



# POPULATION AND THE PLANET

I distinctly remember my annual summers in Maine as a child visiting Acadia National Park. It was there where I first encountered the impacts of humanity on nature. Every summer, my father (Kit Spahr '55) would take my brothers (Chris '83 and Wes '87) and me by boat to see a pair of bald eagles nesting atop a majestic pine tree along the water. In the summer of 1973, when I was 7 years old, the nest was empty.

My father explained to us that hunting and the pesticide DDT had decimated the bald eagle. He explained why people used DDT and how it moved downstream from fields into the water, and eventually the eagles ingested it through the fish they consumed. The chemical interfered with the ability of the birds to produce strong eggshells and that's why the bald eagles were threatened with extinction.

Over the next four decades, I watched this same creeping ecological destruction caused by an increased human presence and activity across the globe. Humanity has exploited the majority of the earth's temperate zone for cities, suburbs, streets, agriculture, and animal grazing and, in the process, has eradicated practically all the wild plants and animals that once inhabited these lands. I have witnessed our oceans being systematically stripped of all marine life. Plastic pollution is everywhere. Dead zones have formed in bays and gulfs from nitrogen runoff. There are massive continent-size swirling garbage patches and coral reefs are bleached and devoid of life. All of this in my lifetime.

One of the lasting lessons from my Haverford School education is the importance of thinking critically. This means continuous and vigilant inquiry to uncover the truth from all perspectives. It

is important to keep asking, who, what, why, where, when, until you thoroughly understand the fundamental cause of a problem. In today's world, climate change is in the news every day, and rightly so. It is a very real and serious problem, but it is just one symptom of many, like the strip mining of our fertile top soils, the leveling our forests, the draining of our rivers, lakes and aquifers, the decimation of our fisheries, the pollution in our air, across the land and in our waterways, and the mass extermination of billions of wild animals. These individual symptoms demonstrate a much larger planetary crisis unfolding before our eyes. There are simply too many people consuming too many resources and emitting too many wastes. We have a human impact crisis and everything we have done to address its symptoms over the past 25 years hasn't worked. In fact, by all accounts, the situation is getting worse. The definition of insanity is doing the same thing again and again and expecting a different result. Unless and until we change our thinking and approach, we won't solve this crisis.

By 2016, I reached a personal tipping point. Frustrated by the political correctness and lack of action by the environmental establishment, I walked away from my leadership role at Long & Foster Real Estate to raise public awareness about the damage being done to the world by unsustainable population growth. Despite having no formal training, I spent the next three years producing a studio-quality documentary feature, *8 Billion Angels*, about the increasing conflict between the size of our global population and the sustainability of our planet.

After 25 years in business, I knew how to execute a project. Because of my lack of film experience, I surrounded myself with an



## By Terry Spahr '84

experienced production team to help carry out my vision. What I would share with any Haverford students who might be looking to get into this field, or for those who are just interested in how a film production works is this: Having a “big picture” understanding of the entire filmmaking process from concept through distribution is critical. You cannot simply separate out the creative process from the business side. Building relationships, exploring every funding option, embracing rejection, always being prepared, never giving up, and approaching every day with determination are the most important things you can do to succeed. The sooner you commit to the career, if that is what excites you, and the more enthusiastically you approach it, the farther you will go.

Unlike the majority of environmental documentaries that have focused on symptoms like climate change, the bleaching of

coral reefs, or species extinction, *8 Billion Angels* focuses on the root cause and main driver of our global environmental crises – unsustainable population growth. I interviewed scientists, industrial farmers, professional fishermen, and others to speak candidly and passionately about the environmental impacts affecting their work, research, and day-to-day lives and what they expect for the future. Unlike any other documentaries that we have seen to date, *8 Billion Angels* also gives the audience solutions to the crises that are practical, high-impact, and scientifically-proven to not only generate environmental benefits, but to also produce tremendous social, health, and economic well-being when adopted by individuals, families, communities, and countries.

For example, many countries, through voluntary, intentional human right campaigns, educating girls, providing access to family



(above) Marine biologists in scuba gear performing underwater field tests at naturally occurring CO<sub>2</sub> vents off the coast of Japan.

(left) Kansas geologist and farmer Bill Mai measuring declining water levels of an aquifer well on the farmer's property.

planning, and helping their citizens understand the importance of small families to the environment, have, not only reduced their population growth, but have reduced extreme poverty; increased universal primary education, gender equality, and empowerment of women; reduced infant mortality; and improved maternal health. What's also remarkable is that these social, health, and economic benefits have occurred alongside a dramatic restoration of nature. (*Family Planning and Environmental Sustainability*, Lynne Gaffikin and Robert Engelman 2016; *Climate Change, Fertility, and Girl's Education*, Brookings Institute, Homi Karas 2016)

Climate activist, author, and editor Paul Hawken of *Drawdown: The Most Comprehensive Plan Ever Proposed to Reduce Global Warming* tabulated the top 100 initiatives we can do now to fix the climate and, much to his surprise, when educating girls and family planning were combined, they were the number one solution to reducing CO2 emissions and fixing climate change. When girls are educated and given access to quality reproductive health services, they tend to get married later in life, space their children more, and have fewer of them. When fewer people are being born, it translates into far less consumption of resources and emissions of wastes.

While producing *8 Billion Angels*, I established a nonprofit organization, Earth Overshoot. The organization, which is quickly building support from foundations, corporations, and individuals, creates educational and advocacy campaigns designed to make individuals, communities, and governments prioritize sustainability in order to achieve a world characterized by human well-being and flourishing biodiversity. In my role as executive director for the organization, I am often invited to speak to businesses, schools, and community groups about the real metrics of sustainability, which are often misrepresented by the media and industry. I also try to dispel the misconception that we, as societies, can reduce consumption enough to make a significant impact on climate change. Are you willing to never fly in a plane or drive in a car again? Are you willing to give up eating meat and fish forever and only eat a locally-produced diet? What about living in a very small space with no central hot water, heat, or air and only have a few sets of clothes and shoes? Those are a few steps that would be necessary for almost 8 billion of us to live equitably and sustainably.

Another question I often get is whether technology can save us and the environment. In reality, it is the opposite. Technologies and the efficiencies they yield actually create greater productivity and prosperity for the individuals and businesses who adopt these technologies. The economic or financial benefits these individuals and businesses realize from these technologies and their efficiencies invariably get reinvested or redeployed toward other economic activity that actually drives greater global growth into the reserves that sustain us. (*Jevon's Paradox and the Myth of Technological Liberation*, John Polimeni)

A couple of things have kept our country and the world from making sufficient progress. One is, as we see different environmental crises emerge from human activity, we focus on solutions for those specific symptoms, whether that is catch limits for overfishing, or restrictions placed on depleted reserves of water, or conserving land next to deforested areas, or adding catalytic converters to cars to capture excess air pollutants, or fertilizers to feed more people on less land, or halting energy projects that could dam rivers or disturb pristine lands. As any doctor will tell you, if we just target these symptoms and never address the disease, we won't solve the underlying problem.

Additionally, we have an instinctive aversion to discussing unsustainable population growth because it can be fraught with emotions across the cultural, political, religious, and economic spectrums. But it is a conversation we must have to ensure the future of our planet and humanity.

*Terry Spahr '84 was a Lifer at The Haverford School, where he played soccer and squash and later became an All-American in squash. He left the corporate world to research, write, and produce the documentary 8 Billion Angels. The film was scheduled for a North American theatrical release in June 2020 but due to COVID-19 has been postponed. A graduate of the University of Pennsylvania College of Arts & Sciences and Fels Center of Government, Spahr lectures on issues of sustainability to students, investor groups, and civic organizations. He is a regular opinion writer for a variety of environmental publications.*



(from left) Terry Spahr '84 with his camera crew filming on top of Cadillac Mountain in Acadia National Park; Terry Spahr '84 at the Shimoda Marine Research Center in Japan.