

THE RECORD

DISASTER PREP | Earthquake science 101

BY DAVE ROBINSON
Special to the Siuslaw News

By now everyone knows that earthquakes are caused by a rumbling deep inside the earth and, if the rumbling is severe enough, there is damage here on the surface. The amount of damage depends on several factors including the type of quake, and location.

Most folks look for a measure of intensity from the newscaster; "There was a quake last night in Outer Slobovia which measured 6.2 on the Richter Scale."

We know that was a quake of moderate strength. The higher the number, the more intense the quake, thus the more danger to life and property.

In 1935, Charles Richter developed a scale based on seismographic readings to measure the intensity of earthquakes. For several decades his scale was the state of the art for earthquake measurement. But technology being what it is, the Richter magnitude scale eventually

became obsolete, mostly because of its limitations in accurately measuring the quake several miles from the epicenter.

Then, one of his peers improved on the original and it became the Modified Richter Scale. Again, technology drove the geology community to improve and along came the Mercalli scale.

While the Modified Richter Scale is still used to measure the intensity of the quake, the Mercalli Scale is used to measure the effects of the quake. The effects are varied, compared to the distance from the epicenter. Then, to further complicate matters, in the 1970s, along came the Moment Magnitude Scale (MMS).

The magnitude is based on the seismic moment of the quake. A formula involving the rigidity of the Earth, the amount of slip on the fault and size of the area that slipped, measures the MMS. Fortunately for the layman,

the numbers to report the MMS are the same as the Richter Scale numbers.

I realize all this can be confusing, but hang on. Did you know that an earthquake measuring 3.0 is 10 times stronger than one measuring 2.0?

We are conditioned to break down numbers in 10ths. For example a sign reading 6.5 miles, means six-and-one-half miles.

Not so with the Richter Scale.

Using ordinary logic, you'd think a 6.0 earthquake would be twice as intense as a 3.0. In reality, it is 300 percent greater!

Scientists can come pretty close with predicting where quakes will happen, and their potential intensity. But even with all of today's technology and measuring equipment, it is still impossible to accurately predict when they will strike.

Thanks to GPS technology and literally thousands of sensors drilled deep within the

earth's crust, tectonic plate movement as little as one-half centimeter can be detected.

Even as you read this, the Cascade Mountains are rising and tilting eastward as the Juan de Fuca plate pushes (subducts) under the Continental Plate along the Cascadia Fault about 60 or so miles off our coast. Currently, they seem to be stuck, but they are still pushing. When they become unstuck, we will have an earthquake that may rightfully earn the title, "The Big One!"

Check your supplies and your plan.

Now is the time to prepare!

Dave Robinson is the postmaster in Bandon, Ore., and author of "Disaster Prep for the Rest of Us." He may be contacted at disasterprep.dave@gmail.com. Visit his website for more disaster preparedness tips, www.disasterprepdave.blogspot.com.

Burns receives OSBA award

Paul Burns, Siuslaw School Board member, was among nine locally elected board members recently recognized with a gold award for completing course work through the Oregon School Boards Association's (OSBA) Leadership Institute.

The awards, presented Nov. 12 at OSBA's 70th annual convention in Portland, recognize board members for significant

levels of achievement in leadership and development.

There are four levels: bronze, silver, gold and platinum.

Betsy Miller-Jones, OSBA's executive director, congratulated recipients, telling them, "This achievement recognizes local school board members who are going the extra mile on behalf of Oregon's children."

COURTS

Florence Municipal Court

Nov. 22

Joshua Michael Brown pleaded no contest to offensive littering and criminal trespass. He was sentenced to three days in Florence City Jail. He must pay \$50 in fines.

Dakotah Richard Hill pleaded guilty to a misdemeanor for driving with a suspended driver's license. He was sentenced to eight days in Florence City Jail. He must pay \$975 in fines.

Nicholes Allen Widmann pleaded no contest to offensive littering. He must pay \$275 in fines and not contact or be in or about the property of the victim.

Christian Elizabeth Cropper

pleaded no contest to attempted possession of methamphetamine. She was sentenced to six days in Florence City Jail and must report to Emergence Addiction and Mental Health Services. She must pay \$50 in fines.

Melissa Megan Chatham pleaded no contest to unauthorized departure. She was sentenced to six days in custody.

Isaiah Jamonz Evans pleaded guilty to criminal trespass. He was sentenced to six days in Florence City Jail and must report to community service. He must pay \$50 in fines and not contact or be in or about the properties or place of employment of the victim.

Oregon Tsunami Conference begins next Wednesday at FEC

Florence will be host to the annual Oregon Tsunami Conference on Wednesday, Dec. 7, when disaster preparations leaders will discuss what preparations are needed for what would likely be a devastating tsunami and earthquake at some point along the Oregon coastal region.

The conference will be held at Florence Events Center beginning Wednesday and continuing on Thursday.

The goal is to coordinate

state, county and local government agencies that would be the first to respond in the aftermath of an earthquake along the Cascadia Subduction Zone off the Oregon Coast.

Director of Oregon's Office of Emergency Management Andrew Phelps will open the conference Wednesday afternoon. He will be followed by several scientific experts who will speak during the two-day event.



Health Care Town Hall

Join us for the second in a series of town hall events addressing our community's health care, the national provider shortage and how Team Medicine is improving access to care.

Friday, Dec. 9
12:30 - 1:30 p.m.
Florence Events Center
715 Quince St., Florence, OR 97439

■ GOT QUESTIONS?

Come to the town hall for an opportunity to ask your questions in person. Or, share your questions in advance of the event:
[facebook.com/peaceharbor](https://www.facebook.com/peaceharbor)

■ NO REGISTRATION REQUIRED.

Visit us online for the latest information about the event and PeaceHealth's provider recruiting efforts.

 **PeaceHealth**
Peace Harbor Medical Center

Thanks to our partner, the City of Florence, for working with us to host this event.

[peacehealth.org/WeCare](https://www.peacehealth.org/WeCare)

Dave's RE-CORNER



Most people have heard of the 3Rs of environmentally friendly behavior-

REDUCE is to use less of something. Use less water, turn off lights, use both sides of a paper.

REUSE is to use an item again. Refill a water bottle, reuse a container and buy reusable bags.

RECYCLE is to make new items from old ones; recycle bottles, glass, paper, cans, plastic, cardboard & more.

Tip

Reduce Waste During the Holidays
Use earth-friendly gift wrapping alternatives, such as

- Scarves, handkerchiefs and bandannas
- Old posters and maps
- Newspapers (the comic sections works great)
- A present in a present. Place gifts inside reusable containers like cookie tins, flower pots, and baskets or wrap gift in cloth napkins or kitchen towels.
- Give a "treasure map" to find an unwrapped gift hidden elsewhere in the house
- Wrap gifts in your children's or your own artwork
- Look through old magazines, catalogs and calendars to use attractive photos
- Use re-useable or re-used gift bags
- Replace ribbons and bows with natural evergreens, berries, dried flowers. Keep them as decorations or compost them after the gifts are unwrapped.
- Wrapping paper made from recycled paper

Quiz

Answer to Previous Quiz: A Reducing

If you sell your children's used clothing you are...

A) reducing. B) reusing. C) recycling.

Did you Know?

People in the U.S. make up 5% of the world's population but use 25% of the world's resources and generate 30% of its garbage.*

