MATT BULT

Wawona Dome - Yosemite, 2002 Acrylic on Canvas, 24 x 24 in



DALE PENDELL

Tracing the Pluton

Discovering history in the rock layers of the Sierra

I. The Smell of Freshly Broken Rock

he rock was so hard that my first two blows had bounced off and my ears were ringing from the impact. I put down my rock pick and walked to the toolshed and pulled out my heaviest single jack. The sample wasn't even that big—fist sized, pale and rounded, and slightly oblate. It was from the Yuba River, in the northern Sierra.

I wore gloves and safety goggles, cradled the sample into a depression in the exposed bedrock, and then swung with both hands. It cracked, and small pieces flew off ten feet in several directions. I should have wrapped it in a cloth. And then I caught the smell.

Every rock has some kind of smell, but it is usually quite faint. A dark-gray rock I had just broken a few minutes before had a cool smell. It was greenish inside and very fine grained, with a frosty look that made me imagine an ancient seafloor. A banded, baseball-sized rock that looked as if it had been made out of soft clay that had been left to settle had a chalky, slightly sour smell. It seemed to be some kind of chert. A rounded beige rock, slightly greenish, had a damp smell, with a hint of wet cardboard: it was dark inside, pyroxenes probably, with no hint of quartz. A piece of phyllite I had broken had an earthy smell. But the smell of this rock, this faintly orange and particularly tough rock, was distinctive.

This rock had a hot, burnt smell, maybe with a touch of ozone, like what one smells around electric trolley cars. Cast iron can have a similar smell, just when it begins to glow, but this was not a smoky smell. It was the smell of a fire locked in rock, a big, hot fire—not the smell of hot lava but the smell of rock at the moment of its birth, when it cooled and crystallized, when high heat was still a fresh memory. And it was a smell I knew and remembered—one of my own earliest memories.

I went to grammar school in eastern San Diego, out near Fifty-Fourth Street, and was allowed to walk home on trails through the canyons. The trails wandered through chaparral: sumac and scrub oak, California sagebrush, California buckwheat, black sage, purple sage, white sage, and a few cacti, including some cholla—I learned the plant names when I was older.

In the 1950s the canyons were still pretty wild: owls,