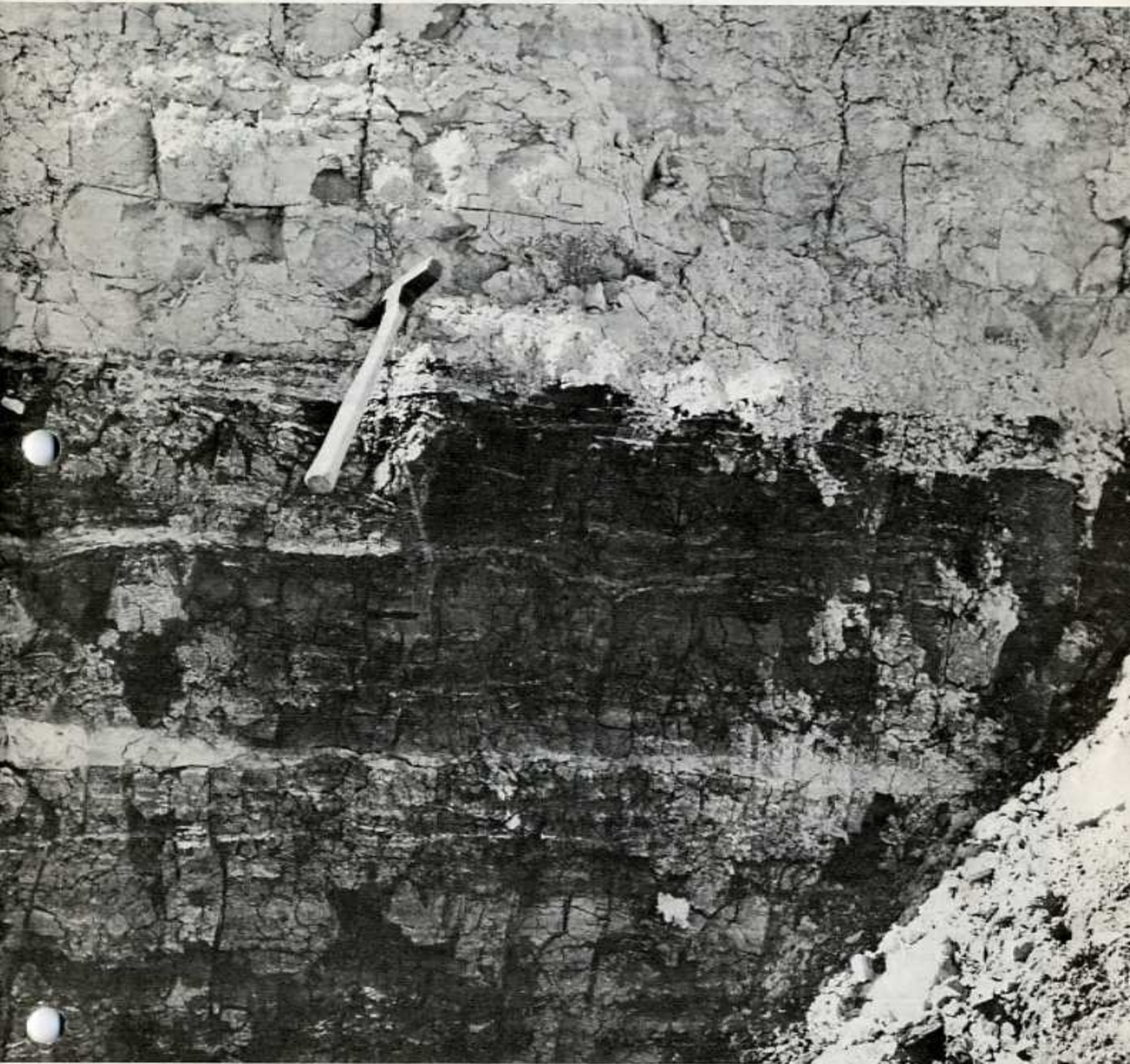


CALIFORNIA  
GEOLOGY



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# EARTHQUAKE TRAIL REVISITED

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*The 18 April 1906 San Francisco earthquake caused great loss of life and property damage in the city itself. But the maximum ground displacement of 21 feet along the fault occurred near what is now Point Reyes National Seashore in Marin County, 30 miles north of San Francisco, where the surface trace of the 1906 break can still be seen. . . . editor*

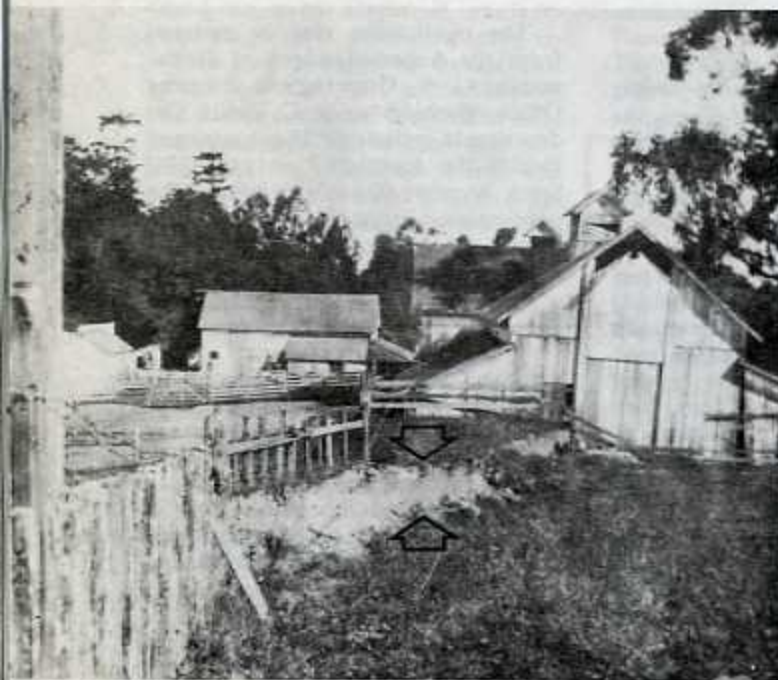
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The Earthquake Trail at Point Reyes National Seashore is finished. The Geology Department of Foothill College and the National Park Service cordially invite the public to attend a completion celebration at park headquarters, 25-26 September.

Geology students from Foothill College, Los Altos Hills, California marked the trail, reconstructed a fence line showing how it was offset during the earthquake, and put up signs explaining the fault features as they relate to the "plate tectonics" theory of earth movement.

Seven new exhibits have been added to the trail. The new exhibits describe how earthquakes are measured, explore some common myths about quakes, and show what people can do to minimize injury and property loss during future quakes. Featured along the trail is a large colorful panel showing all the presently known active and potentially active faults in the Bay area on a background map that predicts how the ground will behave during future large earthquakes. Areas prone to severe shaking and ground failure by landsliding and liquefaction are delineated.

The highlight of the completion celebration will be the unveiling of an original sculpture by Professor Mike Cooper of Foothill College that commemorates a heroine of the 1906 earthquake. The Earthquake Trail is dedicated to helping Bay area residents and California citizens understand their physical environment so that they can minimize the hazards posed by its active geological processes. . . . *Tim Hall, Geology Instructor, Foothill College.*

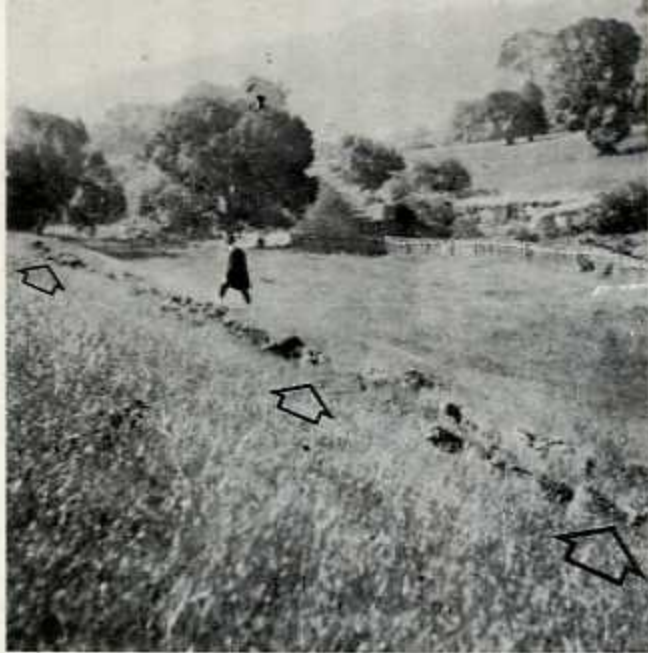


A 1906 view (northwest) of the Skinner Ranch which is now the headquarters of Point Reyes National Seashore. The arrows indicate a metre high northeast facing scarp which marks the 1906 trace of the San Andreas fault. The fence in the left foreground (on the American Plate) and the fence just left of the upper arrow (on the Pacific Plate) were separated approximately 5 metres by the crustal movement which generated the 1906 earthquake. At the time this photo was taken, a makeshift fence was added atop the scarp in order to repair the disrupted corral. You can see the fault passing beneath the southeast (right) corner of the barn. *Photo from J.C. Branner collection, courtesy of Stanford University.*



View today.

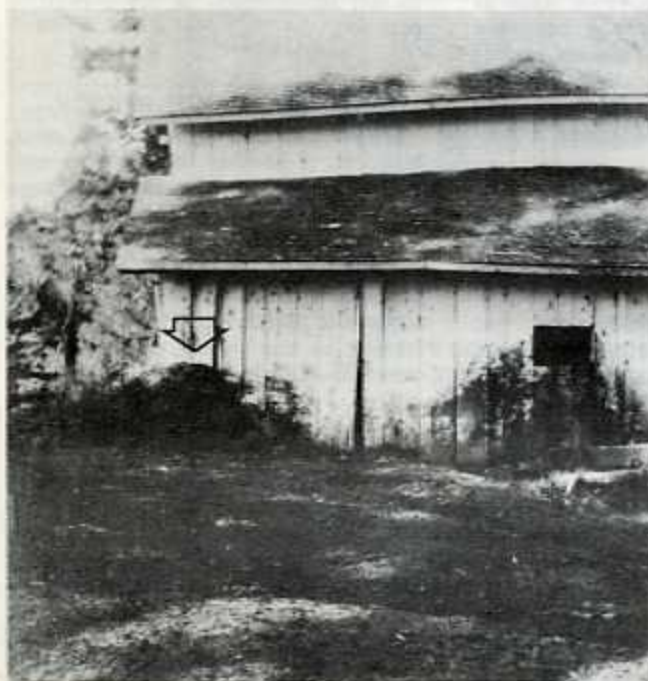




The earthquake trail in 1906. Arrows indicate the moletrack found along the San Andreas fault some 200 metres southeast of the Skinner Ranch barn. Here as well as at the barn, the walls of the fault appear to have separated slightly creating what G.K. Gilbert called the "trench phase" of the 1906 trace. The fence in front of the formally attired field man was also offset 5 metres by the San Andreas. This fence has been restored by Foothill College geology students and can be seen along today's Earthquake Trail. *Photo from J.C. Branner collection, courtesy of Stanford University.*



The Earthquake Trail today. More than 20 signs and exhibits have been installed along the San Andreas fault to help visitors to Point Reyes National Seashore understand the fault, earthquakes, and Bay area geology. The arrows point to two of the many posts installed along the 1906 trace to make the fault easy to see and follow. *Photo by Joan Green, Foothill College.*



Offset deposits provide evidence for plate movement. All but the southeast corner of the Skinner barn pictured here was situated on the Pacific Plate side of San Andreas fault. When the crust shifted, the barn remained intact but the southeast corner was shifted 5 metres off its foundation. Notice the dark conical stain on the barn wall beneath the window. The deposit of biogenic colluvium (manure) indicated by the arrow is now 5 metres from its point (or window) of origin. *Photo from J.C. Branner collection, courtesy of Stanford University.*



Offset of fence line in left background (see photo above left) reconstructed to show earthquake effect.