphill right side when a pine cone skittered across the trail in front of me.

Stephen said something about a squirrel taunting us, and I made a wise-ass reply about how the squirrel knew he was federally protected.

Then I heard Stephen snap his



fingers and half-whisper, halfshout "Jody!" I knew immediately it was a bear.

When I turned around, Stephen was digging for his camera and pointing.

The bear clearly had dislodged the pine cone. She had been waiting above us until we passed and was sauntering down the slope unconcerned.

I say "she" because when she

paused at one point in a patch of sunlight, she had long, straight fur on her back that was shaggy on her belly.

Her reddish brown coloring was like polished wood furniture, the same as the bear Emily and I saw at a different place on this trail two months ago.

We didn't see a cub, but a group behind us did see a cub a bit later that moved down the hill along her same route.