

NUMBERS, NOISE AND NONSENSE: WE MUST STOP FORCING WILDLIFE OFF THE PLANET

**An NPG Forum Paper
by Karen I. Shragg**

ABSTRACT

We are forcing wildlife off our planet in three basic ways: with our growing numbers, with our noise, and with our nonsense, defined as a refusal to create policies which follow the logic and the need to scale down the human enterprise. Furthermore, humans are tethered to the future of wildlife and wild places. This is not a whimsical, Disney-like desire to keep them in our forests, oceans, prairies and wetlands. It is a necessary requirement to do so for our own future. Nature, i.e., the very physics of our biosphere, must be respected for it means preserving our life-supporting soil, water and air quality. It is also key to our psychological well-being. We need nature and nature needs us, but you wouldn't know it by our resistance to address the way in which we are growing too fast on a planet that has always had limits to growth.

WILDLIFE IN CRISIS EQUALS HUMANS IN CRISIS

The wild animals were here first. To be sure, non-human life forms have collectively suffered extinctions before we ever evolved to present-day numbers and habits. Today modern humans are saddling wild creatures with even more misery. We are currently experiencing the 6th mass extinction on planet Earth. This time, however, is not about 6-mile-wide meteors striking the earth, or extensive ice ages, it's about us. In 1963, the Bronx Zoo had a sobering exhibit which was just a mirror and it was labeled "The Most Dangerous Animal in the World."

The problem is bad enough that there is now a day devoted to focusing on endangered species. The 3rd Friday in May is designated to be a day filled with sad stories of the precarious situations in which many iconic animals and many lesser-known ones find themselves.¹

If we follow the typical scenario, the wildlife community will address this crisis with a combination of proposals that include preserving individual tracts of land, restricting pesticides,

increasing hunting regulations, and reducing carbon emissions. These efforts are not working and will never work because of human overpopulation, which is the fundamental driver of a growing list of endangered species, locally and globally.

In an article published by The Center for Biodiversity, "Halting the Extinction Crisis," www.biologicaldiversity.org, the authors articulated what is going on with each species, and overall, state sobering information which should not be news to anyone: "Our planet now faces a global extinction crisis never witnessed by humankind. Scientists predict that more than 1 million species are on track for extinction in the coming decades."

Humans are a part of nature, and we require a healthy biosphere, which we are rapidly destroying with our numbers, noise and nonsense. Our biosphere includes every life form from the deepest root systems of plants to the highest mountaintops and to the darkest realms of the ocean.²

The Earth is a uniquely complex, fragile series of life-supporting systems, 4.3 billion years

in the making. Without the biosphere, we are just the 3rd molten rock, 93 million miles from our yellow star. But because our sun gives off its gift of solar energy every day of the year, and because we have a protective atmosphere, our home planet can support life.

OUR BILLIONS HAVE ARRIVED AT LIGHTENING SPEED

To summarize Population Connection's account of world population history, it took us until the year 1804 to reach our first billion after evolving on the planet some 300,000 years ago. From then on, it's been a snowball of dramatic growth. Human population on Earth reached 2 billion in 1927, only 123 years later. The 3rd billion came about in 1960, 33 years later when I was only 8 years old. The 4th billion was reached in 1974 when I first started paying attention to numbers, 4 years after the first Earth Day. The 5th billion arrived in 1987 during Ronald Reagan's presidential term, only 13 years later and the 6th billion arrived in 1999 while Bill Clinton was president. The 7th billion arrived during the Obama administration and the 8th billion knocked on our door, once again with too little fanfare, just last year in 2022. I mention these presidents because none of them took on the challenges of addressing our numbers in any profound way.³

It was only our 37th president, Richard M. Nixon, who tried to focus our attention on the negative ramifications of population growth, albeit not with the motivation of what it would do to the viability of wildlife. He established a commission on population and in 1969 said the following prophetic words back when our country's population was calculated to be approximately 202,540,000 people. Nixon said:

“This growth will produce serious challenges for our society. I believe that many of our present social problems may be related to the fact that we have had only fifty years in which to accommodate the second hundred million Americans. In fact, since 1945 alone some 90 million babies have been born in this country. We have thus had to accommodate in a very few decades an adjustment to

population growth which was once spread over centuries. And now it appears that we will have to provide for a third hundred million Americans in a period of just 30 years.”⁴

We currently find ourselves bursting at the seams with over 334 million people needing ever-diminishing resources while gobbling up our open space. Some estimates say the number of people in the United States is even higher than that because the way we count immigrant growth is amiss. Stephen A. Camarota and Karen Zeigler of the Center for Immigration Studies in a March 27, 2023, paper, state:

“In our view, the bureau's methodology for estimating net migration, which relies heavily on administrative data, is not able to fully capture a sudden and dramatic increase in illegal immigration of the kind the country began experiencing starting in 2021. If we are correct, then net migration and population growth was one million to 1.5 million higher than the bureau estimated for 2022. This would also mean that NIM (net international migration) accounted for roughly 90 percent of population increase in the last year.”⁵

The 132 million or so additional people we have added to the US since 1969 matter. Higher numbers are often referred to as ‘robust’. But robust is a misnomer when referring to growth. Growth, especially in a country already well into overshoot, is a detriment both to our quality of life as well as to the survival of wildlife. Humans are at the top of the food and energy chain and as such their high and growing numbers are detrimental to wildlife. We not only take up a lot of room with our cities and agriculture, but we have a long track record of introducing exotic species into natural areas, polluting their habitats, illegally hunting and harvesting their bones for alleged medicinal properties.

THE ECONOMY IS A SUBSET OF THE ENVIRONMENT

I was fortunate to meet physics professor Dr. Al Bartlett who confirmed to me that he continued to stand by his now famous quote, “The greatest

shortcoming of the human race is our inability to understand the exponential function.”⁶

Bartlett was an informative and entertaining speaker. In his popular lectures, he illustrated his concern about exponential function using the saying, “a population of 10,000 individuals, if it were to grow at a constant rate of 7% per annum, would reach a population size of 10 million after 100 years. His lecture is worth a look. See it at <https://youtu.be/kZA9Hnp3aV4>.

I would add that it isn’t just an inability to understand the exponential function, it is our common belief that with population growth comes vitality. Not many understand how fast we are growing in population and all that it demands. Even fewer attach a negative outcome to growth. It is ecologically foolish to ignore the way resources are being squandered and rendered useless by our ever-increasing demand, but then as a whole we are not a society that spends much of our time on understanding even the basics of ecology. Throughout the US, three or four science credits are usually required to graduate from high school. One of those is typically biology which may or may not include ecology. Increasing the requirements for ecology would improve our overall understanding of what is happening to wildlife.

Prosperity is a word thrown around by those politicians who keep promising how their policies will offer Americans a better life if they are elected. To paraphrase the late ecological economist Herman Daly, the economy is a subset of the environment, and the environment is limited, therefore the economy cannot be tethered to unlimited growth. We keep destroying the environment in the name of prosperity for it is sacrificed with each new innovation.⁷

Daly’s promotion of a steady state economy is sorely needed in a world based on the need to perpetually grow within a finite system. The demand of our capitalist system and its required growth is not only unsustainable but also immoral as it promotes the growth of only homo sapiens while trampling over other species. This idea for a new way of conducting business is promoted by Daly’s NGO CASSE, the Center for the

Advancement of the Steady State Economy. They define a steady state economy as one which features a relatively stable size population. As their website explains: “The term typically refers to a national economy, but it can also be applied to the economy of a city, region, or the entire planet. The size of an economy is generally determined by multiplying human numbers by the amount each person consumes. This quantity in a steady state economy neither grows nor contracts from year to year.”⁸

In other words, the Steady State Economy is not designed to grow assuming the numbers of people remain stagnant. Unfortunately, we are not currently having the necessary national conversation about how we can stop growing and start saving species. Overpopulation groups and their activists, myself included, keep shouting from our small platforms about this but are either ignored or called out for being racist. Those of us who are pointing an accusatory finger at growth do so because we are witnessing our society choke on growth. By calling out growth, in essence we are trying to administer the Heimlich maneuver on our world. Even though this is a lifesaving technique, we are often accused of assault. It is time to think of scaling back our numbers and economy as a lifesaving Heimlich maneuver to us and our fellow wild creatures.

THE EXPANSION OF HUMAN BIOMASS

There has been much discussion about the benefits of depopulation, and yet the world is still growing by over 80 million people per year. Humans and livestock now outweigh the biomass of wild animals. As surreal as it seems, scientists are able to calculate the mass of us and the animals that feed us verses wildlife. Those measurements should be a huge wake up call to the status of our self-destructive planetary takeover.

The first global census of wild mammal biomass, conducted by Weizmann Institute of Science researchers, reveals the extent to which our natural world – along with its most iconic animals – is a vanishing one.⁹

The report inarguably illustrates the weight (mass) of our collective human presence, noting:

“The new report shows that the biomass of wild mammals on land and at sea is dwarfed by the combined weight of cattle, pigs, sheep and other domesticated mammals. A team headed by Prof. Ron Milo found that the biomass of livestock has reached about 630 million tons – 30 times the weight of all wild terrestrial mammals (approximately 20 million tons) and 15 times that of wild marine mammals (40 million tons). 2020 likely marked the moment when manmade mass tipped higher than biomass.”

NATURE’S CRITICAL ROLE IN OUR LIVES

It’s important in an ever more disconnected and urbanized world to articulate why wildlife, and the natural habitats they require, matter. In the article of September 17, 2017, “How Modern Life Became Disconnected from Nature”, social psychologists Selin Kesebir and Pelin Kesebir state:

“Since the 1950s, research suggests, we have become more and more distanced from nature and its life-giving benefits... Study after study documents the psychological and physical benefits of connecting with nature. People who are more connected with nature are happier, feel more vital, and have more meaning in their lives... merely looking at pictures of nature does speed up mental restoration and improves cognitive functioning... Yet our connection to nature seems more tenuous than ever today – a time when our children can name more Pokémon characters than wildlife species.”

The more biodiverse each ecosystem, the healthier the biosphere. Wild animals are the stewards of our ecosystems. Some do some real heavy lifting. The beaver, *Castor canadensis*, an animal the top-hat inspired fur trade of the 1800s nearly wiped out, is one such species. Beaver activity can increase plant diversity by as much as 33%. By skillfully constructing dams, they encourage new plant growth, increase wetlands

with their dams and in doing so, these giant rodents create habitat for hundreds of species. All of the new plant growth has an additional benefit of functioning to both absorb carbon and contribute to the functioning of the water cycle.¹⁰

Volumes have been written about how vital insects, especially bees, are to our very existence and yet we still see them as pests and kill them with chemicals which travel up the food chain to kill the animals that rely on them for food. Movements to create bee-friendly yards and to ban neonicotinoids, the most egregious of the bee killing pesticides, exist in some cities but the use of these harmful chemicals is still ubiquitous.

According to Professor William Rees: “Biodiversity loss may turn out to be the sleeper issue of the century.” Rees wisely concludes: “On a finite planet where millions of species share the same space and depend on the same finite products of photosynthesis, the continuous expansion of one species *necessarily* drives the contraction and extinction of others.”¹¹

There is more and more evidence that our policies reflect an inability to listen to science while being profoundly good at following nonsense. It makes no sense to ignore what is going to kill us off the planet along with the much more innocent species and yet we have been doing that for a really long time.

We were warned in the 1970s by Paul Erlich and his book, *The Population Bomb*, about how our billions were growing to unsustainable proportions. The United Nations COP (Conference of the Parties) international climate conferences have been meeting yearly around the world since 1995 warning about the increase in carbon and what it is doing to the ability for life on earth to continue to exist. I was honored to speak in Madrid, Spain, to the 25th Annual COP conference about overpopulation’s role in climate change. Together with my colleagues, we were given 23 minutes to address this topic and were the only ones to do so in two weeks of meetings. Leaders in Madrid told me that it had never been addressed.

We continue to shove the overpopulation issue under the bus. In Rob Harding's recent NPG Forum paper, "Adversity for Biodiversity: A Reflection on My Experience at COP15," he reported that human population was not a part of the Convention on Biological Diversity's recent conference. He was puzzled and disappointed that it was absent from the discourse intended to help move the needle in the direction of improving the state of our biodiversity. This is just one more example of how our so-called leaders continue to offer up nonsense in the face of our ecological predicament.

GROWTH DOES NOT EQUAL VITALITY, IT FUELS ADVERSITY

The corporatists and growth hucksters only care about their bottom line. Governments follow their lead as they are dependent on them for financial support. None of them care about the laws of physics that we transgress or that their billions will not be able to buy the world new lions, tigers and bears. They don't care or even understand that when we put ourselves first, we put ourselves last. As a society we don't question this viewpoint. Instead, we act like we are looking out of penthouse windows, admiring the view, forgetting that to support a penthouse you need a basement. Wild animals, particularly insects, make up the integrity of that basement.

Wildlife is being pushed off the planet, and as we continue to vote for their extinction with our actions (or lack of action), we undermine our own future. The great ecologist and writer Aldo Leopold attributed our disregard for the critical role of wildlife in our world to our lack of a land ethic. He articulated this concept as an acknowledgement of the interconnected relationship between people and the land. At the core of his philosophy was that care for the land cannot be separated from care for the people.¹²

As Leopold wisely warned: "One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen. An ecologist must either harden his shell

and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise."¹³

America continues on its journey toward providing an artificial existence for its city dwellers. Artificial lighting of city streets and buildings makes star gazing nearly impossible. Living in overpopulated cities means that experiences in nature are relegated to excursions to places where birds can still be heard, and wildlife still can be seen. Those without the means to escape the trappings of modern cities are growing up without having the kind of experiences that expose them to the natural world and encourage them to adopt a sense of responsibility to the environment.

I was a naturalist and director of an urban nature center in the Twin Cities for 28 years. I often had to stop my lessons to wait for the planes to fly over and the sirens to pass by. Just imagine the impact of this disturbance on the deer, birds, frogs, insects and other animals that called our 150-acre park home. My staff and I were able to teach classes to mostly urban students about a wide variety of nature topics. Our local school district sent their students to us three times a year, other schools were lucky if they could afford one trip a year. The rest of the time the kids were on their screens, and relegated to the outdoors only when there was an organized game to play. As time went on one thing became very clear, the student's basic knowledge of nature was diminishing. Many didn't know that maple syrup didn't come right out of trees or that trees had any role in the process. Those students who were from deeper in the inner city thought they had landed in the wilderness when they stepped onto our paths, and we were so urban that you could walk to a neighboring pizza parlor over lunch. I recall students from an 11th grade inner city class complaining to me that they were afraid of something jumping out at them in the woods and wouldn't leave my side as we started to walk down the trail. Adults also continued to surprise me with their lack of basic knowledge about the

natural world. One man insisted that hummingbirds did indeed fly south on the backs of Canada Geese and I don't think I was able to persuade him that indeed they made it to Mexico's coastline on their own power.

I bring up these stories because the disconnect from the natural world is increasing in our growing world and comes at a very high price. How will we ever have a populace willing to fight for the preservation of biodiversity if they have no clue what it is or what its role is in their own future?

BIODIVERSITY NEEDS MORE CHAMPIONS

Indigenous people still living close to the land are now the biggest champions of biodiversity. No surprise here, for they experience every day what is being lost.

The territories of the world's estimated 370 million indigenous peoples cover 24% of land worldwide and contain 80% of the world's biodiversity.¹⁴ There is no coincidence that the maps of the most biodiverse places on earth coincide with where the remaining indigenous people live. According to Winona LaDuke, author and Native American land rights activist from the White Earth Indian reservation in Minnesota, "native societies' knowledge surpasses the scientific and social knowledge of the dominant society in its ability to provide information and a management style for environmental planning." They are fighting around the globe for the protection of their lands which automatically protects biodiversity.¹⁵

In September 2022, two indigenous women leaders, Nemonte Nenquimo and Nonhle Mbuthuma, were successful in getting a court to revoke a permit that would have allowed Shell Oil to despoil their farming communities and fishing grounds along their homeland, the pristine Wild Coast of South Africa.¹⁶

Biodiversity needs more champions like these two brave women. The biodiversity that remains needs more people who understand and care about its value to the integrity of our living planet and all of us who call earth home. There are too

many distractions in our various forms of media that bring our focus away from how our numbers, noise and nonsense are hurting wildlife.

It is not just our outrageous numbers, now growing past the 8 billion mark we reached last year, but also the side effects of this planetary take over.

DISTURBING NOISES RUN DEEP

Those side effects were scientifically examined in a recent documentary by the ever-wonderful naturalist/filmmaker David Attenborough, in a film which examines how the global pandemic allowed us to study the effect of human presence on wildlife. "The Year the Earth Changed" (2021) examined how wildlife thrived when we all had to stay indoors during the COVID shutdown.

It turns out that sound is very important to wildlife and their ability to 'talk' to each other. What are we so good at? Obliterating their communications with our noise. Case in point, humpback whales. Attenborough documents in his film that they were able to leave their calves for longer distances and longer lengths of time because our ships had stopped shipping, and we quit using boats for recreation thereby allowing these intelligent cetaceans to hear the distress calls of their young. They were able to feed more and raise healthier calves. The film went on to show cheetahs who call to their kits when they make a kill because they can't drag the heavy carcass back to their den.

The noise of safari jeeps and radios stop them from hearing that dinner is being served. Noise pollution is becoming a real problem for wildlife and its effects extend beyond the actual footprint of cityscapes. Airplane noise is one example. Noise from ships is another. As human numbers expand, so does the noise from modern life. Sadly, even protected areas do not escape the detrimental effects of noise pollution.

"In 1972, U.S. officials enacted the Noise Control Act, which gave the Environmental Protection Agency the authority to impose limits on noise from motor vehicles and machinery. But regulators have largely ignored

noise in parks, wilderness, and other protected areas, which cover 14% of the country. And 80% of the United States – including many parks and protected areas – is now within 1 kilometer of a road, thanks to rapidly growing residential and industrial areas.”¹⁷

All sorts of animals rely on sound for communication. Human-created noise from traffic, airplanes, ships, sirens, etc. interfere with frogs being able to hear the croaking of other frogs, birds being able to hear each other’s songs, and mammals being able to ‘talk’ to their young. Crickets are just one example of insects which also need to be free of human-made noise so that they can chirp their way successfully through their mating cycles.

It turns out people are negatively impacted by noise as well. My friend and expert on stress, Dr. Greeley Miklashek writes extensively about this in his book, *Stress R US* (2018). Miklashek also wrote an NPG Forum Paper about how people suffer from what he calls ‘Population Stress Disorder.’ He uses his long career as a neuropsychiatrist to theorize that we are exhibiting dysfunctional behaviors due to our inability to live under the conditions set up in an overcrowded, noise polluted world.

Most of our time as a species on the planet was spent in small hunter gatherer groups. We have not, Miklashek claims, evolved the coping mechanisms to deal with the stresses of living in anonymous overcrowded cities.

POLLUTION INCREASES EVEN IN A QUIETER WORLD

Although the pandemic allowed for a quieter earth to temporarily settle upon the land, it also increased our medical waste and microplastics in the environment when discarded masks, other protective gear and used syringes added to our pollutant problems. According to Reuters, the February 2022 World Health Organization reports that the Covid 19 pandemic was responsible for creating 144,000 tons of medical waste. We must now multiply our creation of waste from all

aspects of life by over 8 billion of us, demonstrating how the volume of people contributes to our environmental woes.¹⁸

Overpopulation and our continued pursuit of growth fuels the amplification of humanity over the landscape. We can’t mitigate our detrimental influences by just buying everyone headphones to drown out the noise, we must turn down the volume. We already pollute so much and adding more of us just means more pollution. More pollution means more contamination of our waterways and soils, which are absorbed by everything from insects to fish and up the food chain to us.

Humans have made over 50 million chemicals, most of them in recent decades.¹⁹

Our very presence interrupts the daily survival behaviors of wildlife, even when we are not hunting them or killing them with our cars. In the Attenborough film, African Jackass penguins started coming up on the beaches with more frequency during lock down in South Africa when they weren’t being overrun with swimmers. This allowed for multiple trips back to the ocean to feed their young, and they thrived. Now of course, things are back to “normal” and the penguins must once again wait for nightfall to reach their young with the day’s catch.

WE MUST BEGIN AT HOME

Overpopulation is a global problem, but it needs to be controlled locally. Each nation has the right to determine its demographic goals and to set forth policies to achieve them with respect to cultural notions of family size.

Sprawl studies have determined that population growth is the engine behind the train that is pushing us closer and closer into wildlife habitats. Analysis of how we are growing has given us a clear message and even a clearer choice. Our future growth will not happen in the usual way of just having more births than deaths, it will be due to the way our immigration policies and lack of enforcement allow both legal and illegal immigration to increase our growth by an

estimated 2 million people per year. If we continue with business as usual, if we continue to ignore immigration, both legal and illegal, into a country which is already full according to so many measures, then we are damning wildlife to certain extinction.

There are over 1,300 endangered or threatened species in the US according to The Center for Biological Diversity. Among those being driven to extinction are the Florida panther and the San Joaquin kit fox. As the US grows, their habitat shrinks. Few realize the connection between illegal immigration and the effect it has on endangered species from other countries. Smuggling humans from Latin America into the US helps to also increase illegal transport of endangered species simply because they follow the same routes.²⁰

In an extensive sprawl study focusing on Arizona, it was determined that immigration inspired growth is hurting the very reason people like Arizona. People love its wide-open spaces and beautiful deserts, as well as the mild winter weather for those escaping harsher weather regions. Wildlife lives in those deserts which are now being tilled for new development. The nonsense of that is that we are not requiring developers to prove that there is enough water now or in the future to support newcomers. The Arizona Sprawl study confirmed what the Special Council on Sustainable Development found as long ago as 1996, that “full environmental protection is not possible without the stabilization of population.” The study further determined that “20-25 million additional Americans each decade will nearly all settle in some community, inevitably leading to additional sprawl as far and as long as the eye can see.”²¹

STOP THE NONSENSE: START SEEING BIOCAPACITY

To conclude, we need nature and nature needs us. We aren't just destroying the natural world, we are destroying ourselves, what could be more nonsensical than self-destructive behavior? There is ultimately one big, limited planet for all species

and humans have the power to make a difference for wildlife.

The Global Footprint Network (GFN) (www.footprintnetwork.org) calculates the biocapacity of the earth and how much we are using. It turns out we are using more than it is producing. How can that be? Well think of it as a bank, there is interest which grows on principle. If we use only interest the principle stays intact. But we are eating away at the principle. GFN collects data on how much biologically productive area it takes to provide for all the competing demands of people. These demands include space for food and fiber production, timber regeneration, carbon dioxide emissions from fossil fuels and the building of infrastructure. These measurements indicate that overshoot is happening and that the harm being done to us and to wildlife is being felt now and will continue into the future.

TIME TO GET MORE PASSIONATE ABOUT WILDLIFE

Why am I so passionate about wildlife? There is the rational reason of course, they matter to the very existence of our planet, and us, but there is an emotional reason too, a spiritual one as well, if you will. They cannot defend themselves. They work hard to survive each and every day and yet must succumb to our noise, our crowds, our wars, our pesticides and our industrialized agriculture and industry. I also believe there is moral reason behind all of this data, it is simply wrong to destroy their world for profit. Money drives so much of the destruction. Where we see the raping of the rainforests, corporations see dollar signs.

As a child I had to memorize the wisdom of Hillel the Talmudic scholar. He taught: “If I am not for myself, who will be for me? But if I am only for myself, who am I? If not now, when?”²²

Applied to this paper it means that we can't only be for humans, yet as advocates for wildlife we actually are advocating for our own well-being. The last phrase is indispensable, if we don't stand up for wildlife now, when will we?

NOTES

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