

Chapter 1

The Smell of Summer

“The trees are so tall and straight,” Dad observed. “How do they grow so straight?” We were driving away from Lake Almanor, among the white firs and ponderosa pines, the occasional massive sugar pine, with its ridiculously oversized cones (how could any squirrel resist that super-stimulus?). Dad was 86, and had grown forgetful—but only of recent events and circumstances; his long-term memory was in full gear and active. And he retained a childlike sense of wonder, of keen interest, about the natural world. Some of this stemmed from his background as a scientist, his long career (38 years) as a chemical engineer for Standard Oil/Chevron. A lifelong interest in science, fed further by his “second career”: fifteen years as a middle school science teacher. He had never taken biology courses when in school himself, and he had thoroughly enjoyed the challenge of understanding life science enough to teach it to seventh graders. But he still relied on me, a wildlife biologist, to answer biological questions. Such as why conifer trees grew so straight and tall.

Now, I’m no botanist (which is why, as a wildlife biologist, I hired botanists to do botanist stuff), but I told him evolution was certainly at play here: it was a race to the top for these trees, a race to the light that was at the top of the crowded conifer forest. Light was everything. If you want to photosynthesize, you need that light. As I tell MY seventh graders (yes, I, too, have a second career as a middle school science teacher), the sun’s light is the ultimate source of energy here

Tim Coonan

on earth. So evolution placed a premium on getting to that light, and conifers grow tall and straight, at least in these crowded mixed conifer forests, full of competitors, in order to get up there. No doubt aided by certain plant hormones, but I didn't get into that. We'd stick with ultimate causes for now.

Dad thoroughly enjoyed the drive through the tall trees, both to and from Lake Almanor, and so did I. It had been fifty years since Dad first took our family to the lake, in 1971. What began as a typical family lake vacation turned into something else entirely. Our return trips (not annual by any means, with gaps even of decades) turned Almanor into a sacred family place. A happy place. We all have those. And for me, especially—as well as for my brother Dan—Almanor is one of those happy places. Almanor, for me, taps into my love of earth's natural beauty, and its biological richness and diversity. And trees.

I love conifers, in particular, the ponderosa pine. Now, I don't really know why this is so. Why does ANYONE take a shine to one thing or another, hold it in high regard, accord it status? Can't say. But ponderosas do it for me. Flagstaff, where I did my master's work, was surrounded by ponderosas, and that's where I attached nestboxes to ponderosas in order to attract and study American kestrels (North America's smallest falcon). And I HAVE to see big trees at least once a year. Lately this has been the annual trip to Lake Almanor.

One thing I love is that a ponderosa pine forest is the smell of summer, for me. Now, there are many things that smell of summer. Salt air. Coconut-scented sunscreen. Campfires. Even insect repellent—you know you're somewhere slightly wild when you smell DEET. But there's nothing like the smell of a pine forest in the summer. The sun's rays, filtered through the pine needle canopy, warm the boles of the trees enough for them to release terpenes. Being a chemical engineer, and cracking hydrocarbons all his career, my dad knows what terpenes are: they're hydrocarbons that,

Lake Effect

when volatilized (gassed up) smell pretty good. Like fruity, heady aromas. Stick your nose in a furrow between bark pieces of a pine tree in the summer, and breathe in. You'll smell butterscotch or vanilla, maybe even something more exotic. And on a really warm summer day in a pine forest, you don't even need to stick your nose in the bark; the faint smell wafts through the forest itself. It's the smell of summer in the high country, and I'm somewhat addicted to it. It's one thing I look forward to on our now-pretty-much-annual Almanor trip.

However, things change, as much as I would like them to stay the same, and the change is not always for the better. These days the smell of the high country is something other than pine trees releasing butterscotch and vanilla terpenes. It's now the smell of pine trees burning. It's the smell of wild-fire.



Pines and firs tower above a meadow's edge at Lake Almanor.