In the universe we live in, nothing lives isolated, completely detached from the environment in which it lives in. Everything has an origin and couldn't have gotten there without coming from something. Each and everything falls into a cycle, whether or not we want it to. Littering once or twice can later affect an entire ecosystem, from things like the food chain to the water cycle. Social behaviors like buying things from the store, not vaccinating your child etc. similarly have far-reaching consequences and may impact global import and export systems that are dependent on demand. Everything that we do will have a chain of events following it. Just like the butterfly effect or chaos theory, everything that happens could lead to something bigger in the future. It's extreme to suggest Edward Lorenz's concept of the Chaos theory as illustrated in this quote, "a butterfly flapping its wings in Brazil can produce a tornado in Texas." Thinking in more realistic terms, the smallest of things like throwing trash out the window can produce permanent damage to the world we live in.

Every living thing depends on another in order to maintain its specie's existence. Isolation, a single being in a vacuum would not survive. Plants need sun, water and air; as humans need food, water and air. A cow and a pig depend on food and water and clean air, just like humans do. Animals used for things like dairy products and wool depend on humans to keep them healthy, fed, and safe. Humans depend on medicines, police, governments, higher powers etc. As simple as something is, it fits into an interdependency cycle, in which nothing can thrive without something else.

My title, What do we do when our doctor gets sick? Holds the idea of what chaos will arise if something we depend on runs out, stops working or is cut off from us.

The circle of life.

Mufasa:
Everything you see exists together in a delicate balance. As king, you need to understand that balance, and respect all the creatures-- from the crawling ant to the leaping antelope.

Simba:
But, Dad, don't we eat the antelope?

Mufasa:
Yes, Simba, but let me explain. When we die, our bodies become the grass. And the antelope eat the grass. And so we are all connected in the great Circle of Life.

I decided to use these lines from my favorite childhood Disney movie, The Lion King. They simply sum up the basics of the food chain, predator and prey, the ecosystem and on top of that, they are familiar lines that we recognize. Everything organic on Earth has a purpose. The purpose of giving back to the world that provides for it. And because of this simple idea, humans give back to the earth, equalizing what we take. Uh. Yeah. I'm aware of how stupid that sounds. Because you and I both know, that's untrue. And us as a human race, we try our best to give back. But do we really? In the society we live in, we rely on the convenience of everyday items,

essentials and necessities. We don't have to walk miles for fresh water, toilets flush, our children will be educated. Compared to many cultures and societies, we are soft. We have everything handed to us. We depend on the easy lifestyle we are so privileged to live in.

In The Lion King, what happens when the hyenas and scar kill off all the antelope? The pride lands starve, creating famine, chaos, dry land, leading to fires. The list goes on. All of this leads to a process called desertification. Drylands turning into deserts. This is freakishly accurate to what can happen to the world we live in. Taking this situation off the big screen and looking at it from, well, real life, the idea “eat less because we can’t produce more” is crucial. As the population of Africa continues to grow, water-scarce regions are forced to drain even more of their already finite water supply. The more people, the more crops are needed, meaning more irrigation. All these people use water to bathe, cook and drink, adding the stress. But we all know that when water evaporates, it comes back down. It will rain and then everyone can have water! As pleasant as this sounds, drylands are called drylands for a reason. To give this an even more local outlook, why don't we take a look at California?

We hopefully are aware about the disastrous California wild-fires. During my stay at oxbow I've been given several masks to protect myself from the poor air quality due to fires. What's causing these fires and why are there so many of them? Like many regions in Africa, California is built of many drylands. Already, it’s filled with native plants that don't require a lot of water. There are many reasons for the the air getting dryer, the planet getting hotter, undergrazing and chasing animals off their land, infrastructure etc. Plants and tall grass shrivel up, the winds get stronger, and more unpredictable. One spark can cause a fire, the dry winds blow it and it begins to spread. Crazy winds spread it even faster and this is what we call a wildfire. In order for land to be green, thriving and healthy, its ecosystem must be stable. Taking out one essential piece throws everything off. Consisting of living and non-living elements, an ecosystem must be balanced, the consumers must be proportionate to consumed, the predator must be proportionate to the prey and so on. The size of a single ecosystem can vary, from a puddle to an entire rainforest. Thinking in these terms, a puddle cannot sustain a city. We need ecosystems in order to survive. It's a no brainer. Each member of an ecosystem's role is fragile. Everything matters. Predator needs prey, prey needs predator. It's so simple. And we have been given the instructions for thousands of years. We have had people throwing answers at us all along, what we are doing to our planet is wringing the life out of it.

What would happen if we end up killing off something as basic as the common bee? Why in the hell is a yellow bug so vital to the world’s functioning? Bees are known as biotic pollinators, living pollinators to move pollen from one flower to another whereas Abiotic pollination relies on wind, water and even rainfall. Bees are social insects, the hive relies on each bee to do its job, the average honey bee carries an estimated100 times its own nutritional requirements back to its hive.

Pollination is also done by animals such as birds, monkeys, rodents and even lizards. Each and every animal does its part so that plants can effectively reproduce and spread. However bees pollinate 80% of the world's plants. You can thank bees for providing 1 out of every 3 or 4 bites of food you eat or throw away. Honey bees are responsible for $15 billion in U.S. agricultural crops each year. The average bee does 10-40 flights per day, pollinating an estimated 1,000 flowers. A single hive of 20,000 bees can pollinate 20 million flowers in one day.
In the past few decades, much evidence for pollination threats has been found. The use of toxic chemicals, habitat loss, pollution, invasive species etc.

Since 1990, the nation's beekeepers have lost one fifth of honeybee colonies from, diseases, mite infestations, pesticides and a handful of other factors. In 2016 alone, one third of the honeybee population in the U.S. was wiped out. Habitat loss another stemming factor to why the bee population is declining. Agriculture, land conversion and urbanization are the most prominent reasons for habitat fragmentation. Because of this, ecosystems are split and separated, making them smaller and more spread out. Have you ever been into a city and you see trees scattered on the sidewalks in fancy planters? Something obviously was moved out of the way in order for the city to be built, whole ecosystems. Trees are seen as decor. Parks act as a sanctuary for plants, animals and humans. Parks are vital to a city and its people, one or two trees is not enough to provide nectar sources that their pollinators require.

Humans are responsible for so much damage. Ecosystems are fragile. Losing one vital piece or species can throw our world off and cause countless problems. We are already losing so much of our natural world to infrastructure, and the spike in wild-fires is not helping our case. Each year, the earth loses 18.7 million acres of forest, equivalent to 27 soccer fields each minute. In the past 50 years, almost 20% of the amazon rainforest has been burnt down. We need to recreate the patterns of the natural world. Give back after we have taken. Like how the antelope are eaten by lions, and the lions become grass for the antelope to eat.

A popular internet meme illustrates the damage we have done since the introduction to fossil fuels.

> "The earth is 4.6 billion years old, Let's scale that to 46 years. We have been here for 4 hours. The industrial revolution began 1 minute ago. In that time we have destroyed more than 50% of the world's forests."

Sooner or later, we are going out figure out What happens when our doctor gets sick? When the systems we so selfishly depend on fails because of us. When our caretaker burns up. We have had the warnings, the lessons and the resources given to us for millions of years. We are now right at the edge, will we actually use this knowledge to do good? What sucks is we aren't talking about the pridelands anymore, we are talking about the planet, our planet: the great barrier reef, the amazon rainforest, cities like San Francisco and Seattle… We are going to lose these, and whether we like it or not we will get our answer.

Resources

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