

The environment by the numbers

In the information age, we are bombarded with celebrity gossip, sports minutia, advertisements and, occasionally, something meaningful. Numbers are thrown at us from every direction—poll results, weather variables, unemployment figures, bargain prices, census outcomes, as well as social indicators of all sorts. The importance of these numbers cannot be overstated. They give the appearance of objectivity—i.e., lack of subjectivity. They, therefore, tend to command authority and truthfulness, much more so than “mere” qualitative descriptions of our world. As such, individuals or organizations with a point to make often choose to do so by way of providing figures, numbers, percentages, statistics, and other forms of quantitative measures. In order to make sense of the arguments that are being presented, we must begin to familiarize ourselves with the numbers that are offered to us on a daily basis. Having done this, we must then try to understand how they inform us and to what extent they are relevant.

In the accompanying table, I present a host of environmentally-related statistics. Each group of statistics represents one dimension of environmental concern. At first glance, some of the statistics presented here might not be considered environmental, but I intend to show how they all have something to say regarding our health and the environment's health.

Though I will provide a few thoughts and questions relating to each group of statistics, readers should first spend a few moments digesting the numbers and making their own connections and/or constructing questions before reading on. PAUSE. Upon reflecting on and comparing their thoughts with those presented below, I hope the readers will feel compelled to share their ideas and questions in future letters and op-ed pieces as well. Ultimately the purpose of presenting these numbers is to get folks thinking and talking about matters of significance to our environmental well-being, rather than just matters of entertainment and commercialism. (Sources for each statistic are provided since the origin of every statistic is essential to establish its credibility and authenticity.)

Re **Group A:** What we spend money on says a lot about who we are. Our daily expenditures reveal what priority (or some might say, value) we put on things. For example, most of us are willing to spend more on our house than we do on our automobile because most of us don't live in our car. Also, hopefully, we pay for our children's immunizations before we decide to buy a new tennis racket or computer monitor. Yet when it comes to non-essentials (such as the tennis racket, a lawn care product, or even a donation to an environmental organization), people's decisions vary considerably. In aggregate, however, our spending patterns do suggest that we have a lot of cash to burn. We citizens, every man, woman, and child, spend, on average, about \$212 dollars a year on cigarettes. (Note that \$1,000,000,000 (or 1 billion) per U.S. resident per year works out to about \$4 per person.) And this doesn't begin to take into account the real price of tobacco, which must include all the detrimental health costs that are associated with this luxury. In contrast we spend so little on Head Start programs (which serve nearly one million children) or materials for our children's school libraries. Yet we often hear that we are spending way too much money on our schools. Are we kidding ourselves or do we think that puffing tobacco while fiddling with a healthy assortment of video games or pornography paraphernalia will

compensate for a lack of learning?

Re **Group B:** Most realize that Illinois is a state known for its corn and soy fields. And while much of our state's economy is driven by the success of these agricultural crops, might we also be a major player in the production of marijuana? Though the statistics presented here are not specific to our state, on a national level it certainly appears that we aren't really growing what we think/say we are. And with all the money that we spend trying to do away with drugs (see Group A again), it seems that we are fighting a losing battle, to the tune of \$25 billion dollars plus some (and that is for marijuana alone). Amazing. Where is all this marijuana being grown anyway? In the basements or attics of homes? Is that really where the richest soils of America are located? With all of these money coming in for dope, I wonder what the U.S. government would do if it had an extra \$20+ billion dollars to work with? (The +

have been non-white is downright mind blowing. In my experience, women tend to be better informed and more concerned about environmental degradation. Does it matter that so few of them are in position to lead our nation's policies in these areas? And although statistics broken down by class are not provided, it seems that most politicians have considerable access to money. Does it matter that so few of our top legislative representatives have lived among the lower economic classes? Might this explain why toxic waste sites and point-source environmental pollutants (i.e., those from factories and incinerators) overwhelmingly tend to be in the poor (and African American) neighborhoods?

Re **Group D:** As a species, how are we doing? Most of us reading this are definitely near the top of the comfort scale. We may not be Bill Gates, but most of us have had very little direct contact with or with people who have chronic hunger or

important to our own happiness, security and health. Whether it be the spreading of once strictly-tropical diseases, the denudation of our “collective” lungs (i.e., oxygen-producing plants) found in the rainforests of the world, or the political instability driven by insufficient resources, our home is suffering in part because so many are pushed to the brink of survival. All this being said though, might the real cause of the environmental damage that we find worldwide be traced back to our overconsumption of our planet's bounty? Can we continue to dismiss others? And at what cost? Shouldn't we start to make a real dent in inequity? Optimistically, Group A's statistics suggests that we have a lot of “pork” to reallocate if we truly wanted to.

Re **Group E:** We have so much life on this planet that we don't even know about. Even among the ones that we do know about, we often neglect to understand how we rely on them for our survival. For example, how many of the 20,000 fungi in IL do you (or I) know? What do fungi do for us anyway? (Actually, they provide the amazing service of decomposing for us, i.e., breaking down dead organic matter into reusable chemicals.) We might want to know something about them because some fungi, such as the Potato Blight Fungus associated with the death of many Irish people in the 1840's, can be mighty dangerous. I find it fascinating that we have so many fungi in my state alone, but equally fascinating that so little attention is given to them. At a global scale, does it matter that the rainforest is being burned at a rapacious rate? How many species worldwide (or statewide) have we exterminated? So many of us try to live humanely and treat animals with respect and admiration. Yet, on a global scale, mass genocide is a daily phenomenon. We call IL the “prairie” state, yet almost none of the prairie still exists. Will we decide to change the name or will we work to work hard to protect that which remains?

Closing: I've said my piece. I want to hear others respond, positively or negatively to the statistics and ideas/questions presented. Ample other statistics and questions deserve a hearing as well. What other statistics warrant our inspection and reflection? How might we work collectively toward the improvement of any one of these statistics? How might each one of us do so individually? Too often we wait until others lead, it might be time that we all begin to lead by example. How much risk is there in leading? Are you willing to take that risk? Perhaps we will begin to focus on the significant at the moderation of the trivial. Peace.

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ENVIRONMENTAL STATISTICS		
GROUP A	Expenditures in U.S. (aggregate per year)	Source
\$53,000,000,000	on Cigarettes	1
\$10,000,000,000	on Hardcore Pornography	2
\$7,000,000,000	on Home Video Games	3
\$6,500,000,000	on Head Start Programs	4
\$4,000,000,000	on Law Enforcement connected with marijuana violations	5
\$1,000,000,000	on School Library Materials for children	3
\$730,000,000	on Smoking Cessation Products	1
GROUP B	Cash Value of Crops (Grown in U.S. per year)	Source
\$25,000,000,000	Marijuana	5
\$17,900,000,000	Corn	6
GROUP C	Political Representation	Source
100	# of U.S. Senators (current)	7
1,875	# of U.S. Senators (history)	7
14:33	# of Female U.S. Senators (current:history)	7
0:4	# of African American U.S. Senators (current:history)	7
2:5	# of Asian American U.S. Senators (current:history)	7
0:3	# of Hispanic American U.S. Senators (current:history)	7
1:3	# of Native American U.S. Senators (current:history)	7
98.2	% of U.S. Senators that have been male	7
99.9	% of U.S. Senators that have been European (ethnically)	7
60.0	% of African Americans that live in communities with abandoned toxic sites	8
GROUP D	Inequality	Source
6,300,000,000	World Human Population (in 2003)	9
3,944,700	# of Children that die from preventable water-borne disease (yearly)	10
1,100,000,000	# of People that are chronically malnourished	11
1,500,000,000	# of People that do not have access to clean water	10
2,800,000,000	# of People that survive on an income of less than \$2 a day	11
\$29,240	Average Purchasing Power in U.S. (per person)	11
\$440	Average Purchasing Power in India (per person)	11
GROUP E	Non-human Species	Source
10,000,000	# of Species on the planet (conservative estimate)	12
1,500,000	# of Species that have been Identified and Classified	12
20,000	# of Different Species of fungi in Illinois	14
30,000	# of Species Extinctions (per year, moderate estimate)	12
63,072,000	# of Football Field-sized Regions of rainforest being destroyed (per year)	13
0.045	% of Illinois Prairie that remains	14

Sources: 1. Parker-Pope, Tara. (2001) Cigarettes: Anatomy of an Industry from Seed to Smoke. The New Press, 192 pp.; 2. Campbell, Duncan. (2003) "With pot and porn outstripping corn, America's black economy is flying high." The Guardian, May 2.; 3. American Librarian Association, Office for Research & Statistics, (2000); 4. U.S. Dept. of Health & Human Services, Administration for Children & Families. Head Start Fact Sheet. (2003) 5. Schlosser, Eric. (2003) Reefer Madness: Sex, Drugs, and Cheap Labor in the American Black Market. Houghton Mifflin, 320 pp.; 6. U.S. Department of Agriculture Statistics; (www.usda.gov); 7. U.S. Senate (www.senate.gov); 8. Population Research Bureau (www.prb.org); 9. The Commission for Racial Justice, Toxic Wastes and Race Study (1987); 10. Howard, Brian. (2003) "Message in a Bottle." The Environmental Magazine, Sept/Oct 2003, pp. 26-33.; 11. State of the World 2001. Worldwatch Institute. 275 pp.; 12. Raven, P.H. (2001) "What have we lost, what are we losing." in The Biodiversity Crisis, ed. M.J. Novacek. New Press, 223 pp.; 13. Rainforest Action Network. (www.ran.org); 14. Jeffords, M.R., S.L. Post & K.R. Robertson. (1995) Illinois Wilds. Phoenix Publishing.

sign represents the additional monies that would be available if our courts weren't busy trying marijuana offenders, etc.) Might we not be closing down schools and firing competent teachers? Might we actually have funding for college study to motivate some of our brightest (yet poorest) citizens to dedicate their lives to public service through teaching?

Re **Group C:** Who speaks for us? Who represents the multi-dimensional, multi-ethnic voices that call the U.S. home? At the highest levels, overwhelmingly, and throughout U.S. history, it has been white, European men. And while there is obviously nothing wrong with being white, European, or a male (or at least I hope not), there is no question that one's ethnicity and sex have a lot to do with how one views the world and his/her place in it. In terms of sexual representation, the U.S. is well behind many nations in the world who provide much greater access for women to positions of power—Sweden, India, China to name a few. To think that less than 2 percent of our nation's senators have been women, and less that 0.2 percent

insufficient water. Unfortunately, a huge number of our brethren face these realities every day. What makes us so special? Do we work harder? Are we superior to those less fortunate? Obviously not. So what gives? Simple, we have and they don't. But is it so simple? While we might be able to cloister ourselves in our living rooms playing our DVDs and avoid thinking about the plight of others, we cannot escape the fact that from an environmental standpoint the well-being of these “others” is critically

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