**A Man in His Natural Habitat**

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9/22/13

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My uncle, Jeff Marso, reminds me of a friendly bear. He has a hulking structure and gruff posture, yet a smile never leaves his face. However, Jeff certainly does not spend his time hibernating, he travels around the world, observing volcanoes. You see, Jeff is a volcanologist, or someone who researches volcanoes. Although he has a home and family in Washington State, he rarely stays there for long. He travels around the world working with foreign governments to help them prepare for imminent volcanic eruptions. His job, and his impact on society itself, is truly indescribable, but I’ll try.

Even though Jeff has this wild job, he did not choose it for himself. He said he wanted to become a geologist, and studied in school and college for geology alone. However, one day “It just fell at the right place and the right time.” As he was studying some geodes in California, his good friend called and offered him his job in volcanology. The hilarious part about this was that Jeff was not going to answer his phone, because it was an extremely long distance call. If he didn’t answer it he would have lost his chance at volcanology. Jeff explains the event as “The best day of my life, easily, and it was truly, my dream come true.” Now he works at USGC or the United States Geological Center, Volcano Division

During the time that Jeff spends on duty, he goes to countries around the world to help prepare for an eruption, or if an eruption has already occurred, he is the first to response to help with the crisis. Wherever he goes he brings emergency survival equipment, tools for rescue, and evacuation procedures to give to the head of the country. He works with their government discussing plans for relocation usually, and when Jeff is talking to that head of government unless the volcano erupts, he will not stop negotiating a plan for the least casualties. “It gives me a sense of purpose; I love to help others.” he said.

After hearing this, I then asked him if he could tell me a story of a paramount experience. “Ha, a story, well, I certainly can do that. Ok. Due to the fact that I am crisis response, I have been to many major volcanic eruptions. The most memorable was the eruption of Nevado Del Ruiz, in Colombia. Despite the fact we had hundreds of volcanologists rushing around to help evacuate natives and provide shelter, the blast was devastating. Nevado Del Ruiz killed twenty three thousand people, and injured countless more. This was game changing, as it was the first time I understood the destructive power in a volcano and set this career in stone. I wanted to at least make an attempt at preventing a major loss of lives such as that one. Even after the immediate threat was gone, I still went to towns, cities, even neighboring nations that needed help after the blast. The clean up time that I personally spent there was four months; I imagine the cleanup took much longer.”

In volcano logy, the scientists need to be prepared, but not in the way you’d expect. There are no hazmat suits or bizarre goggles. The scientists prepare by learning many branches of earth science. “We volcanologists train largely in geology, seismology, geochemistry, and geodesy.” Geodesy is the study of the shape of the Earth’s crust. He also needs to be able to communicate with the people of different nations, and knows a huge number of languages, even if he cannot speak the fluently.

Even though Jeff is looking directly at volcanoes, some which are becoming unstable, he says that is not the biggest risk. Jeff says that “Ironically, the most dangerous part is trying to get to the volcano, traveling on roads in third-world countries.  The reason the volcano is not necessarily the risk is because they know when it is about to erupt, and can clear the heck out before a massive eruption occurs.”

Jeff’s research largely affects people, and he loves that. “Well, like I said, I am first response, as well as ‘The Warner.’ I try to keep eruptions from being extremely deadly by bringing it to a national attention.” After the eruption, Jeff feels that it is his duty to try to protect anyone caught in the blast. This is the same reason that he says he loves his job. “Just the thought of saving someone's life and they go on to change the future thrills me. The only thing about my job that I dislike is the overwhelming amount of paperwork.”

Then the question came about “What is required to become a volcanologist?”

“The most basic skills we use on a daily basis are; seismology, the study of earthquakes, and geology, the study of rocks. However, we also need to know geodesy,  as well as geochemistry. Geochemistry is very interesting because you literally look at the composition of rocks with beams of light.” They also need to know how to utilize all the machinery that can be used to detect volcanic activity, or the movement of the earth, even by half a millimeter.

“I definitely feel the job as a volcanologist is rewarding, especially in two ways. The first is the friends and colleagues that I make all over the world during my travels. The second is that feeling of helping people that just brings you joy.” In fact, Jeff is currently studying multiple volcanoes in Indonesia. “We have detected a large amount of seismic hotspots, which are of our top concern. Even more alarming is an aftershock from an eruption that occurred over 20 years ago. If this continues, it could aggravate nearby volcanoes and an eruption would follow shortly after.

All in all, Jeff would never give up his incredible job in volcano logy. He loves to use his passion of geology every day, as well as have a well paying job at the USGC. The feel of helping and making oversees friends is what keeps him addicted to this job, and he wishes, he could do this forever.