

In search of disappearing vernal pools

By Stephanie Taylor, Sacramento Bee

A vanishing and mysterious phenomenon, concentrated on the western alluvial slopes of the Sierra, spans much of California's Great Valley. Vernal pools. We most often hear about vernal pools in relation to the "endangered" fairy shrimp, and I was always slightly annoyed that such a big deal is made over something we can barely see.

In winter, rain collects in shallow depressions of hardpan earth so dense that water can't drain. Every freshwater pool is as unique as a fingerprint, with hundreds of species adapting to precise conditions of its specific environment. An integral element in California's freshwater system, each vernal habitat is like an island, a microcosm that represents our wider ecosystem of interdependence, including specialists and generalists, each with a talent or trick for survival.

Fleeting vernal habitats are easiest to see in the spring. Flowering plants proliferate in concentric rings in a seemingly impossible array of color and pattern. When John Muir walked this valley, he wrote, "Sauntering in any direction my feet would brush about a hundred flowers with every step, as if I were wading in liquid gold."

With summer, the bounty fades in the desiccating heat, and in fall the magic is covered with a sheltering layer of dying matter.

Winter hides what I think are the most fascinating secrets of vernal pools. The land looks barren but softly golden as we drive by. Stop, and an undulating countryside transforms into a surreal fantasy-scape.

At the top of a gentle hill at Rancho Seco Recreation Area, hundreds of fuzzy mounds descend in all directions. These are mima mounds, covered with dead grasses highlighted white in the late afternoon sun. Each casts a shadow over slightly greener, flatter areas that should be filled with water reflecting a huge sky. But most pools are dry now. There's been so little rain.

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