First Unitarian Universalist Society of Albany, New York Stop Human Extinction

Rev. Samuel A. Trumbore September 15, 2019

Call to Celebration

We live in warm times.

Scientists say our climate is about 2 degrees warmer than it was fifty or a hundred years ago.

That is having some big effects that we can already see in our climate.

Warmer air holds more water.

That means more water
is pulled out of the ground and plants.
That causes more clouds and rain to fall.
That makes storms more powerful.
That means there is more flooding.
And that all means more problems
for life forms on this planet.

And **that** might be creating **some expectations** in you about our future.

And that might be creating some expectations in you that might be **very scary**.

We're going to address those expectations today.

May addressing those expectations motivate all of us to do something about them.

Sermon

<u>Listening to this poem</u> created by the two young women, one from a rocky, cold place with a lot of ice and one from a sandy, warm place with no ice, we can easily get focused on one aspect of climate change, sea levels rising. By the end of the 21st century, the Marshall Islands very likely will be underwater and their inhabitants, climate refugees. But that isn't the *only* effect of the relentless increase in carbon dioxide in the atmosphere we are facing ... just as perilous.

A great deal of the carbon dioxide in the air dissolves in the ocean decreasing its alkalinity. This is already having life threatening results for any creature that has a shell. Changes in temperature are interfering with the ability of species to survive. In the habitat to which they are adapted, species

that are unable to regulate their internal body temperature are dying. Human beings who **can** regulate their body temperature may not be able to survive either where it is getting too hot **even** for them. There were places this past year that the temperature peaked at 129 degrees Fahrenheit. >>>

There are areas of India, China and the Middle East where about a billion people live that may soon become uninhabitable. Walls and cages are not a solution to these problems.

There are many more warning signs we are seeing with heavier rains, stronger hurricanes, more intense fires, drier soils, decreased land that can support crops, melting of the arctic ice and permafrost and receding glaciers, just to name a few of them, that are generating greater and greater alarm. The International Panel on Climate Change, the IPCC, has given us a stern warning. We've only got 10 years, probably less, to cap our carbon emissions and start moving them down. If we don't, positive feedback loops will be engaged that we can't stop that will lead, inexorably to catastrophic, life threatening climate change.

The short hand version of it is: Humanity: change your ways or you're doomed.

We are programmed by evolution to respond to a danger signal like this in three ways: fight, flight, or freeze. We see that response to this threat in people of all ages. The flight response, I like to call the "party on" response. Someone who wants to run away, goes into denial. Whether that means questioning the science as climate deniers do, or willfully ignoring the signs and continuing to participate in behaviors harmful to the planet or just not pay attention, the result is inaction.

The freeze response, stays with the danger, a deer frozen in the headlights, but despairs about being able to do anything about it. They are aware of the growing danger as the car gets closer and closer, but are immobilized by imagining an apocalyptic future where it doesn't matter **what** we do, we'll all be doomed. They are frozen by **hopelessness**.

Today I'm going to argue for the fight response. I can't promise that we aren't already doomed. But I **KNOW** we will be if we do nothing. Doing something is a moral imperative.

The 16 year old who inspires me in this regard is Greta Thunberg.

Last year in August, Greta stopped going to school on Fridays to demonstrate outside the Swedish Parliament. She sat down and held up a sign that said "climate strike" and advocated, when asked, for stronger governmental action. She asked, "Why should I go to school for eight hours a day to prepare for a life I will not be able to have if climate changes eliminates it?" Other students saw what she was doing and joined her by striking on Fridays. They joined together to form the school climate strike movement, now called Fridays for Future. Greta addressed the December 2018 United Nations Climate Change Conference in Poland setting off a worldwide response. She has become a powerful force partly because of her non-neural typical, matter-of-fact speaking style that amplifies her demands for immediate action to address our "climate crisis." Over a million students have responded in some of the multi-city protests. You can join in next Friday too. She says, "We can longer save the world by playing by the rules, because the rules have to be changed."

Greta is here in the United States right now because she will be speaking at the United Nations General Assembly on September 23rd. On Friday, she was at a die-in in front of the White House. Refusing to travel here by airplane, one of the most fossil fuel intensive ways to move, she crossed the Atlantic in 15 days on a 60 foot sail boat with her father and crew at the end of August. She will be asking the world to pay attention to the science and respond appropriately.

Greta isn't the only one we've heard that message from. We've also heard it from Dr. Bill McGibben who teaches at Middlebury College in Middlebury, Vermont. 40 years ago, all he thought he needed to do was present the science, reason with people and persuade them that we needed to act. Tragically, after Dr. Jim Hansen testified before Congress in 1988 about the urgency of addressing climate change, that also signaled the beginning of the climate denial movement.

The news media has recently reported the story that this climate change denial movement was carefully orchestrated by the fossil fuel extracting companies. Corporations like Exxon and Shell did their own research in the early 1980's and came to the same conclusions as Hansen. They didn't take a global perspective on it however. They took the neoliberal perspective – the only thing that matters is shareholder value. Having trillions of dollars' worth of fossil fuel in the ground that can't be extracted is, well, bad for business. Let's do anything and everything, they said, to question the science and undermine the political will to do anything about it. They got their wish with a climate denier in the White House who believes climate change is a hoax created by the Chinese.

What McGibben realized was that facts and reason will not force policy change when dealing with well-funded political opposition. That is when he created 350.org and started a people's movement. That movement has been far more effective to initiate change than any of his books or testimonials.

We know the answer already. We need to stop putting new fossil carbon in the air which means, for the most part, leaving what is in the ground, in the ground. And if we take it out, we can't burn it. We don't even want to make a lot more plastic out of it either. We don't need any more infrastructure to extract it or move it around. We need to convert our vehicles, power grid, and heating systems to use renewable power that comes from the sun, the wind and the water.

There is really good news on this front. Advances in solar and wind and batteries continue to drive the cost down of renewable power. The cost of solar panels have come down 90%. Right now it is cheaper to build a renewable electrical generating system than one fueled by coal, gas or oil. The technology pipeline has a number of cost savings in it that suggest this trend will continue. Offshore wind power generation is very promising because the transmission distance to cities will be very short.

And the Green New Deal, can take full advantage of these opportunities to create good jobs. So much energy can be saved through a massive insulation program in older homes and updating windows to increase their efficiency.

What is missing right now is the scale of response needed that is appropriate to the level of the climate change dangers.

This is where 350.org and McGibben have been building a movement, leading and advocating to drive that response.

Millions of barrels of Tar Sands oil are staying in the ground in Canada because they can't get it out. The Keystone Pipeline to move the dirtiest oil on the planet to refineries and ports on the Gulf of Mexico is dead right now. The Canadian Petroleum Corporations have been stymied by too many roadblocks that started back in 2011 when it was proposed. Thousands of people have been arrested. Land owners have refused to let the pipeline cross their land.

When Shell was ready to move a huge oil derrick from Seattle to the Arctic to begin drilling wells, "kayaktivists" blockaded it so effectively that the negative publicity got Shell to call it off.

Threatened Pacific island dwellers have also organized as Pacific Climate Warriors. Their motto is, "We're not drowning. We're fighting." They cut down trees and made traditional boats. Then they traveled thousands of miles in these boats to New Castle, Australia. Coal mined there is shipped out of New Castle's harbor. These small log boats blockaded the harbor sitting in front of huge coal ships. The Warriors were able to persuade the city of New Castle to divest their pension funds from fossil fuels.

Fossil Fuel divestment is another activist effort led and encouraged by 350.org. So far divestment work has convinced many funds to stop investing in fossil fuels with commitments of something like 11 trillion dollars. That is a lot of money. Enough that some of the big fossil fuel corporations are beginning to notice changes in their ability to get funding and changes in their stock prices.

The next step is to go after banks that lend money to extraction operations and insurance companies that protect their assets.

Like Greta's climate strikes, there is another new kid on the block, the Extinction Rebellion. That started in 2018 too as nonviolent protests in London seeking to shut down the city. They were disruptive enough closing bridges across the Thames that they were able to get a resolution passed by Parliament. Like the climate strikes, the Extinction Rebellion has also traveled around the globe and has a chapter here in the Capital Region.

There is more inspiring action happening around the world I haven't mentioned. I heard Bill McGibben speaking at Chautauqua August 15 with the latest on the response to climate change. He is the inspiration for some of what you've heard from me so far. I encourage you to go listen to him to get even more positive news about 350.org initiatives and you can see pictures from that presentation as well.

Our theme for this month is expectations. If your expectation is that there is nothing we can do about climate change, you are likely to respond with flight or freeze. My message for you today is to challenge that expectation. We don't know how everything is going to play out over the next several years or even decades. We don't know if things will just get worse *even faster* than we expect – so far the scientists have erred on the conservative side *underestimating* the impact we've now seen. We might get some breaks we don't expect too, like a volcanic eruption large enough to drop the global temperature a few degrees. There could be geologic forces we don't expect to kick in. There could be new science developed that can effectively extract carbon dioxide out of the air. A toxic virus may escape from a research lab or develop on its own that wipes out 75% of the population dramatically reducing carbon emissions. We might have a world war that eliminates 90% of the

population initiating a nuclear winter that refreezes everything in a new ice age. Who knows – maybe aliens will invade and help us fix the problem with terraforming technology. Right now we just don't know what is *actually* going to happen.

We don't **need to know** what's going to happen to know what we can do **right now**. Our values, our principles tell us what we need to do. We must see ourselves as an interdependent part of the web of life on this planet and we need to behave that way. We must recognize the inherent worth and dignity of all people, maybe even extend that to all life, and behave that way. The demands are clear – reduce carbon dioxide in the atmosphere to 350 parts per million by any means necessary.

The meaning of our actions will not be in the ends we achieve, though that is wonderful when they converge and validate each other. Our meaning comes from the values that drive our actions. We love life and we love Mother Earth. We want to support the continuation of all life on this planet and support the evolving biodiversity of which we are a part.

This is the moment for humanity to validate evolution's bet on big brains and use them in the service of all life. That means fighting the forces driving global climate change. That means *going all in* supporting any and all movements with that goal.

The Tide is rising, and so are we. And this coming Friday, there is *only one place* we need to be.

Let's stop human extinction ... together.