## A Walk in the Upper Codornices Watershed

by Susan Schwartz, President, Friends of Five Creeks

Codornices is one of many small creeks flowing from the geologically young Berkeley Hills to San Francisco Bay. It is unusual only because is the only creek from Oakland into South Richmond to retain a substantially continuous channel from hills to Bay. This may be because the creek became the Berkeley-Albany border, making it bureaucratically difficult to bury most of it in pipes.

Probably because of this relatively continuous open channel, Codornices the only creek from Oakland to North Richmond with a population of steelhead – ocean-going rainbow trout (*Oncorhynchus mykiss*; the two are the same species). Since steelhead are listed as threatened, great effort has gone into improving and expanding their habitat, particularly in the lower reaches, where the creek forms the border between Berkeley and Albany.

The hills where Codornices rises are a geologic jumble. Some of the oldest rocks date from the age of dinosaurs. Formed far away, they were scraped from the Pacific Plate as it was forced beneath North America. One example is Pinnacle Rock in Remillard Park; its lavas erupted in distant tropical seas some 160 million years ago. By contrast, Indian, Mortar, and Grotto Rocks are bits of a much younger volcano that erupted somewhere near today's Hollister much more recently, perhaps 13 million years ago. They were dragged north on the more recent sideways motion of clashing plates. Sediments washed from the Sierras and deposited at different times also have been mixed and pushed into odd angles.

Like the rest of the Coast Ranges, the jumbled rocks of the Berkeley Hills began their ongoing rise very recently, less than 3 million years ago. In what is now our local hills, a long block cracked with an upward tilt to the east, creating a steep drop to the fault valley that holds Wildcat Creek.

Frequent quakes and earth movements continue to fracture the rising range. Winter rains percolate easily into the riven rocks, filtering out into small springs and swales that coalesce into small creeks. This natural "storage" enables creeks like Codornices to flow year-round. Although small, these youthful creeks have cut striking canyons, some with lovely waterfalls.

The creeks also have washed eroded rock downstream, forming the Berkeley Flats. Since the Bay itself is very young, and water levels have been both much higher and much lower during the Ice Ages of the last million years or so, the flatlands can be looked at as a combination of old beaches and floodplains where the creeks dropped detritus from the hills. Walking south and south in the flats, you can feel the slight natural levees where the annual floods dropped debris, separating the watersheds of the different creeks.

The south border of the Codornices Creek's watershed – the area from which it gathers water -- is approximately Rose Street, except high in the hills where fingers touch those of Strawberry Creek. Below Delmar and Parnassus, water drains to Schoolhouse Creek. Roughly north of Marin Street., drainage is to tributaries of Blackberry Creek (tributary to Cerrito Creek) or to vanished Marin Creek, now buried under curving Marin Street.

With European settlement, the area of upper Codornices Creek was used for dairying and haying. Napoleon Bonaparte Byrne, a wealthy Southerner, before the Civil War brought his family and two freed slaves who are believed to have been Berkeley's first African American residents. They built their home on Codornices Creek, where Congregation Beth El is now. Cattle raised east of the hills were driven to tidewater or the railroad via what are now Spruce and Regal Streets. At the opening of the 20th Century, ambitious developer Henry Berryman used the southern tributaries to feed Berryman Reservoir, one of the town's early water sources.

The area was developed in the first quarter of the 20<sup>th</sup> century as a well-to-do streetcar suburb. Euclid Avenue began as a street railway on a trestle (later filled). The hillside paths were platted to provide quick access to rails and streetcars. Some paths were elegant showcases, like Rose Walk and Tamalpais Steps. But as automobiles replaced streetcars, other paths remained unbuilt. In recent years, Berkeley Path Wanderers volunteers have reclaimed many, mainly by installing landscape-timber steps. The new concrete steps on the Glendale Paths, result of a city-BPWA partnership, were the first in a generation.

Berkeley's first successes in preserving nature were in the upper Codornices watershed. Live Oak Park, established just before World War I, was Berkeley's first "nature park." It was quickly followed by Codornices and then Cragmont Rock Parks (bought and donated by neighborhood residents). Huge stone fireplaces and the now-vanished clubhouse of the Codornices Club supported a now-vanished lifestyle of frequent community gatherings. The Rose Garden, west of Euclid, came later, built by the Civil Works and Works Progress Administration during the Great Depression of the 1930s.

Also in the 1930s, Dick Leonard, the "father of technical climbing," and his friend David Brower pioneered modern rock-climbing methods at Cragmont Rock, Indian Rock, and Pinnacle Rock. Leonard used techniques developed at Cragmont in the first technical rock climb in Yosemite.

Pinnacle Rock finally became an official park in the 1960s, donated by Lillian, Countess Dandini Her father, Pierre Remillard, came to California as a laborer and built a near-monopoly in brick making as Oakland boomed with arrival of the Transcontinental Railroad.

Glendale-LaLoma Park, a quarry since the late 1800s, was also developed as a park mainly in the 1960s. Although the creek itself is buried in a pipe, the impressive channel of the southern branch remains.



Map of Codornices and Cerrito Creek from 1860s land case, courtesy of Bancroft Library. Note that Codornices does not reach the Bay. Schoolhouse Creek to the south and Marin Creek to the north are very small.

Friends of Five Creeks is an all-volunteer group working to protect and restore creeks and watersheds of Berkeley, Albany, Kensington, El Cerrito, and Richmond. www.fivecreeks.org, f5creeks@aol.com, 510 848 9358.

**Berkeley Path Wanderers Assn.** is an all-volunteer group working to protect, restore, and expand Berkeley's historic path network; www.berkeleypaths.org.