

Japanese Tsunami Debris Enters U.S. Coastal Waters

realscience.us/2012/04/24/japanese-tsunami-debris-enters-us-coastal-waters/

[Curtis Ebbesmeyer](#) recently returned from Alaska, where he visited the area near where the first fishing boat drifted into American coastal waters after being washed out to sea following the devastating Japanese tsunami in March 2011. The Seattle-based consulting oceanographer has been tracking wayward [Nike shoes, rubber duckies and hockey gloves](#) for 25 years. In fact, he is known as one of the top flotsam experts in the world and is the author of [Flotsametrics and the Floating World](#). And with decades of practice he's pretty good at predicting what will float past thanks to wind patterns and ocean currents.

He predicted that the U.S. mainland would start seeing the most buoyant pieces of [debris from Japan](#) sometime this year. After studying drifting ships and other things that float, he thought the first of dozens of Japanese fishing boats would begin to hit the U.S. west coast in February.

Many other scientists thought that was a bold prediction and one that seemed too early by their standards. When the first Japanese boat found its way to the north Pacific waters off Canada, Ebbesmeyer thought the sighting was a bit later than he thought.

He says, "Judging by the devastation in Japan I was expecting dozens of boats. You know we have about 100 boats that we've recorded in the last 200 years so I was expecting a boat in February. I was a little surprised that it took so long."

A derelict Japanese fishing vessel drifted at least 4,500 miles before it was spotted off the coast of Canada and sunk by the U.S. Coast Guard in early April.

During a spring trip to Craig, Alaska, Ebbesmeyer taught kids how to spot Japanese tsunami debris, how to use a geiger counter and even asked them for solutions to get rid of the refuse.

So far he says hundreds if not thousands of four-foot black styrofoam buoys have washed ashore — mostly from oyster farms off the coast of Japan. They are appearing, pretty much all at once, Ebbesmeyer says, from Kodiak, Alaska all the way to northern California.

He tells [KUOW's Weekday](#) says, "When you have a disaster like a container spill the debris comes ashore all at once and that's what we've seen since last October." Now Ebbesmeyer says he's expecting more to wash ashore, including refrigerators, cameras and boats. But so far there's only been the one squid, which the U.S. Coast Guard sank in deep water near the Queen Charlotte Islands.

He says, "Refrigerators float because the insulation around the outside is styrofoam." A couple of years ago Ebbesmeyer tracked a container spill of little refrigerators which washed ashore months later. So he knows that they float quite well.

The Coast Guard says the Japanese ghost ship was floating in shipping lanes and posed a risk as an unmanned, unmarked, unlit vessel. Therefore it had to be sunk, despite the fact that it was still carrying diesel fuel on board. Ebbesmeyer says that we are woefully unprepared for the Japanese tsunami debris and that the decision to sink the 200-foot boat shows that.

He says, "We're in reactionary mode when things show up and we react but we don't have time to plan."



Japanese Tsunami Debris Island off Coast of Japan, courtesy of US Navy



Japanese Ghost Ship, Ryou-Un Maru Floats Near British Columbia before Coast Guard Scuttles Her

The debris began arriving last October in what Ebbesmeyer says was the wake-up call. Now, he says, this boat has given us another wake-up call. He says, "I think we are going to be driven by more and more events of different things washing up until the main event starts maybe this fall in October."

He says that's when we are going to see a lot of flotsam washing ashore up and down the U.S. west coast from Alaska to California. Right now, Ebbesmeyer says we are "behind the curve" and need to get ahead of it.

Last week a soccer ball and volleyball rolled ashore in a remote Alaska island used primarily as a radar station. The soccer ball has Japanese writing stenciled on it and allowed radar technician David Baxter and wife Yumi to translate and identify the school where the ball came from in Japan. The school is located in the tsunami zone but is up a hill and didn't sustain much damage.

NOAA spokesman Doug Helton says he is working with the U.S. State Department and Japanese officials to return the two items.

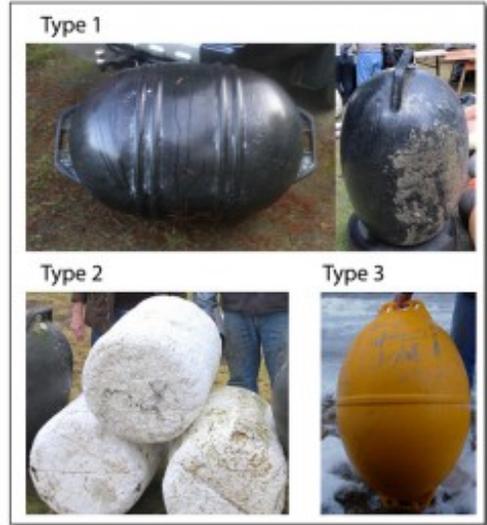
He tells the [Anchorage Daily News](#), "There have been other items that were suspected, but this is the first one that we're aware of that has the credentials that may make it possible to positively identify it."

Baxter and his wife are in the process of returning the soccer ball to 16 year-old Misaki Murakami and the volleyball to 19 year-old Shiori

Sato. According to a [NOAA update](#) Murakami received the ball in 2005 as a gift from his classmates in third grade before moving to a new elementary school. He lost everything in the 2011 Japan tsunami and is grateful that this sentimental object has been located. The NOAA update also says that Sato's house washed away during the March 11, 2011 tsunami.

Helton says that a new computer model released earlier this month puts Alaska as one of the first stops for tsunami debris from Japan. He says, "You can see that the Gulf of Alaska is going to get high windage items, floats, Styrofoam, soccer balls. Those things could be moving pretty quickly. Wood and construction materials will be a lot slower."

In a late March post on his blog [Beachcomber's Alert](#) Ebbesmeyer began tracking the 170-foot squid boat Ryou-Un Maru. Using the [OSCURS computer model](#) which his oceanographer friend [Jim Ingraham](#) built, the two tracked the ship's path using wind speed and ocean currents.

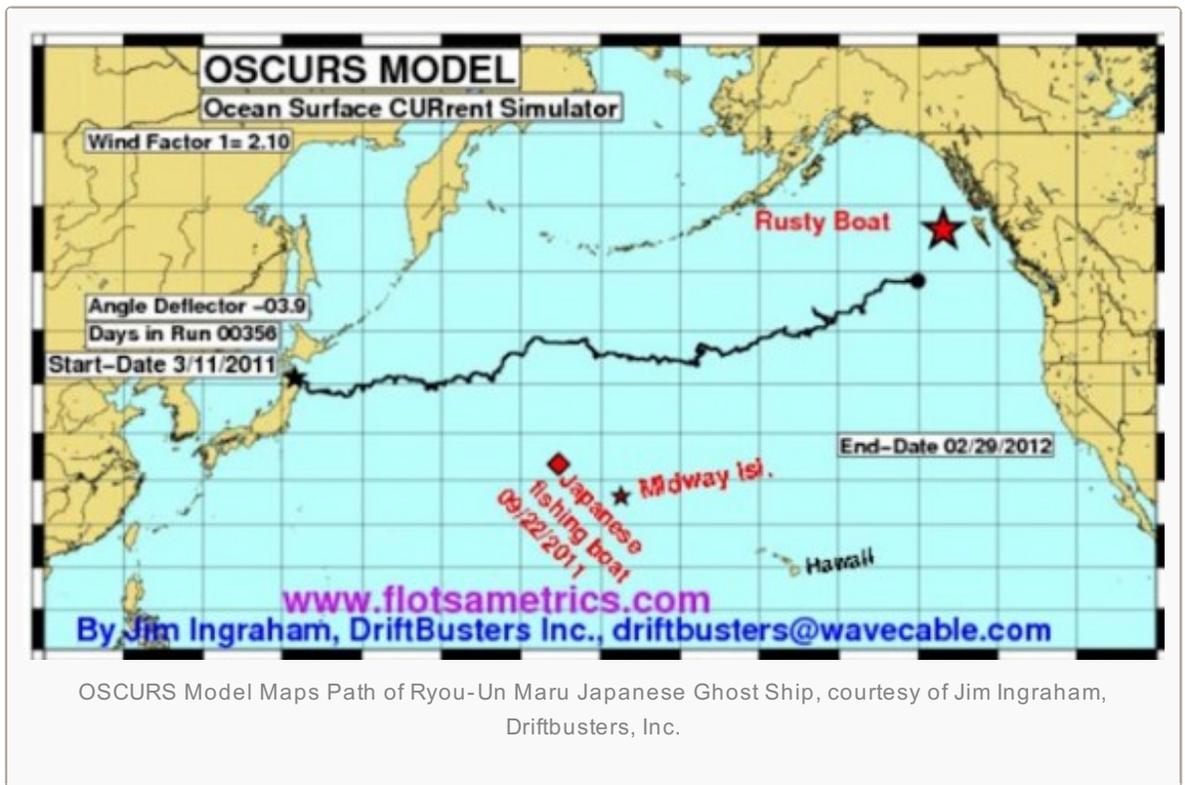


3 Japanese Buoy Types Washing Ashore from Oregon to Alaska, Photo by John Ingraham



The Soccer Ball with Japanese Writing, "Hang in There, Murakami!!" Came from a School in the Tsunami Zone Washed up on An Alaskan Island. Photo by David Baxter.

They wanted to see where the vessel would eventually make landfall, somewhere near the northern tip of British Columbia. As it turns out, the Coast Guard scuttled the ship about 150 miles south of Alaska. Ebbesmeyer thinks that Japanese tsunami debris in coming months and years is going to overwhelm beach clean up efforts because it'll just be too much stuff. After talking with middle and high school



OSCURS Model Maps Path of Ryou-Un Maru Japanese Ghost Ship, courtesy of Jim Ingraham, Driftbusters, Inc.

students in Alaska he's decided that beachside rock pits that commonly dot the coastline there could be a good place to store the debris as it washes ashore before it can be sorted and recycled or returned. He says, "There will be mementos that the Japanese will want to come over and retrieve themselves." But the rest he says needs to be removed from beaches and "sequestered so we can sort it judiciously." Based on running the OSCURS model for the last 30 years, a lot of experience with flotsam and the wind factor, Ebbesmeyer says that the U.S. west coast is going to be getting a big pile of Japanese debris sometime around October. Based on ocean currents the coast of Washington and Vancouver Island could receive up to 90 percent of the debris that's on its way. Ebbesmeyer is traveling around the state telling people to get ready and in his words "to gear up."