

Historic Earthquakes In Glen Cove and Environs

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While the environs of New York City may seem to be “safe” from seismic activity, earthquakes can, and have, occurred in the region. At least three earthquakes have been documented in Glen Cove.

The Earthquake of 1845:

One of the earliest well documented earthquakes to rattle Glen Cove (and which was also experienced in the surrounding communities of Oyster Bay, Roslyn, and Hempstead) occurred on October 25th 1845. At 6:15 in the evening, residents were jolted by a strong and fairly violent shock that lasted, according to best estimates, about two minutes.

A resident of Roslyn was reclining on his couch “when the building began suddenly to shake with great violence, so that the windows rattled and the rafters cracked. Our first impression was that somebody was endeavoring to move a heavy stove on the floor below; then it was suggested by one of our companions that a violent wind had sprung up; but as the shaking of the house was soon followed by a deep hollow sound like the rolling of thunder under the earth it became evident that the phenomena were the effects of an earthquake.” In Oyster Bay, the inhabitants of one house ran out into their yard “under an apprehension that the building was falling down, and the women and servants uttered shrieks of alarm”.

One witness noted that the noise that accompanied the shaking of the earth seemed to move. “The movement of the sound was a very deliberate one, and seemed to us to be in a direction from south to north, or perhaps a little to the east of north,” adding that it sounded like “the rushing of heavy chariots along a hard stony street.” Some people who were outdoors even reported experiencing “a brief electrical excitation of the air” - a phenomenon which has been reported numerous times

in association with earthquakes, but is still poorly understood. (Anon., 1845)

The Earthquake of 1872:

Perhaps the best-documented earthquake in Glen Cove occurred at 5:25 a.m. on the morning of July 12th, 1872. “The inhabitants of Glen Cove, Dosoris, Roslyn, Sands Point and other towns on the north shore of Long Island were surprised in their beds at half past 5 o’clock this morning by a very decided and even severe shock of earthquake,” reported the Brooklyn Daily Eagle. “They were aroused by a sound which many took for a tremendous clap of thunder, but they soon became aware that it was beneath them and not above them.” (Brooklyn Eagle, 1872a)

The noise of the quake was described as being akin to that of a “heavily laden cart driven rapidly over frozen ground” or like a “piece of artillery.” (NY Times, 12 July 1872) Just like during the 1845 earthquake, the noise seemed to travel – but observers seem at odds whether the noise moved from south to north or from north to south. The earthquake was strong enough to “give a very perceptible vibration to the houses”, to rattle crockery, and even knock down piles of coal neatly stored in residents’ basements.

An as-yet unidentified Glen Cove resident was cool-headed enough to send a formal report of the event to the Smithsonian Institute on the same day that it occurred:

This morning at 25 minutes past 5, local time, a very sharp earthquake shock occurred. The duration of the trembling motion was about two or three seconds, and of sufficient intensity to awake almost everyone who had not yet awakened. The shock was accompanied by a rumbling noise at the beginning,

lasting about one or two seconds; then a tremendous discharge of noise like a violent burst of thunder, at which time the jarring took place; then passing away with the rumbling sound like the passing off of thunder from a violent bursting near by.

The shock did not last as long as the noise. The direction appeared to be from east northeast to west southwest. The earth trembled with considerable violence in this section, so much so that persons were startled. Buildings of all kinds shook, windows, doors and crockery rattled. Here it was quite still as to wind. (Brooklyn Eagle, 1872b; also see Rockwood, 1873)

The science of seismology – the study of earthquakes – was still quite primitive in 1872. A university professor named Charles Green Rockwood, Jr., who was affiliated with both

Bowdoin College in Maine and Princeton University in New Jersey, tried to estimate the epicenter of the quake based on the geographic distribution of the reports he had received. While his methodology was a bit flawed, he estimated that the quake was centered near New Rochelle.

The Earthquake of 1893:

Another earthquake was felt throughout the western part of Long Island on March 14th, 1893. Glen Cove residents reported experiencing a distant rumble at about 2:55 a.m., followed by “a heavy jar that causing houses to shake and crockery and windows to rattle”. It was particularly noticeable on the bluff which overlooked the Glen Cove steamboat landing, then owned by the Ladew family. The shaking only lasted about 5 seconds. (Brooklyn Eagle, 1893)

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