

Musings at the End of 2020
by Lisa Doner

A new year looms. The end to a year of infamy. For many of us, it feels as though we've been frozen in time, caught in an endless loop of isolation and angst, boredom and fear, grief and gratitude. It turns out that a pandemic is nothing I imagined it to be. That's the problem with the unparalleled. What's the term the media can't stop flaunting ... in these unprecedented times ... It's a lie, of course. It has all happened before, many, many times. We just forgot. Because humans, and civilization, and the world survived.

It is this, exactly this, that is the point of adaptation. Survival – the ability to pick up the tendrils of life after disaster. Resilience – the ability to recover and even thrive after catastrophic events. The natural world cannot think strategically, not really. Not the way humans can. Asteroids and rifting continents are as close as Earth itself comes to natural annihilation - one wicked fast, one grindingly slow. Life has a solution to both: evolution, after extinction; adaptation, to manage the slower changes. In fact, it's really, really, hard to get rid of life itself. I admire that quality of endurance; it gives me hope. No, not hope, that's the wrong word. It gives me faith. I have faith that life will exist far into the future of this planet.

So, I'm not worried about the planet's survival. I'm not worried about wildfires cindering the forests, about plastic accumulating layer upon layer in the world's beach sands, about the end of natural ice. But I grieve for the pain and misery that accompanies those changes. I grieve for all the life forms that will be lost. I really like polar bears, and manta rays, and massive old trees. The diversity of life on this world amazes me. Here's something 2020 gave us: platypuses and Tasmanian devils glow in the dark! How cool is that? I will miss them when they're gone. They'll be replaced, eventually, probably by something equally weird and wonderful and adapted to the world that will be.

Don't get me wrong – in no way do I condone the mess we've made here. Humans have strategically mucked up just about everything that life on earth had going for it, and in the process, boxed ourselves into an increasingly small corner. Our survival into the next millennium seems unlikely. Because it wasn't actually the asteroid impacts or lava flows from continental rifts that caused major extinctions in the past. Sure, some critters died from being bonked on the head by bits of exploded crust, or from being entombed in slowly cooling basalt. But the primary cause of major periods of extinction, sometimes wiping out up to 95 percent of all species in existence, was the effect these major events had on climate. It turns out that when you explode a whole bunch of dirt into the air, whether from an impact event or a continent fragmenting with thousands of volcanic eruptions, climate lurches into a new way of being and it happens so quickly that many life forms cannot adapt fast enough.

So, you see, we've been here before. Five times already, and counting, for the big extinctions. Epidemics and pandemics, on the other hand, they usually just knock back one species for a while, until it adapts or has time to evolve. Many epidemics seem to be fungal infections, causing the great Hemlock decline 5500 years ago, and the Dutch Elm and Beech bark diseases of the last 100 years. These epidemics transformed our northern forests, and forced many animals to find other food sources. Another fungal pandemic is currently killing off many species of frogs. Introduction of disease is faster because of human movements around the globe, but birds get into the action too, carrying influenza all over the world as they migrate. Diseases seem to get a kick start into epidemic and pandemic proportion when accompanied by climate change, perhaps because stress reduces the ability to fight off disease, and climate change causes a lot of stress on our natural world.

My neighbors wonder why I've stopped raking leaves, mowing the field outside my fenced yard, spraying my fruit trees, or removing fallen tree limbs. I didn't stop doing these things all at once. It's been a

gradual process, in response to the minor, then, suddenly, the alarmingly large decline in birds, snakes and insects that used to be commonplace around my house. It's not climate change, yet. It's the other stuff – the pesticides, the plastics, the habitat loss and other human plagues upon the land. And climate change is coming. Fast. Faster than expected. Bringing unexpected things, unprecedented things. It will be nothing like we expect it to be. But it has happened before, and it wasn't a happy time for life. So, I do what I can. I give the birds an undisturbed habitat in my field, for nesting and searching for grubs and caterpillars. I give the snakes and frogs a mower-free summer. I give the grasses and wildflowers a chance to capture nutrients from the leaf mulch and tree bark. I can't stop the ice from melting. I can't remove the plastic from the seas. But I can make my own land a very small oasis, and maybe, it'll make a difference. That, I can imagine.



