

## Wally Trabing's Mostly about People



### Shake, rattle and roll

**T**HIS IS EARTHQUAKE country.

We are not quite, but fairly constantly ajiggle.

"Sometimes we'll go for a whole week without an earthquake," said Dr. Karen McNally, director of the Charles Richter Seismology Lab at UCSC.

Most of these are small jolts that you may or may not feel. If you were outdoors sleeping on a rock you might feel the quakes with a magnitude of 2 or 3.

Under your feet is the most intense earthquake system in these United States. The California coast is rated zone four, the highest on the scale.

Santa Cruz County is surrounded by seven major faults, but for some reason we have not made the big time — yet.

We seem to have a history of rolling and rattling to the average Richter magnitude of 4 and sometimes 5.

The spotlights have settled on San Francisco (1906), about 8; Santa Barbara (1925), 6.3; Long Beach (1933), 6.3; Imperial Valley (1940), 7.1; Kern County around Bakersfield (1952), 7.7; Eureka (1954), 6.6; Mammoth Lakes (1980), 6; and Coalinga (1983), 6.5.

These are considered the major quakes around the state.

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Early earthquakes in Santa Cruz County were recorded in diaries and letters. The earliest I could dig up occurred in 1865 with an epicenter in the local hills. Chimneys fell, the earth opened in places and "boulders fell" onto roads.

They were recorded informally in 1885, 1890 and a couple in 1899. Epicenters were in Watsonville, Monterey Bay and Hollister.

The 1890 quake unbridged a local bridge and toppled the usual chimneys.

Then came 1906, the year of the quake that leveled San Francisco. This is when the Big Daddy of all our faults, the San Andreas spoke.

Ten were killed in northern Santa Cruz County and the downtown was in shambles. But the fatalities were from landslides and falling trees, not from falling buildings, ironically.

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Quakes severe enough to record came in 1914, throwing items off shelves and breaking water pipes. Then, there were none until 1926 when the Ano Nuevo lighthouse was damaged.

In '34 there were reports of sea cliffs breaking off and in '47 the magnitudes were added to the reports. A "4" closed Hecker Pass with slides.

On and on they rumbled. Every year there was one worth mentioning. In 1953, a 5.3er cracked walls and broke dishes. In 1954, the Watsonville Bank of America sustained a crack in the ceiling and one wall, several houses were seriously damaged, and brickwork crumbled.

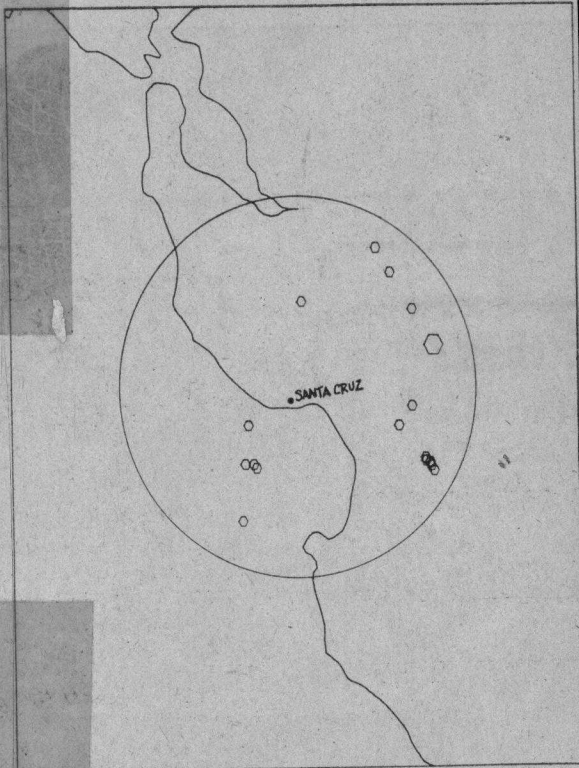
Earthquakes can show no justice. A cornice fell from the ceiling in the Superior Court chambers of the county courthouse in the 5.3 roll of 1959.

A series of 5s on the scale occurred in '63 and '64, doing the usual light damage.

There was a quake in the 4 and 5 range every year on up to 1970.

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Jacques Delsemme, a research assistant in seismology at UCSC, researched for me the earthquakes greater than a magnitude of 4 occurring within a 35 mile radius of Santa Cruz, in a time



### Local quakes

The small hexagons within the circle represent the some 18 earthquakes of magnitude 4 and 5 which have occurred between 1970 and 1980 within a 35-mile radius of Santa Cruz. They were plotted by the Charles Richter Seismology Lab at UC Santa Cruz.

frame of 1970 to 1982.

The results can be seen on the map accompanying this column.

As you can see, there were none in the Santa Cruz area proper.

Perhaps what caused the general damage in Coalinga was the nearness of the epicenter.

The 6.5 wallop struck five miles from the center of town.

Delsemme punched some computer buttons and it was revealed there were 18 shakes of magnitude 4 and above between 1970 and 1980.

The largest was 5.9 in 1979. Its epicenter was near Gilroy. All the rest were in the range of 4.

But, says Delsemme, "it is very difficult from these few events to extrapolate what the "normal" seismicity is around Santa Cruz.

"Ten years is much too short an interval to make valid conclusions."

Next: A look into a local seismology lab.