## Give em an inch

Garnett Creek is about 6 miles long, a relatively small tributary of the upper Napa River. (The Napa River travels the length of the Napa Valley, in Napa County, CA.) The creek has two branches, one originates in the N end of the plateau called The Palisades, behind Table Rock. A shorter branch originates at the N end of the facade of the rock escarpment called The Palisades. Our property is bisected by Garnett Creek just about 2+ miles down from the watershed ridge. I have spent considerable time in the creekbed at all times of the year and enjoy experiencing its many moods and appearances.

For most of the summer and fall, Garnett Creek is dry except at seepage pools which are rare. In the winter and spring its flow can be great or absent, depending on rainfall frequency and amounts. It has been interesting to see what it takes to get the water flowing.

At the end of the dry season, it usually takes 3 to 4 inches of rain in a short period of time (a few days) to recharge the creekbed and have obvious flow through our property.


Dec. 1109 , showing dry creekbed after only $0.2^{\prime \prime}$ of rain that day.
Because it takes percipitation to keep the system flowing, during long dry periods - such as are common before the New Year, the water often disappears after about 2 weeks of decreasing flow. But it is clear the water does linger underground because it may take only o.3" afterward to get it flowing again.


Dec 1209 after 1 " of rain, creek is now actively flowing.
The watershed does benefit from several factors that tend to exaggerate the rainfall. The ridge is nearly 1,500 ' + feet higher than our house, thus the clouds have to lift to get over them and often drop moisture. Most of the upper watershed is hard volcanic rocks with only shallow soil or gravel pockets, thus what rain falls, typically quickly sheets off and down the creek. And importantly, the upper watershed is dominated by knobcone pine, Pinus attenuata, in thick stands. Knobcone pine, as with many conifers, is very effective at turning aerial moisture into dripping water, thus even a thick cloud-cover on the ridge can produce "rain".

So it is very likely - although I don't have any proof - that the actual rainfall, or precipitation reaching the ground in the headwater zone could be double, or more, what my rain gauge records at my house. At least twice, when there had been barely measurable rain in my gauge, the creek has mysteriously come back to a low flow - and the water has to come from somewhere.


Closer view Dec 11th


Same view next morning.

The transformation seems almost miraculous. There is nothing unattractive about the dry creekbed, but the look and sound of flowing water is another dimension to the landscape, and one that we crave. Almost by definition, the presence of life on Earth is inextricably tied to water, thus it seems no great surprise that we get so much pleasure from the sound of it. We need it, we can not survive without it.


California polypody fern, Polypodium californicum, on bluff above a small waterfall at the N end of our property along Garnett Creek
. While the fronds of this fern are present for about 6 months, it is never lovelier than when freshened by rain.

I always cheer when it rains - although I don't enjoy being damp or chilled - because it is almost invariably good for both the garden and natural areas. It kicks into gear the whole chain of life that burgeons into springtime and then sears into summer and fall. It revives the creeks and makes a music all too rare in our predominantly arid climate.


One of today's rainbows across the canyon.
I can complain with the best of them, but I often feel a little anger when I hear folks moan and whine about the rain, especially newscasters who exaggerate the supposed misery. We couldn't be here without it.

