

Small earthquakes recorded near Augusta, West Yellowstone

By MARTIN J. KIDSTON - IR Features
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The Earthquake Studies Office in Butte detected a small temblor 14 miles southwest of Augusta Tuesday and another quake 10 miles northeast of West Yellowstone.

The quake near Augusta measured 1.9 in preliminary readings, though scientists at the Montana Bureau of Mines and Geology believe it most likely registered 2.5 on the Richter scale and was much deeper than first thought.

"That one yesterday near Augusta is a preliminary location determined from our real-time system," said Mike Stickney, director of the Earthquake Studies Office. "We'll go back and do a more detailed analysis."

A second quake measuring 2.1 was also recorded Tuesday about 10 miles northeast of West Yellowstone. Temblors in that region are common, accounting for much of Montana's seismic activity.

"It's probably one of the hotter spots in the lower 48 states outside of California," Stickney said. "Over the past year we've been averaging five locatable earthquakes a day in Montana. That gets you up to a couple thousand a year."

Most earthquakes aren't felt until they approach a magnitude 3 on the Richter scale, Stickney said. One such quake — the last "felt" temblor in Montana — occurred below Radersburg southeast of Helena in late January. That event measured 2.9 and was reported by several Radersburg residents.

"It turned out that the epicenter was below a subdivision there," Stickney said. "The lady I spoke with said it was a real sharp jolt. It was a mile from her house and about five miles deep, so she was almost sitting on top of it."

For each increase in number on the Richter scale, Stickney said, a quake carries 30 times more energy. It would take 30 earthquakes of magnitude three to release the same energy created from a magnitude 4.

While there are more small quakes than large ones, Stickney said, there's never enough to get rid of all the stress. That means tension is always building and when it releases, it threatens to do so in powerful ways.

In July 2005, one quake north of Dillon measured 5.6 on the Richter scale and was reportedly felt as far away as Denver and Seattle.

"We're still seeing aftershocks from that on a daily basis," Stickney said. "I don't think we've recorded one in the last 24 hours, but we get them weekly. We've recorded over 5,000 aftershocks since it occurred."

Most of the recent seismic activity around Helena has occurred near Silver City and Marysville, and just across the Continental Divide toward Avon.

The last "felt" quake with an epicenter under Helena occurred in March 2003, when a magnitude 2.8 event occurred below the intersection of Ten Mile Creek and I-15.

"I did get some calls after that," Stickney said.

Reporter [Martin Kidston](#) can be reached at 447-4086, or at mkidston@helenair.com