MYSTERY #1

Nuu-chah-nulth story of how the Pachena Bay village Disappeared

“In the year 1700, on Jan. 26 at 9 at night, in what is now Northern California, Earthquake was running up and down the coast. His feet were heavy, and when he ran, he shook the ground so much it sank down and the ocean poured in. “The earth would quake and quake again and quake again,” said the Yurok people. “And the water was flowing all over.” The people went to the top of a hill, wearing headbands of woodpecker feathers, so they could dance a jumping dance that would keep the earthquake away and return them to their normal lives. But then they looked down and saw the water covering their village and the whole coast; they knew they could never make the world right again.

That same night, farther up the coast in what is now Washington, Thunderbird and Whale had a terrible fight, making the mountains shake and uprooting the trees, said the Quileute and the Hoh people; they said the ocean rose up and covered the whole land. Farther north still, on Vancouver Island, dwarfs who lived in a mountain invited a person to dance around their drum; the person accidentally kicked the drum and got earthquake-foot, said the Nuu-chah-nulth people, and after that every step he took caused an earthquake. The land shook and the ocean flooded in, said the Huu-ay-aht people who are part of the Nuu-chah-nulth, and people didn’t even have time to wake up and get into their canoes, and “everything then drifted away, everything was lost and gone.”

MYSTERY #2 Orphan Tsunami Japan

Across the ocean, in **Japan, January 26th, 1700** had been a nice day. Some places were cloudy, others sunny, with no major storms. No one was expecting disaster when they went to bed that night. And there was no shaking, no indication anything would happen, until the tsunami arrived at midnight. It invaded towns along the coast. The worst damage happened in the north, where the tsunami probably reached a height of five meters, the floodwaters ripped apart or washed out thirteen houses in the town of Kuwagasaki as villagers fled to high ground. Twenty-one more houses burned in the ensuing fires.\* Happily, everybody lived, and they would be able to rebuild when the fires were out and the waters receded.

Seven kilometers away houses along the shore were swept away. Floodwaters proceeded into town a kilometer inland from the bay, and the tsunami barreled up the Tsugaruishi River. Villagers panicked when it nearly reached the Inari Shrine. But they and their shrine survived the night.

In Ōtsuchi, thirty kilometers south of Miyako Bay, the midnight tsunami damaged rice paddies and farmers' fields, along with two houses and two salt-evaporation kilns, but probably stopped just short of the town's main street. Officials reported that no people - or horses - were killed in the chaos. Hopefully other animals survived the night as well.

Further down the coast, the port town of Nakaminato suffered nothing of note on the night of the tsunami, although an official reported high waves preventing boat traffic from entering the port on the morning of the 28th - a result of the ebbing tsunami interacting with incoming ocean swells.

In Miho, the village headman woke to what appeared to be a series of brief high tides. The unusual waves worried him enough to send the village's elders and children to the high ground at Miho Shrine, and he kept a sharp eye on the sea. He was fascinated: he'd heard that tsunamis often followed earthquakes, but there had been no earthquake. He watched the bayside pine grove flood, and counted seven waves, and was disturbed enough by the highly unusual events to make a meticulous record of them.

The last district to report any damage or strange events was Tanabe, far to the south. The tsunami invaded the government storehouse in Shinjō, and astonished the mayor and other onlookers by reaching a castle moat near his house in Horidobashi. Seawater flooded fields in Atonoura, Mikonohama, and Mera. But here, as elsewhere, no one was killed.

None of the people astonished by the sudden tsunami ever learned what had caused it. Officials sent in their reports, damages were compensated, and life went on. The poor headman at Miho never had his curiosity satisfied. Other orphan tsunamis had happened both before and after, but by the end of the 20th century, most of them had been matched to their parent earthquake. But Japan's orphan tsunami of 1700 remained a mystery.

MYSTERY #3

Copalis Ghost Forest Oregon

  ***The banks of the Copalis River features one of the best examples of a "ghost forest".  This was a forest of red cedars and spruce trees killed at least 300 years ago. Deposits in the tree rings show the trees were killed by saltwater.   If you visit the Ghost Forest, what you will see are tall, dead tree trunks left standing these past 300 years.  These dead trees stand out alone over a low grassy area.  The current live forest stands considerably back from the river. But how could salt water reach this grassland area that once stood as a living forest?***

*#1By*[*Ann Finkbeiner*](http://www.slate.com/authors.ann_finkbeiner.html) This article is from **[Hakai magazine](http://www.hakaimagazine.com/%22%20%5Ct%20%22_blank)**, an online publication about science and society in coastal ecosystems. <http://www.slate.com/articles/health_and_science/science/2015/09/earthquakes_and_tsunamis_in_the_pacific_northwest_native_american_myths.single.html>

# *#2* By [Dana Hunter](https://www.scientificamerican.com/author/dana-hunter/) Thunderbird and the Orphan Tsunami: Cascadia 1700 on January 26, 2016 <https://blogs.scientificamerican.com/rosetta-stones/thunderbird-and-the-orphan-tsunami-cascadia-1700/>

#3 IMAGE <http://www.burkemuseum.org/static/earthquakes/bigone/detective.html>

#3 ARTICLE By Bob Kelley http://www.northbeachvacation.com/copalis\_ghost\_forest.html