

 **Spotlight on Climate****Trouble With Tribbles – Little, but Deadly****STEFAN SOMMER**

(700 words)

I don't know if you'll remember the old Star Trek episode "Trouble With Tribbles", but it was the most popular episode ever. It featured all the usual suspects, Kirk, Spock, Bones, Uhura, and of course the dreaded Klingons. As always, the Klingons were the big military threat, but in this episode it turned out that a little puff of fuzz, known as a Tribble, was the bigger threat and almost took down the starship Enterprise and everyone aboard. Uhura brought one of these cute little puffs on board because it was fuzzy and made her and others feel good. No one saw these puffs as a threat, but the Tribbles multiplied exponentially until they clogged air ducts and consumed all provisions.

Similarly, it's easy for us to overlook the threat of the little puffs of CO₂ that we release as we drive our cars, heat our homes, fly our planes, or consume goods from other parts of the world. So what if I leave the lights on when I leave the room? Well, if the electricity comes from a coal-fired power plant, then that produces more puffs of CO₂. Problem is, like the Tribbles, these puffs keep adding up, and each new puff adds to the 2,500 gigatons of CO₂ we have already put into our atmosphere.

These accumulating puffs have already raised Earth's temperature by 1.3°C (=2.3°F), yet we do not recognize the significance of this threat and we keep puffing away. Maybe it's because 1.3° sounds small...? But really this means we've raised the average temperature of our entire atmosphere and all ocean and land surfaces. The amount of heat energy this represents is massive.

Just like the crew of the Enterprise, we overlook the little puffs (CO₂/Tribbles) and focus our attention on the immediate threats (military conflicts/Klingons) that are tearing apart our world. Should we ignore military conflicts? Of course not. These crises are immediate and dire. But we also cannot ignore the burgeoning threat of the accumulating puffs. By overlooking Tribbles, the crew of the Enterprise were on the verge of losing everything. Our current situation with CO₂ is heading us in the same direction.

In 2018 the Wall Street Journal reported that corn production in Iowa had become volatile, while corn production in northern Alberta and in Canada as a whole, had been rising steadily. That's right NORTHERN ALBERTA!! Year after year we are seeing over 30 million refugees fleeing their homes because of climate disasters. The World Bank projects that by 2050 we will see even more intense effects of climate change, and we can expect 216 million climate refugees every year; with 17 million fleeing Latin America alone. In Central America water availability keeps dropping as temperatures rise. The

World Bank based its projections on the associated drop in agricultural productivity.

Here in Arizona, we see hundreds of thousands of climate refugees every year. These refugees come from Guatemala, Honduras, and El Salvador, where climate change has made drought so intense that farmers can't feed their families. It's a hard decision to flee your home, your community, and your way of life. For these farmers the situation is also dire.

In 2022, Pakistan saw severe flooding, wildfire, and droughts resulting in over 33 million climate refugees. The world stepped forward to help, but could only provide shelter for 1.3 million. The situation for the Pakistani people was also dire.

This summer, a combination of unprecedented drought and high winds from one of the ever more frequent tropical storms burned down Lahaina. Over 2,200 homes burned, and almost 100 people died. The situation for the people of Maui is also dire. These are just a few examples that we see every month now across the Globe.

Towards the end of the Star Trek episode, Captain Kirk opened an overhead bin and was completely buried by an avalanche of Tribbles. Fortunately, his crew found a last-minute solution by "beaming" all of the Tribbles over to the Klingon spaceship.

Unfortunately, we don't have that kind of miraculous solution. We only have the one atmosphere, and we can't "beam" our accumulated puffs anywhere. I guess we'll just have to stop our puffing before we too get buried.

Dr. Stefan Sommer

Center for Adaptable Western Landscapes
at Northern Arizona University
and the

Northern Arizona Climate Change Alliance, www.NAZCCA.org/volunteer

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