

## **Not My Fault: World Tsunami Awareness Day 2021**

Lori Dengler/For the Times-Standard  
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The United Nations designates November 5th World Tsunami Awareness Day. It is a day to salute people whose actions protected their families and communities from tsunamis. Anyone, including the old and the young, can be a tsunami hero or heroine with a bit of education.

November 5th was chosen to honor an old man saved his village because he knew that tsunamis could follow earthquakes. In the early winter of 1854, a magnitude 8.4 earthquake struck Japan's Kii Peninsula off the coast of central Japan. After the earthquake, Goryo Hamaguchi, set fire to piled sheaves of newly harvested rice to get the attention of villagers near the coast and guide them to high ground in the darkness. The 1854 tsunami caused damage and casualties, but his actions saved many in Hiro. It became part of Japanese folklore and was recounted by Lafcadio Hearn in 1897 in one of the earliest stories about Japan in the English language.

My introduction to the Rice Sheaf fire and Hiro tsunami was at a meeting of the National Tsunami Hazard Mitigation (NTHMP) program. The NTHMP was founded in 1996 in large part of concerns over tsunamis on the Cascadia subduction zone following our 1992 Cape Mendocino earthquake. We were a small group then - two representatives from the five Pacific states and members from NOAA, the USGS, and FEMA.

In those early NTHMP days, we collected as much tsunami educational material as we could find and one of the Oregon reps had found a 7-minute video "The Wave A Japanese Folk Tale" that animated a children's book about an old man (Ojiisan) and his grandson who saved his village by igniting the rice crop. We were given copies and I incorporated it into our first school curriculum project.

I loved the simple graphics and the positive message of the video. I showed it to my daughter's second grade class. Two years later, after the Papua New Guinea tsunami, I was preparing to leave on my first post-tsunami field survey. Clara said that it was too bad there wasn't an old man to

warn the people to go to high ground. The Ojiisan story had stuck in her memory.

Nine years later I learned that it wasn't just a folk tale. It really happened. Brian Atwater, now emeritus at the USGS, spent a sabbatical in Japan in the early 2000s looking for historic evidence of the 1700 Cascadia tsunami in Japan. The result is a fabulous book "The orphan tsunami of 1700—Japanese clues to a parent earthquake in North America" that lays out the evidence for the last great earthquake in the Cascadia subduction zone.

An orphan tsunami is one that arrives without feeling an earthquake. Japan is one of the most tsunami-prone regions of the world and the majority of tsunamis are home grown – caused by large earthquakes that people feel and shortly followed by a series of tsunami surges. The term orphan tsunami refers to one with no parent earthquake – the tsunami surges just suddenly arrived. In March 2011, we experienced such an orphan in California when the Great East Japan earthquake produced a tsunami that was large enough to cause damage in Crescent City and other West Coast harbors.

One of the accounts Brian and colleagues found of the Cascadia orphan tsunami was from the village of Hiro. In researching the Hiro story, they came across the 1854 story of Goryo Hamaguchi. They even tracked down a painting done by a witness to the tsunami. The actual earthquake occurred in December on our calendar but on November 5th using the traditional Japanese calendar.

I have a special fondness for this day. Rather than focus on a horrific disaster, it elevates an action that reduced impacts and saved lives. The first UN World Tsunami Day was in 2015, on the very same day that the first edition of the book "The Extraordinary Voyage of Kamome, A Tsunami Boat Comes Home" was published. The Kamome story is a bilingual Japanese – English book that I co-authored with Amy Miller. The wonderful illustrations by Amy Uyeki are very much in the spirit of World Tsunami Day. It is a book about how bad things can happen but can also bring out the best in people, that kindness matters and, despite differences in language and culture, we are far more alike than we are different.

The Kamome book, like the Ojiisan story, is not scary. Both deal with a frightening subject but in a way that is positive and will make you smile. We've created a new web page <https://rctwg.humboldt.edu/world-tsunami-awareness-day> where you can explore the origins of World Tsunami Day, access the Kamome story and view the Japanese Folk Tale video. There's a video lecture on California tsunami

hazards, stories of other tsunami heroes and heroines, and links to curriculum activities.

This World Tsunami Day, take a moment to think about your family and what actions you could take to protect them. Even if you don't live near the coast or in a tsunami zone, any visitor to the beach is possibly at risk. If you are a coastal resident, support your community's efforts to establish tsunami evacuation routes and practice how to evacuate. We've included info on how to hold a drill on the website. Looking forward, we hope to hold a tsunami evacuation drill in Manila and Samoa during California's Tsunami Week in March. We will be looking for Peninsula residents to help us organize the drill.

Note: The orphan tsunami of 1700 is available in downloadable form for free at

<https://pubs.er.usgs.gov/publication/pp1707>

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Lori Dengler is an emeritus professor of geology at Humboldt State University, an expert in tsunami and earthquake hazards. The opinions expressed are hers and not the Times-Standard's. All Not My Fault columns are archived online at

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