Intensity reports of the 1954 Fickle Hill Earthquake

The table below summarize felt reports gathered as part of this study. The majority are the results from requests for accounts in the last year in publications like the regional newspaper Times-Standard and Senior News. Additional responses came from the Humboldt County History and Humboldt County on Alert Facebook pages. A few were from the Susie Baker Fountain Papers, an archive of clippings, memorabilia, and regional history from 1850 to 1966. The papers are archived at Cal Poly Humboldt (<https://specialcollections.humboldt.edu/susie-baker-fountain-papers>). One report came from 1992 at a community meeting.

Most of the reports are the recollections of children from age 3 to early teens and as such should be considered highly selective. Memories of 65 or more years ago from a child will not encompass a complete assessment of impacts. The table estimates minimum intensities. Intensities above 7 are based primarily on structural damage and other than wide-spread reports of chimneys toppling, these children did not remember what happened to building foundations or other structures.

One of the most prevalent memories is seeing the ground undulate. Ground roll was mentioned by most who were outside at the time of the earthquake and by a few who were indoors. “Waves are seen on ground surfaces” is included in XII (Extreme) in the Modified Mercalli Scale but is not included in the USGS “Did You Feel It?” questionnaire and has been poorly studied as an indicator of shaking strength. Ground roll reports from more recent earthquakes including 1989 Loma Prieta and 1992 Cape Mendocino are in areas mapped from MMI VII to IX from other methods.

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| Intensity Reports gathered for this study | | | | | | |  |  |  |  |
| **#** | **Respondent** | | **Age** | | **Location** | **~ Lat/Lon** | **Description** | **MMI\*** | **date** | **source** |
| 1 | Anne Pierson | | age 11 riding bike | | Eureka | 40.786, -124.152 | couldn't ride bike, chimneys down, power lines arcing, heavy furniture toppled | 7 | Jul-24 | PI |
| 2 | Jennifer Davis Godwin | | inside | | Eureka | 40.79, -124.17 | chimney down, ground roll | 7 | Nov-24 | FB |
| 3 | Steve Rosenberg | | inside | | Eureka | 40.789, -124.154 | slid across room in chair, chimneys down | 7 |  | FB |
| 4 | Roger Smith | | age 8 outside | | Arcata | 40.92, -124.076 | fell down, heavy bookcase fell | 7 | Nov-24 | FB |
|  |  | |  | | Arcata/HSU | 40.88, -124.077 | books fell in an E-W direction | 6 |  |  |
|  |  | |  | | Arcata/Plaza | 40.87, -124.09 | many items topled/broken | 6 |  |  |
| 5 | Derral Campbell | | indoors | | Eureka | 40.78, -124.178 | xmas tree bouncing, got under a table | 5 |  |  |
| 6 | Kerry Joanie Griffith | | inside | | Eureka | unspecified | oven door flew open, chimney toppled | 7 | Nov-24 | FB |
| 7 | Greg Barnes | |  | | Fortuna | 40.596, -124.156 | Lots of buidling debris in street | 6 | Nov-24 | FB |
| 8 | Barb Harper | |  | | Eureka | 40.794, -124.165 |  |  | Aug-24 | PI |
|  |  | | inside | | Cutten | 40.769, - 124.143 | ground roll, water splashed out of washingmachine | 7 | Sep-24 |  |
|  |  | | outside | | Eureka | 40.764, -124.166 | adult thrown to grown,thought it was a bomb, power lines down | 7 | Sep-24 |  |
|  |  | |  | | Cutten | 40.764, -124.149 | many items toppled/broken | 6 | Sep-24 |  |
| 9 | Linda Barellis | | inside age 9.5 | | Eureka | 40.784, -124.168 | telephone poles swaying, items toppling | 6 | Sep-24 | PM |
| 10 | Penelope Chastaine | | inside age 11 | | Eureka | 40.800, -124.151 | Chimney down, items toppled, outside objects swaying | 7 | Sep-24 | PM |
| 11 | John Nicholas | | inside age 4 | | Eureka | 40.794, -124.172 | loud noises, dishes falling off shelve, family found it hard to stand | 7 | Sep-24 | PM |
| 12 | Roxie Paxton | | outside age 9.5 | | Rhonerville | 40.576, -124.121 | ground roll, bricks and shingles fell from roof | 7 | Sep-24 | PM |
| 13 | Rowetta Miller | | inside | | Showers Pass | 40.587, -123.83 | Uncle on roof could barely hang on, strongest they had felt | 7 | Aug-24 | TS |
| 14 | Susie Baker Fountain | | outside | | Mad River |  | fishermen reported water flowing upstream, child thrown to floor and nearby adult thrown against wall |  | 1954 | SBFP |
| 15 | Holmes Eureka Lumber Comapan | | outside | | Korbel | 40.876, -123.958 | employeed thrown into log pond and drowned | 8 | 1954 | SBFP |
| 16 | Joline Bettendorf | | inside | | Arcata | 40.876,-124.055 | door slammed, many items off shelves | 7 | Aug-24 | TS |
| 17 | Kay Escarda | | inside | | McKinleyville | 40.968,-124.107 | in shower, lights out, many items fell | 7 | Aug-24 | TS |
|  |  | | inside | | Arcata | 40.874,-124.095 | ground roll, heavy furniture displaced, cows outsidenavigating rolling ground | 7 |  |  |
| 18 | Jack Nash | | inside | | Eureka | 40.80,-124.166 | plate glass windows broken, much debris in store and street | 7 | Dec-24 | TS |
| 19 | Phyllis Carlton | | inside - mother was 14 | | Warren Creek | 40.895,-124.042 | ground roll, heavy water lione tossed from supports | 8 | Sep-24 | PI |
| 20 | Rod Ledbetter | | inside age 4 | | Arcata Bottom | 40.902,-124.096 | watched a cup vibrate across a counter and not fall | 5 | Oct-24 | PI |
| 21 | Judith St. Clair | | inside uncle's story | | Arcata | 40.87,-124.091 | Post office dmaged so that door was wedged shut | 7 | Jul-24 | PI |
| 22 | Daughter of Holmes Lumber Co. employee | | inside, father's store | | Kobel | 40.873,--123.96 | Thown in desk chair across room |  | Jan-92 | PI |
| 23 | Margot Genger | | inside 3rd floor | | Eureka | 40.799, -124.16 | Water sloshed out of bathtub, mother couldn't move, chimney damaged | 7 | 25-Jun | PI |
| 24 | Margot Genger (account from her brothers | | outside, walking | | Eureka | 40.80, -124.16 | ground roll, knocked a man to the ground | 7+ | 25-Jun | PI |
| \* MMI estimates are minumums | | | | |  |  |  |  |  |  |
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| Source abreviations: | | |  | |  |  |  |  |  |  |
| TS - responses to Times-Standard article 7/27/24 | | | | | | |  |  |  |  |
| PI - Personal interviews | | | | |  |  |  |  |  |  |
| FB - responses to query in the Humboldt County History Facebook Page | | | | | | | |  |  |  |
| SBFP - Journal entries in the Susie Baker Fountain Papers from the Cal-Poly Humboldt Library | | | | | | | | | |  |
| Report | | Respondent | | Complete description | | | | | | |

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| --- | --- | --- |
| Report | Respondent | Complete description |
| 1 | Anne Pierson age 11 | Eleven year-old Anne Pierson was riding her bicycle with a friend on Buhne Street in Eureka heading west between L and N when suddenly it became impossible to ride their bikes. Her friend immediately dropped to the ground and covered her head as they had been taught in school for atomic bomb drills. Anne immediately recognized it as an earthquake and watched what was happening around her. She saw the ground roll across the street coming from the north and heading south, electric lines and poles shaking wildly, and sparks flying. She saw several chimneys topple from houses to the west on Buhne Street. One woman whose chimney toppled came running out of her house – Anne laughed because the woman’s hair was in curlers. She didn’t feel frightened and once the shaking was over, they got back on their bikes and headed to H and 15th where they delivered Christmas presents. At that house, everything on the second floor had come off shelves and lots of knickknacks were broken, including a large cabinet toppling over. Her recollection was the shaking wasn’t as strong as what she experienced in the second-floor bedroom of her home in Freshwater on December 20, 2022. But the experience of being 11 on a bicycle outside is very different than being awoken from a sound sleep indoors. She also remembers the streets so jammed with cars of people trying to drive home from work that it was hard to cross the road. |
| 2 | Jennifer Davis Godwin | My friend Linda Stromberg and I were sitting in the living room of my parents’ three story, 1912 house on E Street when it hit. We were making paper chains for the Christmas tree. A huge roar and the shaking began. I recall seeing E Street rolling as we jumped up, terrified. There was a loud crash outside where the top of the chimney came down. The house had curved glass in the turret windows which shattered. Dad had to order new ones from San Francisco which took a while to get shipped. Lamps were lost but the Christmas tree stayed upright. My mom ran outside and we joined her. My stepbrother brought my sister downstairs to join us. I remember Mom being terrified, and goodness, the noise! |
| 3 | Steve Rosenberg | I was sitting at my desk about five feet away from the window of my upstairs bedroom on O street in Eureka near Albee stadium The sky was gray. It was dead calm. The quake struck with tremendous noise. I hung on to my desk and it and me in my chair started sliding south towards the window. I turned to look outside and the neighbors house was waving back and forth like a flag. When the shaking stopped ,i was almost against the window. I ran downstairs and went out in the street. Dogs were wailing all around. My friend Larry Doyle and his father Ed appeared and we went around the houses checking for damage. All of a sudden we heard another big roar and an aftershock hit. The trees were waving. Quite an experience for an eight year old. The courthouse and high school had terminal damage. The catholic church steeple failed. Lots of broken chimneys. But the 1992 and 2022 were worse, at least near college of the redwoods where I live, as they were centered further south. 2010 was bad too. It was just southwest at the eel river canyon.It was exciting for me as a child. Now they are dreadful . |
| 4 | Roger Smith age 8 | My older cousin was cutting brush with a brush hook so the road access was better, dad was trying to square up the pump house because PG&E pulled it off plumb when hooking up the power lines, I was playing on the dirt pile created from digging the well. My cousin let the brush hook fly out of his hands (We never found it), dad yelled out "Ralph with the hell are you doing out there"​, and I fell to my knees. We went up the hill to our "house", a 20' x 24' cabin that, at the time had no electricity or water). Discovered that a glass dish had fallen and broken on top of the meat that was supposed to be dinner. We then got into the car and went to the HSC campus, as dad was the Chemistry Professor. He was really worried about the "stock room". Found very little damage, a couple of glass items had hit the floor but nothing serious. My mind thinks the shelves were in a north south configuration. This was in the "basement" of Founders Hall. Now the "New Library", presently the Engerniring Building (?) north of Founders Hall had almost all of the books on the floor. It seems that their shelves were in an east west configuration. We then went down to the plaza where Brizards grocery store was sweeping lots of glass and product out into the street. We needed to get something out of the freezer locker to thaw out for dinner. I also remember my folks talking about a store that had "earthquake wires" on their hard liquor. Hutchens, Arcata Liquors, I don't remember the exact store, and it might have been an on/off sale bar. I also remember a floor to cieling book case that crashed to the floor in our house that crashed down and broke the coffee table. On the very top shelf is where dad had the .22 stored. The butt plate was broken. To this day that .22 still has a broken butt plate and I still own it. I also have memories of the flood the following year, or was it the previous year. I'd be very happy to share more memories just reply. |
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| 5 | Derral Alexander Campbell | In the '54 shaker, i was at the Child Care Center, next to Marine View Terrace school in west Eureka. I remember the Christmas tree bouncing and swaying, and getting under a desk or table. |
| 6 | Kerry Joanie Griffith | the cookies flew out of the oven and the brick chimney on our old Victorian tumbled off the roof!! |
| 7 | Greg Barnes | I lived in Fortuna at the time of that quake on 11th street. It was a rather strong quake…lots of bits and pieces of buildings in the streets. |
| 8 | Barb Harper | I was with my mom and brother and we were visiting a friend who lived in Eureka on E street between 13th and 14th streets My brother and I were playing in the playground across the street when the earthquake struck we were very scared and ran to our mother who was in the two story apartment when another jolt came while we were in the stairwell of the apartment. |
| 8 | Barb Harper | I talked to my 95 year old aunt who lived in Cutten on Walnut Drive across from where the Humboldt C.S.D. Is today and she remembers it very well. She said that it was very scary, she saw the earth raising up and down in waves. The water splashed out of her wringer washing machine. She said that her boys were playing in the woods across the street where the HCSD is today and she ran as fast as she could to get to them. |
| 8 | Barb Harper | My Sister in law remembers it the same as my late husband who lived on D street in Eureka near the community golf course.Their dad was home for lunch (he worked for PG&E) and asked my future husband to fetch his toolbox from his truck. The earthquake struck as he was carrying it down the driveway and the earthquake threw him to the ground and my father in law thought that was a bomb since he was a sailor during the war. He went down the street turning off gas lines and found power lines down at Alder and D streets and stood guard until more help arrived to turn off the power. Their Christmas tree toppled over breaking many of their ornaments. They put eye screws in the corner of the living room and had their Christmas trees secured forever after. |
| 8 | Barb Harper | Mom took us to our home at Excelsior and Holly streets in Cutten to find a lot of things broken. |
| 9 | Linda Barellis | Was 9.5 yr old and on 2nd story of Saint Bernards, lots of shaking and some items toppling; father near 6th & F st and saw telephone poles swaying |
| 10 | Penelope Chastaine | Was 11 years old watchings 8 yr and 4 yr old brothers while mom at grocery store; remembers seeing 8 yr old on slide in backyard swaying back and forth a lot (he had fun) and 4 yr old was put to the ground and had to crawl to sister in the doorway; broken chimney, christmas tree knocked over and ornaments shattered; shelf with teacups fell and all broke; lived at 930 S St Eureka |
| 11 | John Nicholas | Was 4 years old and he remembers the dishes shaking off shelves, his family members were hanging onto the walls, there were lots of loud sounds and lots of items falling; home located at 1461 California St, Eureka |
| 12 | Roxie Patton | I was 9 years old at the time and living on Rohnerville Road, Rohnerville, ( now Fortuna, Ca) when the earthquake hit. It was a nice day out and my mother Luva Wendt was mowing the lawn with a push mower. I was outside playing and the lawn started moving like waves and I tried running towards her and jumping over these mounds. It seemed to last forever. During this time my grandfather was outside ( grandparents lived next door) and my grandmother ran to backdoor and tried to exit when my grandpa yelled at her to stay in. He was right as just at that moment bricks and shingles started falling off the roof right at the doorway and she would have probably been hurt |
| 13 | Rowetta Miller | In response to your inquiry in the Sunday July 28, 2024 Times Standard concerning the location of the 1954 M 6.5 earthquake, I was living with my family on our Bootjack homestead in the mountains of Showers Pass. Our Great Uncle Dee who lived with us at the time, was repairing shakes on the roof of the laundry room attached to the original homestead cabin. This is also where he slept and I guess he preferred not to get wet in his sleep. It was the strongest earthquake we had felt in that area. Uncle Dee had to hold on tight to prevent from falling off the roof. I was attending Heart’s Valley School and in sixth grade at the time. I recall being home so I’m unsure of the day of the week when the earthquake jolted my Uncle Dee on the roof. We were all relieved that he didn’t fall off. Our location was across the Mad River and approximately four miles up the hill on the south side of Mad River where Deer Creek enters the Mad on the north. Bug Creek and Humbug Creek also enter the Mad on the north side of Mad River -- several miles downriver from our homestead. |
| 14 | Susie Baker Fountain | Fisherman “thrown off balance into the stream.” SF1954: “Suddenly, the river flopped back against him, knocking him flat.” |
| 15 | Holmes Eureka Lumber Comapan | Employee “reportedly hurled into a log pond by the impact of the quake,” and drowned. |
| 16 | Joline Bettendorf | Working at Whirligig Restaurant while attending Humboldt. It was located on G Street between Tatman's Bakery and the grocery store in North Arcata. One memorable event was the 6.5 earthquake on December 21, 1954. Newspapers had been full of forecasts of a quake on that date. I sniffed. "Earthquakes can't be that precisely forecast." On the twenty-first I was the cook on duty when the quake struck. I was in the store room, an enclosed room past the counter and grill with shelves full of cans and bottles. The door slammed shut in the shaking . Goods cascaded from the shelves around me in the total dark. When the shaking stopped, I found the door, tore into the restaurant and screamed, "My God, it's the twenty-first." Still holding out at the counter were three men who looked at me blankly, as if I had lost my mind.They must have beenwondering why in the world I was screaming the date after surviving The Big Shake." |
| 17 | Kay Escarda | About seven miles north at the airport apartments, located alongside the fence separating the public area from the airport restricted areas, where the terminal is now located, my mother was taking a shower. The apartments were former officer quarters. Ours was on the second floor, built on a slope with the elevation facing west toward the ocean. The bathroom was interior with no windows or light source. When the quake struck, she said the lights went out and in total darkness, she grabbed the faucet handles, gave herself a blast of cold and then a blast of hot and slithered out onto the cold floor. There was quite a mess of fallen items, things dumped from cupboards but no real household damage. I also worked cleaning house for an employee of HSC. She lived in a duplex on west 13th Street near the Arcata Methodist Church. She and her young son were both home sick with the flu. I had made chicken soup and was just starting to spoon some into bowls for them when the quake struck. The pot flew out of my hands onto the floor, the west cupboards flew open and all the dishes came crashing out. Johnny screamed and I lurched down the hall toward his bedroom as we continued to rock and roll. I looked out the bedroom window northward and will never forget the sight of cows from the dairy across the street running across the field. The land was rolling like ocean waves which seemed about twenty feet deep. The cows looked like camels, all distorted with their haunches several feet above their heads as they all staggered to the east in one mass. A huge dresser mirror barely missed Johnny's head and the Christmas tree in the living room made another crashing sound. I spent the rest of the day cleaning up the mess, made them a light dinner late in the evening and went back to help my sister clean up the mess at our own apartment. |
| 18 | Jack Nash | My story is that I was a regular customer at Jim's Barber Shop at 511 Henderson Street in Henderson Center, Eureka. It was later called the Barber Center and owned for many years by Al Sanders. It is still a barber shop. I was not in the barber chair when the quake hit but in one of the "waiting" chairs. The quake scared me so much I hopped on my bicycle and rode home to 1915 "D" Street to find my mom cleaning up all the broken glass jars in the kitchen. My family's business, Arthur Johnson's Menswear at 5th & "F" Streets in Eureka, suffered a lot more. They had large picture windows on the 5th Street side and many of them were broken. Oddly enough it wasn't the quake that broke them but the mannequins that were in the windows falling into the glass. What a mess! The inside of the store was more fortunate as piles of shirts, sweaters and pants landed on the floor but were not damaged. I will never forget it! |
| 19 | Phyllis Carlton | I was 14 when the earthquake happened and living on Warren Creek area between Arcata and Blue Lake. She was in the house whenthe earthquake happened standing in the hallway. She had to brace herself on the sides of the hall inorder not to fall and could see the room distorting as the seismic waves passed. Her sister was in a larger chair whic tilted over in the shaking. Her father was outside working in the two story chicken house and was terrified by the shaking. The major water main (more than a foot diameter) from Seasey dam ran by their property and was knocked off its supports by the shaking. |
| 20 | Rod Ledbetter | I was four and in the kitchen of my house on Parton Ln in Arcata. I remember being fascinated by a cup and suacer on the counter that slowly vibrated several feet along the counter top. The shaking stopped just as it reached the edge. |
| 21 | Judith StClaire | According to my uncle, the old Post Office building was packed with people. It was during Christmas rush, full of folks there to collect mail and people who left everything until the last minute to send mail. When the quake happened, the old building shook like crazy. The doorjamb changed shape enough to make the door unable to open. People inside panicked. My uncle had a very calm nature. I never saw him excited about anything. He was collecting mail from his mailbox when the quake happened. It was a heavy door and was wedged in pretty tight. It took him several minutes, but he was able to get the door open enough so that people could get out. |
| 22 | daughter of Holmes Eureka Lumber Co. employee | My father worked for Holmes Eureka Lumber Company and was working at his desk in Korbel when the earthquake occurred. He told me years later that during the earthquake his chair (with him sitting in it) slid across the floor and banged into the wall onthe other side of the office. |
| 23 | Margot Genger | I had just turned 3 and was in the bathtub with my mother on the third floor of our home. The water sloshed violently, and my mother grabbed me, but the shaking was so strong she couldn’t move. I don't remember much about the quake. I remember that the chimney was cracked; above the crack, it had rotated a bit but didn't fall. |
| 24 | Margot Genger's brother | My brother Robby would have been 4 at the time. He and my other brother, Tommy, 6 yrs old were returning my Dad's coke bottles to Cannom's grocery. Robby and Tommy were on K Street between 8th and 9th. The whole sidewalk started rolling. A man came out of the house on the corner of 8th and K and fell down. When the rolling stopped, what Robby remembers is that the sidewalk went back completely flat, no cracks. |