

 **Spotlight on Climate****Earth Day 2022 - What is the Value of the Earth?****STEFAN SOMMER**

(702 words)

We tend to value things based on their importance to us. We value friends and family because they are important to us. They are important because they support us physically, emotionally, economically, and spiritually and because we care for them in all of these ways as well. We value our homes because they shelter us and our families, but the economic value of a home is relative. If homes are plentiful, their economic value is lower than if they are in short supply. If only one home were available, its economic value would be sky high. If we consider the Earth our home and understand that our family's survival depends on it absolutely, then wouldn't its value be infinite?

What is the Earth? It is not just a rock upon which we stand. It is the land, the water, and a rich complexity of life, organized into ecological communities of plants and animals, forming the ecosystems that are our only life support. Earth is also located at just the right spot in our solar system to provide the conditions on which we depend. Earth's orbital path around the Sun provides the temperatures and seasons to which all of life is adapted. From this perspective, wouldn't the Earth's value again be infinite?

Of course, we have not evolved to simply survive in the conditions provided by the Earth, but we have also adapted and learned to appreciate the rich beauty of nature. A walk through a beautiful grove of aspen on a mountainside is nourishing to our well being in a way that asphalt, parking lots, and exhaust fumes never will be. Many studies have documented the beneficial effects of nature's beauty on our physical and mental health. We depend on the Earth not just for food and water, not just for Goldilocks temperatures, not just for oxygen to breath, not just for fertile soils, but also for beauty and meaning (Hózhó).

If the value of Earth is infinite, should we not care for it? Now that there are eight billion of us, we are beginning to understand that we are having significant global impacts on the health and productivity of Earth's ecosystems. Through habitat destruction and pollution, we are causing a rapid mass extinction of species that are the nuts and bolts of our life support systems. By burning fossil fuels, degrading natural habitats, and plowing the carbon out of soils, we have now put 2.4 trillion metric tons of CO<sub>2</sub> into our atmosphere, raising the Earth's temperature by 1.1°C (= 2°F). This is causing species to flee northward and up mountainsides. It is shifting corn production out of Iowa and into Northern Alberta. It is drying out our forests and rangelands, increasing the risk of wildfire. It is driving tens of millions of people from their homes every year due to drought, flooding, wildfire, sea level rise, extreme storms, and extreme temperatures. Last year there were 36 million climate refugees. The World Bank projects that by 2050 there will be 216 million every year.

This year's Earth Day theme is "Invest In Our Planet". The good news is that many people are already doing this. When I told my buddy Bob about this, he mentioned that he is putting conservation easements on his land to keep it from being 'developed' in the future. This means he will keep the carbon in the trees, in the birds, and in the bees that live there. He will also preserve that natural beauty that is so valuable.

As mentioned in last month's Spotlight on Climate, Babbitt Ranches and others are now installing 1,424 megawatts of wind and solar power that will greatly reduce CO<sub>2</sub> coming from our electric power supply. This will help Flagstaff reach our goal of net zero emissions by 2030. It is also the opportunity for each of us to lower our carbon footprints. If you buy a new car, furnace, or water heater, make it electric, and install heat pumps as soon as possible to "Invest In Our Planet". For tips on other things you can do to preserve the Earth and build a fossil free future, visit [www.NAZCCA.org](http://www.NAZCCA.org) and join with others in the Northern Arizona Climate Change Alliance.

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