Berkeley's Rock Parks

By Susan Schwartz, President, Friends of Five Creeks

Written for a walk about 2013

Geology: About 11.5 million years ago, volcanoes somewhere south of today's San Jose erupted thick lavas rich in silica, called rhyolites. The period was the late Miocene, a world of generally warm climate and widespread grasslands roamed by grazers including three-toed horses, camels, and pronghorns.

Geologists debate the detailed reasons for these volcanic eruptions, but the overall cause was the same as that of today's earthquakes: the clash of moving plates of the earth's crust. As part of these movements, the cooled lavas were gradually carried north-northwest as the Pacific plate's ground against North America. By about 3 million years ago, the remnants of the dried lava fields had joined a jumble of old and young sediments, volcanics, and scrapings from the Earth's mantle, in the area that now forms the Berkeley Hills. Between 3 and 1 million years ago, pressure between the plates began to tilt the Berkeley Hills upward, while land to the west sank, forming a valley. Earthquakes cracked the rising hills still more. Rain and other erosive forces picked away at the softer rocks. Eventually, hunks of the hard lavas were left standing alone.

These lavas today form most of Berkeley's rock parks – Cragmont, Grotto, Mortar, Indian, Contra Costa, and Great Stone Face, more or less on a southeast-northwest axis. Pinnacle Rock in Remillard Park is different – its reddish rock, from the earth's deep mantle, formed more than 140 million years ago, during the Jurassic, when dinosaurs flourished

At the end of the last Ice Age, 10,000 - 5000 years ago -- a blink of an eye in geologic time -- sea level rose as the huge glaciers melted, forming San Francisco Bay in the valley west of today's hills.

History: Native Americans were already in the area before the Bay reached its present level about 5000 years ago. They were probably already using the rhyolites for grinding. (Chert, the metamorphosed skeletons of silicarich diatoms, was better for cutting.) After gathering seeds and berries from native trees and bushes close at hand, native Americans ground them using "manos" – basically thick pestles, shaped slightly to fit the hand – and either free-standing mortars or hollows in the outcrops. The seeds made, among other foods, acorn flour, a tart drink using manzanita berries, and a nutritious seed cake called locally Pinole (hence the name of the town). Gradually, grinding wor the hollows deeper. You can see these holes at Mortar Rock Park. Other rocks were used ceremonially in ways that we no longer understand. An example is the many tiny chipped-out depressions called "cupules" on a rock in El Cerrito's Canyon Trails Park.

Except for lines of trees in the stream canyons, and some scattered oaks, the hills were grass covered when Europeans came. Native Americans burned these grasslands regularly to promote plants they used for food and basketry.

In 1820, the Spanish crown granted the area from Berkeley to San Leandro to Luis Maria Peralta, who had come to the area with the DeAnza Expedition in 1775 and later governed San Jose. He gave today's Berkeley to his son Domingo, but Gold Rush immigrants overran the rancheros – Domingo died a pauper in 1865. The area of the rocks became a ranch owned by a Nevada senator who had made a fortune from mining. Leased to a Civil War veteran named Benjamin Boswell, the ranch was a popular picnic destination for town dwellers.

In 1902, the area of Grotto, Mortar, India, and Contra Costa Rock parks was bought by the Berkeley Development Company, a partnership of Lewis Titus, Duncan McDuffie, John Spring, and others, who gained control of most of the land surrounding Berkeley. In the boom following the 1906 San Francisco Earthquake, they subdivided the area as Northbrae, with amenities including stone pillars, pink concrete sidewalks, and the rhyolite outcrops set aside as parks. Thus 2007 was the rock parks' 100th anniversary – although the area was then unincorporated, so they did not become Berkeley parks until 1917.

Lewis Titus, also president of Peoples Water Company and the First National Bank of Berkeley, campaigned to move the state capital to Berkeley – specifically to Northbrae. Local streets were named for California counties to boost this effort. The plan passed the Legislature in 1908, but was defeated by popular vote.

Seeing the fast-growing town lose its magnificent open spaces, many Berkeleyans tried in 1908 to create a 100-acre park in the most beautiful area of rocks and oaks. The ballot measure failed by less than 100 votes. The next year, the land was taken over by a partnership headed by John Spring, who a few years later developed it as Thousand Oaks, setting aside Great Stone Face as a small park. (The layout was done by engineer Mark Daniels, later superintendent of Yosemite National Park and designer of Pebble Beach and the 17-Mile Drive near Monterey.) Spring also laid out most of what is now Albany, quarrying rock at what is now Glendale-La Loma Park (the former J.J. Dunn quarry) and in El Cerrito.

Much larger Hinkel Park, just north of Indian and Mortar Rock Parks, has a different history. John Hinkel was a civic-minded capitalist who let Boy Scouts camp on his 4.2-acre tract in North Berkeley, where two branches of Blackberry Creek came together. He donated the land to fast-growing Berkeley as a park on condition that they continue to allow Scout use. Hence the Scout Hut, north of the clubhouse. Berkeley accepted the gift in 1919 – but only after Hinkel had built trails, the clubhouse, and the magnificent stone fireplace at what was then a picnic area with an informal natural amphitheater. (During the Great Depression of the 1930s, relief workers built the present outdoor theater, recycling broken sidewalk to make seats and steps). Also in the World War I era, Cragmont Rock was bought by neighbors and donated to the city, and Live Oak and Codornices Parks were acquired. It is difficult now to appreciate the importance of these parks at the time, before most people had automobiles or even radio. The parks, easily accessible by the city's excellent streetcar system, were in constant use for picnics, theatricals, dancing, and gatherings of all kinds

The rock parks are important in the history of climbing. In the 1930s, Dick Leonard, the "father of technical climbing," and his friend David Brower pioneered modern rock-climbing methods at Cragmont, Indian, and Pinnacle Rocks. Leonard used techniques developed at Cragmont in the first technical rock climb in Yosemite. His nd Brower's techniques helped train US soldiers for the difficult winter campaigns re-conquering Italy in World War II. We can see, nearly every sun-filled afternoon and weekend, a continuation of this legacy as climbers journey to Indian and Mortar Rocks to practice their climbing skills.

Neglect and redevelopment:

Old photos show that at least up through their dedication, these parks had few trees except near the creeks in John Hinkel Park. The eucalyptus planted at Indian Rock, like the redwoods planted at Hinkel, were still young. The Great Stone Face, now hidden by shrubs and oaks, was clearly visible as a craggy profile. Developers and the city landscaped several of the rock parks. But particularly after the passage of tax-limiting Proposition 13 in 1978, ivy, blackberries, black acacia, and other invaders were allowed to take over.

Neighbors and Friends of Five Creeks volunteers, working with park gardener Pam Boland and neighborhood groups, have been restoring these parks, emphasizing native plantings. Indian Rock has new native plantings; Mortar Rock has been freed from a smothering blanket of ivy; at Grotto Rock, oat grass, blackberry thickets and acacia have been cleared; a new rock retaining wall has been added; and paths have been improved with a UC Chancellors Grant funds and much volunteer labor. Ivy is being rolled up at John Hinkel Park, too.

Please join us! Email f5creeks@gmail.com to get notice of future events.