

Treeways

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The End of Nature?

Some researchers have estimated **that 95% of the land area of earth has been changed or significantly impacted by human activity**. This means that there is very little nature left in pre-human pristine condition. One of the prime rules of ecology is that the larger the geographical area the greater the number of species that it will support. Conversely the smaller the natural preserve the fewer the number of species that can survive there. This suggests that trying to save all of the world's species when most species have very specific ecological requirements is doomed to fail simply for lack of space. Humans have changed the pre-human world to the world we prefer and we control it to harvest food and resources we use to support our human lifestyle. We have subdued the earth and all the creatures on it and in some ways the biological earth is less productive, less diverse and less resilient than it has been in eons.

It has been said that at least 95% of all the species that have ever existed on the earth are now extinct. For biological nature to survive worldwide cataclysms through geological time extreme species diversity was the solution. In the worst of times there have always been some species that outlasted the ecological disasters and worked out new possibilities. Following these events survivor species radiated out to fill all the open ecological niches leading to a blossoming of new biological diversity. **The radiating out of new species takes millions of years.**

It is generally agreed that a diverse ecology is more resilient. Maximum biological diversity is generally believed to be a positive goal. So if we humans have changed nearly all of terrestrial earth and we want to keep the maximum biological diversity around us then what should we do? Perhaps there are ways for us to live among the creatures we have held at bay for so long. Maybe we have to learn to share the earth rather than simply subdue it. We humans are short sighted. I have trouble planning out my daily activities further than a few days. Only major holidays and birthdays are already on my yearly calendar. An entire human lifetime is less than an eye blink of geological time. In fact the entire length of all human existence would fade into irrelevance were it not for our ability to magnify our purposeful footprint on earth's ecosystems as we change them to suit human needs.

When humans first spread across the earth we began changing how ecosystems worked. Small groups of us were able to change the local conditions of our home areas to increase the likelihood of our survival. We have been eating our way through earth's natural resources since we became human. Megafauna and most large predators have been largely eliminated. Humans are now the apex predator on earth. When we dream something we can build it, we can make it happen. We can dam major rivers, dig gigantic open pit mines, crack the atom, rocket to the moon and back, and fly around the world using nothing but solar photovoltaic power. But what we apparently cannot do is control our appetite for changing the world and the biological world that is the basis for all life, including our own.

Humans are causing the 6th mass extinction event (that we know of) in the geological history of life on earth. There have been many other smaller extinction events. At least one past extinction event was caused by a meteor impact and that one was dramatic and fast even in human terms. The extinction we are causing is fast too but only in geological terms. Humans have been here as thoughtful, aware, conscious beings for a geological eye blink and yet thousands of creature species have been and are being winked out by our activities. There is a tipping point where and when certain of earth's ecosystems will fail. We are seeing this now with coral reefs due to CO2 and climate change and the collapse of various ocean fisheries due to depletion of certain fish species.

We humans need to find a way to live with and not just push out the other creatures that occupy the earth with us. It is in our own best interest to find a better way forward... our children's children will ask us why we didn't if we do not succeed in finding a better way. Or worse yet, why we did not even appear to recognize the problem.

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