

INTRODUCTION TO PART 1

Those who do not learn from the past are doomed to repeat it.
—George Santayana

I admit, writing Part 1 of *Recipe for Survival* was very difficult for me. It contains many issues that are disturbing, tragic, and perhaps even scary – issues that have kept me up at night. It may be upsetting and at times difficult to read, but it is incredibly important that you *do* read it. Part 1 (Chapters 1–7) describes some of the problems we face – primarily related to climate change and human behaviors – and it sets up the rationale and the need for Part 2 (Chapters 8 and 9), which describes hope and the actions *you* can take.

Our consumption habits and our competition for resources (often against other species) have had all kinds of negative impacts on our own health and on the world at large. We are now at a pivotal point in time – what we do right *now* matters more than *ever*.

This has been especially true in 2020, when business as usual was completely uprooted with the emergence of a deadly global pandemic. Many countries around the world forced their citizens into lockdown, confining them to their homes or apartments, where life as we all knew it stopped.

In over a year (as of May 2021), 161 million individuals have tested positive for COVID-19 and over 3.3 million individuals have died from it.

Too many people have died from it.

Even now, as I finish writing this book, we are still in the middle of the COVID-19 pandemic, and many people are struggling to survive

this harrowing time. The number of hungry and food-insecure individuals around the world grew (again) during the pandemic.¹

While some countries lack the health care infrastructure that is needed to save individuals, other countries have far too many individuals living with preexisting conditions, malnutrition, or who are negatively affected by climate change – compounding the effects of this disease.

It is possible that the COVID-19 pandemic could have been prevented. The virus is believed to have crossed over from a wild animal to a human in a wildlife trade market in Wuhan, China. This is not the first time something like this has happened. Nor will it be the last.

The flu of 1918–1919 was believed to have originated in birds. It crossed over into humans and infected 500 million individuals around the world: it killed 50 million.² This flu was so infectious and deadly to humans in part because we had no immunity to it.

We have no immunity to COVID-19 either.

Even more recent than the flu of 1918–1919 was the SARS-CoV-1 epidemic of 2003, which spread to more than two-dozen countries and killed 774 people. This virus (which was also a coronavirus) originated from close interactions between humans and wildlife.³ Similarly, MERS – the Middle East respiratory syndrome of 2012 – is another coronavirus illness that was new to humans and likely originated in bats. MERS killed 858 people.^{4,5}

The reason for bringing these examples up is that all of these viruses originated in wild animals, all of these viruses crossed over to humans as a result of close interactions, and all of these viruses were (and are) lethal. Moreover, if past is prologue, these examples tell us that there will almost certainly be viruses in the future that will cross over from animal reservoirs to humans – and cause disease – in a world with worsening climate change, habitat loss, human population growth, and increased human–wildlife interaction.⁶

This is one of the topics I explore more fully in this book – how humans exploit animals and the environment and what this may mean for our own health and for the health of the planet with its interconnected ecosystems. While this discussion is not for the faint of heart, it is necessary to have for a better understanding of the importance of each species and why we must not take any of them for granted.

There are other lessons we can learn from our experiences with the COVID-19 pandemic that apply to the ways we address environmental problems and climate change.

When it came to the COVID-19 pandemic, we were not prepared. We were left scrambling in a panic for personal protective equipment (PPE), testing, treatments, vaccines, and a cure. With climate change, we *do* have advance warning, and we have *had* advance warning for some time now.

We know global temperatures are rising. We know pollution is more prevalent. We know carbon emissions are increasing. And we know glaciers are retreating. We see the polar regions losing their ice. We see species fleeing their homes or dying where they cannot adapt fast enough to environmental changes.

We have the signs. We see the symptoms. If we are not careful, we will hit *the* tipping point, when it will be too late to protect or save what we have here on Earth. These are topics of discussion throughout Part 1 of this book.

We are also at a point – *right now* – when we still have time to *prevent* these things from happening (or at least lessen their potential effects) with sufficient foresight and will. That is what Part 2 of this book presents – solutions and life support.

Our planet needs us to step up and help it. I believe we can do it. I believe we can be empowered to actively heal the planet. It *is* possible. We have seen signs of Earth's healing and glimpses of recovery during the COVID-19 pandemic. During the lockdowns, Earth was given a much-needed respite from the daily onslaught of carbon emissions that result from cities.

In the short amount of time in which human activity was put on pause, Earth's respiratory and water systems began to show some signs of healing.

The world took a breath.

There were reports of cleaner canals throughout Venice; animals were seen swimming where none had been seen for decades. There were reports of cleaner air in China and Los Angeles where smog is the norm. There were even reports that where countries were in full lockdown there was an average decrease in energy demand of 25 percent. Countries that were in partial lockdown reported a decrease in energy demand of 18 percent. In fact, lockdowns around the world have lowered total global energy demand by up to 6 percent when looked at over the course of 2020. This is largest decrease seen in seventy years and the largest ever decrease in absolute terms.⁷

But, sadly, as with almost everything in life, there *is* a flip side.

The significant increase in the use (and discarding) of PPE has taken a major toll on the environment. While PPE is absolutely needed to protect healthcare workers and essential workers (and everyone, really) from spreading the coronavirus, far too much PPE – much of it made with plastic – has entered the oceans.⁸ Gloves, masks, hand-sanitizer bottles, and more are thrown away every day by the million.⁹ Most of these items are used once and then tossed in the rubbish pile.

There are also reports that land grabbing, deforestation, illegal mining, and wildlife poaching by opportunistic actors and criminal groups actually increased during the pandemic, adding stress to already fragile environments.^{10,11}

What are we to make of these various changes, some good and some bad?

One lesson we can take away is that by using fewer resources and living more sustainably – especially by those of us who live in developed countries and use more than our fair share – we can help Earth slow down its warming trend, we can help fish stocks recover, and we can help rain forests to expand and draw down carbon dioxide from the atmosphere and put more oxygen into the atmosphere. We can allow wild species to thrive once again in their natural environments rather than being confined to small geographic areas or overcrowded cages where they may host and spread new deadly diseases.

During the pandemic, many of us saw and felt for the first time what it feels like to be cooped up in our homes day in and day out; to see the same surroundings twenty-four hours a day, seven days a week without much stimulation, mental or physical; to feel what animals confined in a factory farm, circus, zoo, or aquarium might feel. It has been emotionally taxing and mentally debilitating for many of us. And perhaps it has given us more insight into the way we treat others – whether animal or human. But we can prevent this from happening again in the future, whether from the next disease outbreak or from too many climate extremes. We must each do our part.

There are many examples where individuals performed acts of kindness or gave to others to help save lives during the COVID-19 pandemic. We must act in kind, each of us performing acts of sustainability, to help heal Earth. Although Part 1 of this book describes the challenges we face, Part 2 provides *hope* and recipes for how we each can help Earth and ourselves. So, let's dig in.