

The Caldera at Taum Sauk

“Come on,” Elena said. “It’s just a little bit further. We’ve got to hurry.”

They had come all the way from Washington D.C. to retrieve a small USB stick of scientific data. It was housed in the seismographic instruments deep in the old Taum Sauk Caldera. Mr. Blackstone wanted proof that the increase in earthquake and volcanic activity here in the heart of America was related to the arrival of the comet. Taum Sauk Mountain, at 1,772 feet was the highest point in Missouri and once an active volcano. They struggled to climb up the steep access tunnel.

“Mr. Blackstone is going to get his proof,” she continued, “but it may be too late.” Her voice trailed off but David thought he heard something in Spanish about a donkey. Elena led the small group up the caldera access tunnel to the data station she had put in place less than a year ago. David brought up the rear of the small group consisting of Manny and his daughter Cynthia. Just three days ago, a 7.2 temblor hit the New Madrid earthquake zone, a little over 100 miles to the Southwest. It hadn’t been active since the early 1800’s. Were they connected?

Elena’s voice in the dark reminded David of the many times she had led him on in the past. Confident, she always knew the way when it came to volcanos. That self-assurance both annoyed and endeared Elena to David. Undergrads together at the University of Washington, Elena had come from Mexico City on an international scholarship to study atmospheric science. David’s classes in astronomy met in the same building.

Memories of following her through the tunnels of Mt. Rainier came flooding back. He could never refuse her weekly requests to visit the recording equipment. After calibrating the

devices they would go exploring some new part of the caves. Elena always seemed to almost fall into some crevice, and needed David to hold her ever so close in order to make it out safely.

Elena was used to getting her way. Their relationship had been purely physical until grad school took them in different directions. David didn't mind being her boyfriend, but his head was always in the stars. Nor was there any room in his heart for love, even when Elena practically begged him to come with her to meet her family in Mexico for a few weeks that last summer.

David, blind to the woman who adored him, left for his graduate program at CU without so much as a kiss goodbye. His eagerness to get started on his career meant there could be no time for anyone but David and his professors, who recognized and encouraged his genius. Elena went back to Mexico pursuing that advanced degree in volcanology at the Universidad de Colima, on the West side of Mexico. It was at Colima that she studied with Dr. Peter Walker, one of the world's best volcanologists and coincidentally, Cynthia's husband.

Peter had died in Cynthia's arms, after having been hit by rocks from the unexpected eruption of the Popocatepetl Volcano. Peter and his graduate students had just finished a study comparing the types of igneous rocks found in both volcanos – Colon and Popocatepetl. Nobody expected the eruption. They had no monitoring equipment setup back then because it had been dormant for so long. That all changed. Of course the best place for monitoring is as close to the pyroclastic area as possible. Elena, with the rest of the graduate class finished placement of the recorders a few weeks before as a memorial to Peter's work.

Another small temblor jolted David back to the present, back to Missouri. They seemed to be getting more frequent, a sure sign of an impending eruption, just like at Mt. St. Helens.

"Elena, slow down," David said. "We don't know this place like you do."

Manny and Cynthia were right behind David, their flashlights moving from side to side. With every shock they stopped to shine their lights on the walls, as small rocks fell. Elena did not

stop. She had probably been this way a dozen times. As a visiting expert, she knew all the active and most of the inactive volcanic hotspots in the world. She was on a mission to get that data.

“Up until a few months ago,” Elena said, “nobody cared about this mountain in Missouri. That caldera we’re going to see has not been active for millions if not billions of years.”

“Well, it’s obviously not so dormant anymore,” David said. It was now bulging, venting steam and building a dome where there had never been one before.

“How many times have you been here lately?” Cynthia said to Elena.

“Five times just in the last month,” Elena said. “I led the team that placed the new monitoring equipment and data link. It’s too bad that link failed just as that comet showed up. I hadn’t expected to be back so soon but we need to get a look at the earthquake data.

Elena stopped, turned her flashlight back toward the rest of the group, a sense of pleading in her voice. “Hurry,” she said. “We’re almost there. We’ve got to get those data sticks.”

“I know, Elena, but it’s not going to erupt right now,” Cynthia said. “Manny can’t keep up. This tunnel is too much for him.”

Cynthia had her arm fully around her father’s back, helping him up the steep incline.

“Don’t you worry about me,” Manny said. “I can just sit right here until you come back.” Manny found a rock at the side of the tunnel and sat down. Manny’s labored breathing convinced David it might be best to follow his advice. Besides, if Elena was right, they should be back in five minutes. He and Cynthia could go on with Elena to get the GPS readings they needed.

“We’ve got to prove to the commission that this event is not limited to the Cascades,” Elena said. “It’s not just a Western phenomenon like Dr. Blackstone insists.”

David thought he heard her add something about a “stupid bureaucrat,” but the last part sounded like it was in Spanish.

“OK, Manny,” David said. “You sit tight. We’ll be right back. Don’t move.”

“I’m not going anywhere,” Manny said. “You young folks go get what you need.”

Elena had already turned up the tunnel again. Cynthia was right by her side. Unless he decided to run to catch up, David would be just behind them, but still within earshot. He let them lead the way. They each had strong flashlights. Elena was obviously anxious to get there.

“What’s it like working at Berkeley?” He heard Elena ask Cynthia. Surprised, David wondered why the sudden interest in conversation. They were huffing and puffing as the tunnel wound its way ever steeper up the inside of the mountain.

“It’s like any male-run institution,” Cynthia said. “You never get the respect you deserve, your decisions are questioned at every turn and you have to justify every nickel and dime. It’s as if they think we need money for something besides the science we do.”

Elena laughed. “I can understand. It’s worse in Coloma. They’re always taking from my budget for some new program just because the director’s nephew needs a job.” They both paused a minute to catch their breath. David wisely stayed just a few feet behind, saying nothing. He turned to face the opposite direction so his flashlight did not shine up toward them.

Elena continued, “Did I ever tell you how much we appreciated Peter coming down to set things up that first year?”

David thought he heard a sharp intake of breath from Cynthia.

“No,” Cynthia said, “tell me what he did.”

“Oh, he was wonderful,” Elena said. David was glad it was dark. He could just imagine the look on Cynthia’s face as Elena gushed on about Cynthia’s deceased husband.

“I understand you two worked closely together,” Cynthia said.

“Oh, yes,” Elena said, “I was his favorite.” Realizing what she had said Elena quickly added, “Student,” She paused. “He was so much fun, always willing to go to parties with us.”

David definitely heard a large sigh escape from Cynthia. Dare he say anything?

“Elena? Other than at the airport the other day, we haven’t talked about what happened...you know, between you and Peter, especially that last night.”

“What do you mean, Cynthia? Peter was my professor.”

“Come on, Elena, you know what I mean. Peter was good looking. We had only been married a few months. He was far from home. There you were....” She trailed off.

Elena quickly turned back up the tunnel and practically ran the rest of the distance to the monitoring station. It was all Cynthia and David could do to keep up with her. They found her tearing desperately at the cover of the seismograph, which seemed to be stuck.

The equipment was mounted on a steel post, secured to the wall by cement and a chain. The humidity in this part of the tunnel was overpowering. The smell of sulfur permeated the atmosphere. It burned in his nostrils. Sweat trickled from David’s face and ran down his neck and back.

“Elena, stop,” David said. “You’ll ruin the cover latch. Here, let me help.”

He stepped between Elena and the equipment. Elena stepped a few feet further towards the center of the mountain, watching David wrestle with the cover, waiting impatiently. Cynthia stood slightly behind and opposite where they stood. Manny was further back in the tunnel, but still within earshot, since they hadn’t come much farther beyond where they left him.

Just as David got the cover open, the largest tremor they had felt yet rattled the mountain. The ground on which David and Elena stood gave way. Rocks fell from the ceiling crashing down around them. They both slid down a newly formed embankment that led to the center of the caldera. David heard Cynthia scream, “David, Elena” from up above and behind them.

David managed to hook one arm to the equipment post that was chained to the wall. At the same time, he caught Elena’s arm before she could fall into the caldera. Her legs dangled where the floor of the tunnel used to be. The ground around them continued to crumble. Their

flashlights dropped into the hot lava. Blazing heat escaped from a crack that opened in the earth just below Elena's swinging feet.

Steam from the boiling lava shot upward at them. The hot moisture and sweat caused David to lose his grip on Elena's arm. "No," David shouted as Elena slipped and fell onto a ledge just above the lava. She screamed. The smell of burning flesh and denim reached his nostrils. "Elena, don't move. I'm coming," he said.

With all the strength he could muster, David inched his way down the steep incline until he could reach Elena. Although his feet were protected, the rocks burnt his hands. Elena was unconscious. He grasped her hand and pulled. She screamed in pain. Slowly, he tugged, trying to get her body weight up the incline. Her legs were already blackened, her pants scorched away

"It's no use," Elena said. She was losing consciousness again. The heat was unbearable. Tell Cynthia that nothing happened between me and Peter."

"You tell her yourself," David said. He tugged harder. Elena screamed again and passed out. David managed to pull her up the embankment, an inch at a time. It seemed like an eternity.

At the top, both Cynthia and Manny helped him pull Elena the rest of the way away from the steady stream of heat. She opened her eyes once they had her away from the opening. Tears streamed down her blackened face.

As David reached around to pick her up, she screamed again in agony. He realized her entire back had also been burned, her shirt burned away. She must have been laying on top of the superheated rock ledge too long time before he was able to get to her. Cynthia began to weep. Manny knelt and held his daughter in his arms.

David took off his shirt and wrapped it around Elena but it was too late. The burns had taken their toll. Her shoes and her feet were gone. She was having trouble breathing and clutched at David's arms as he held her upright, trying to help her breath and remain conscious.

“I’m sorry,” Elena said.

“For what?”

“For messing things up like this. I should have waited for you to help me with the latch.”

“Don’t worry about that,” David said. “We’ve got to get you out of here and to a hospital. See, look. Cynthia has the GPS data stick. That should be more than enough evidence to prove Mr. Blackstone didn’t know what he was talking about.”

Elena tried to laugh. “I can’t breathe,” she said. David tried to hold her head up and felt the back of her hair had burned off. Now he was crying.

Elena turned to Cynthia. “Please believe me,” she said. “Nothing happened between me and Peter. I tried but he said he loved you. I’m so sorry. Please forgive me.”

Cynthia clutched Elena’s charred hand, continued to cry. “Oh Elena, please hang on.” But it was too late. Elena closed her eyes and was gone. Cynthia buried her face in her father’s chest and sobbed.”

Another tremor rattled the caldera, this one stronger than the last one. They had to jump for the far wall to keep from falling down the embankment. Elena’s body was buried in the rubble that fell. They were forced to turn and run down and out the tunnel toward the exit.

One last tremor rattled the area and sealed the tunnel, Elena’s tomb, just as they left into the cool night air. Cynthia continued to cry. David wiped away his own tears as they drove North toward Springfield.