

What are our responsibilities to the Earth?

Alan K. Betts, July 21, 2010

Humanity can no longer ignore the response of the Earth.

The US Constitution lays out rights and responsibilities for citizens, elected representatives, the States and the Federal government, but it gives no rights to the Earth. It does not define our responsibilities to the Earth, because this was not an issue in the eighteenth century. The population was small and the land seemed vast. And the immigrants largely ignored the rights of the native people of this land - who did have a deeper understanding of their relation to the Earth.



The global population and consumption has now grown to the point where it may be beyond the carrying capacity of the Earth - with a reasonable quality of life for all. Our impact on land, atmosphere and oceans has become global. We must consider the needs of the Earth's ecosystem of which we are part, and on which all life is dependent.

So what are our responsibilities to this glorious planet, the Earth?

This has become one of the great moral questions of our time, and the future of humanity and the Earth depends largely on what choices we make in the next few decades. In just a few centuries with the advent of science and technology, powered by fossil fuels, humanity has moved from feeling largely at the mercy of the Creation to a world-view where we thought we were omnipotent - that our power was limitless. We have searched the Earth for all its resources, and let our population and consumer societies expand without limit; while dumping our wastes and polluting land, oceans and the atmosphere. And still we are unable to provide adequate food and a reasonable quality of life for billions of humanity. And our feverish, wasteful consumption of finite resources like oil and fresh water are nearing limits where they can grow no further.

Now the climate is changing, the ice-caps are melting, the ocean is rising and becoming more acidic, and millions of species face extinction. We have turned a full circle in barely two centuries, as once again we seem powerless to stop what we have set in motion on a global scale - without thinking and without any ethical code to guide us. We didn't start down this path consciously, but now that we see what is happening, we are responsible.

It is a moral choice as it clearly stems from our self-centered arrogance, the corruption that comes from power without responsibility. Yet if we step back, we really have no choice but to change our mind-set, because the Earth is in fact far more powerful than humanity.

Our science and technology have transformed our human world and are in the process of transforming our planet. But remarkably we have realized only very recently that our technology must be managed, because it has led to both extraordinary achievements and catastrophic failures. The great achievements we appreciate or take for granted, but most of the time we avoid connecting catastrophes (like climate change and nuclear weapons) to the poor management of technology.

We need to understand a key distinction (pointed out by E.F. Schumacher) between our world of technology and the natural world. We understand our human-made technology, since we built it and, unless we are careless, it is largely under our control. But we did not build the complex living natural world and, despite scientific advances, our ignorance is still vast, and it is not under our control. It is up to humanity to manage and limit the impact of our technology and society on the Earth and its ecosystem, because our prosperity and survival depend on it.

Cooperating with the Earth requires several fundamental shifts. The first big step is a shift from an annual to a generational perspective. In economic terms, this means we must look beyond quarterly profits and start the "real costing" of goods and services for humanity and the earth system for the next 30 years and beyond. This perspective is not really long enough, but it is a tangible first step for those with children and grandchildren. In reality, the longer seven-generational perspective of many native peoples is a better timescale for the earth's ecosystem.

Since we don't know enough, we have to build in resilience and adaptability. Where we lack detailed knowledge, we need the vision to follow broad principles that are earth-centered rather than human-centered. The global population, at our present levels of consumption and waste production, exceeds the carrying capacity of this planet. Clearly we must stabilize and then reduce the global population, a process that will take generations. A more immediate issue is that, given the global scale of our impacts, we need to minimize the lifetime of all the waste products from human industrial society in the Earth system. This can be done more quickly, on a decadal time-scale, simply by replacing manufacturing infrastructure.

How do we manage the Earth, when there is so much we don't know? Here are a few simple rules we must follow to be responsible caretakers:

- *All our waste products must have short lifetimes in the biosphere.*
- *We must minimize the use of raw materials by recycling for remanufacture.*
- *We must maximize the efficiency with which we use energy and fresh water.*

The Earth changes slowly — but it is more powerful, resilient and in many ways smarter than we are. It is up to us to understand and adapt to the real world. For our societies, it may mean changing our fossil bureaucracies to a more adaptive, earth-conscious system of government. For many this means stepping out of our computerized, air-conditioned bubbles and reconnecting emotionally, spiritually and with humility to the natural world in all its beauty and complexity.

This is a societal issue and a global challenge, but each of us has our personal responsibility in this.

You can read what I consider are my personal responsibilities as an earth scientist.

<http://alanbetts.com/understanding-climate-change/question/what-are-our-responsibilities-to-the-earth/>