

“Help Save the Environment”

by Steve Boyan, PhD

The Union of Concerned Scientists (UCS) says there are two things people can do to most help the environment. The first is to drive a fuel-efficient automobile (that means, not an SUV or a truck) and live near where we work. The second is to not eat beef.

I'm going to go one step further than UCS: I suggest that you refuse to eat any animal or animal product produced on a factory farm. In 1990, when I first read that 10 people could be fed with the grain that you would feed one cow that would be turned into food for one person, I was impressed. But I was not moved. The reason: If 10 people would be fed because I gave up meat, I'd give it up. But, I thought, if I give up meat, it won't have that impact: it probably won't have any impact on anything at all, except me.

I was wrong. If I had known that for every pound of beef I did not eat, I would save anywhere from 2,500 to 5,000 gallons of water, I would have been moved. It's a good idea to save water; we are depleting our underground aquifers faster than we are replenishing them. The largest one, the Ogallala, which covers a vast part of the country from the Midwest to the mountain states, is being depleted by 13 trillion gallons a year. It is going to run out. Northwest Texas is already dry. They can't get any water from their wells.

John Robbins points out that in the 1980s and 1990s, to conserve water, most of us went to low-flow showerheads. If you take a daily seven-minute shower, he says, and you have a 2-gallon-per-minute low-flow showerhead, you use about 100 gallons of water per week, or 5,200 gallons of water per year. If you had used the old-fashioned 3-gallon-per-minute showerhead, I calculate you would have used 7,644 gallons of water per year. So by going low flow, you saved almost 2,500 gallons of water per year. Wonderful. But by giving up one pound of beef that year, you'd save maybe double that. You'd save more water than you would by not showering at all for six months! And that's merely one of the environmental impacts you'd have.

The modern factory farming system is a prolific consumer of fossil fuel and a prolific producer of poisonous wastes. Up to 100,000 animals are herded together on huge feedlots. These animals do not graze on grass, as picture books tell us; they can't graze at all. Feedlots are crowded, filthy, stinking places with open sewers, unpaved roads and choking air. The animals would not survive at all but for the fact that they are fed huge amounts of antibiotics. It is now conceded that the antibiotics fed to cattle are the main cause of antibiotic resistance in people, as the bacteria constantly in these environments (become resistant) to survive them.

The cattle are fed prodigious quantities of corn. At a feedlot of a mere 37,000 cows, 25 tons of corn are dumped every hour. It takes 1.2 gallons of oil to make the fertilizer used for each bushel of that corn. Before a cow is slaughtered, she will eat 25 pounds of corn a day; by the time she is slaughtered she will weigh more than 1,200 pounds. In her lifetime she will have consumed, in effect, 284 gallons of oil. Today's factory-raised cow is not a solar-powered ruminant but another fossil fuel machine.

And she will produce waste. Livestock now produces 130 times the amount of waste that people do. This waste is untreated and unsanitary. It is filled with chemicals and disease-bearing organisms. It overpowers nature's ability to clean it up. It's poisoning rivers, killing fish and getting into human drinking water. 65 percent of California's population is threatened by pollution in drinking water just from dairy cow manure. It isn't just cows that produce this waste. Factory-raised hogs produce four times the waste in North Carolina as the 6.5 million people of that state do. Even the oceans are polluted: 7,000 square miles of the Gulf of Mexico are a dead zone.

There are additional environmental impacts. Cattle don't spend their entire lives in feedlots. When they are young, they graze. Where do they graze? Well, over two-thirds of the land area of the mountain states are used for grazing, 70 percent of the lands in western national forests are grazed; 90 percent of Bureau of Land Management land is grazed. These are public lands, lands that President Clinton didn't even try to save. These lands are trampled by the cattle, compacting the soil. When it rains, the land doesn't absorb the water. Instead, it runs off, taking away topsoil, forming deep gullies and damaging streambeds.

The government protects the cattle by killing off any creature that might threaten the livestock. They poison, trap, snare, den, shoot or gun down the wildlife. Denning, by the way, is the practice by federal agents of pouring kerosene into the dens of animals and setting them on fire, burning the young animals alive in their nests. According to John Robbins, agents kill badgers, black bear, bobcats, coyotes, gray fox, red fox, mountain lions, opossums, raccoons, skunks, beavers, porcupines, prairie dogs, blackbirds, cattle egrets and starlings using these methods. These activities take place on public lands, which were created in large part to protect the environment! Your tax dollars subsidize these activities.

I'm not finished yet. We in the United States do not get all of our beef from the West. We import over 200 million pounds of beef from Central America alone. Every second per day, one football field of tropical rainforest is destroyed to produce 257 hamburgers. When you destroy rainforest land, you destroy rich plant and animal life, varieties of life we don't even understand, and forms of which may provide the medicines we need to cure disease. Rainforests supply us with oxygen. They moderate our climates. When rainforests are destroyed, it's only a matter of time before the land becomes a desert. Rainforests absorb some of the carbon dioxide we are spewing into the atmosphere.

We humans have increased the amount of carbon dioxide in the atmosphere by 25 percent compared with any other period when humans were on this planet. Most of that has taken place in the past 50 years. The Intergovernmental Panel on Climate Change, consisting of some of the best scientists in the world, says global warming is a fact. If uncontrolled, we will have ecosystem collapses, crop failures, weather disasters, coastal flooding, the spreading of previously controlled diseases, the death of coral reefs, and new insect pests. Some of these things are starting to happen already. Coral reefs are dying, insect pests are spreading out of their range and killing off new kinds of trees. Weather patterns are changing. Some places have had extreme weather events, with billions of dollars of losses. Some island people have had to abandon their islands because rising seas have salinated their underground aquifers.

Carbon dioxide is largely produced by the burning of fossil fuels, especially coal, and especially our use of inefficient vehicles for transportation. But not often mentioned is the fossil fuel used to raise farm animals. As I said earlier, a factory cow is a fossil fuel machine, not a solar-powered ruminant whose wastes fertilize the fields to produce more grass for the cow to eat.

There's another environmental consequence of our factory farming system of animal raising: that's the matter of species extinctions. It is true that species die off all the time. Normally, the Earth has lost 10 to 25 species per year...we are (now) losing several thousand species per year, and maybe tens of thousands. We think of mammals that are endangered, and 25 percent of mammalian species are endangered. But what's much more endangered, or wiped out already, are the plants, including varieties of plankton, fungi, bacteria and insects, that are fundamental to all so-called higher forms of life. All life will unravel if these creatures are wiped out.

The driving force behind all these extinctions is the destruction of wildlife habitat, especially the rainforests. The driving force behind the destruction of the rainforests is livestock grazing. The leading cause of species in the United States being threatened or eliminated is livestock grazing. A 1997 study of endangered species in the southwestern United States by the Fish and Wildlife Service found that half the species studied were threatened by cattle ranching. We believe you can protect your health and the environment one bite at a time. By not eating beef—and other farm animals—you:

1. save massive amounts of water – 3,000 to 5,000 gallons of water for every pound of beef you avoid
2. avoid polluting our streams and rivers better than any recycling effort
3. avoid the destruction of topsoil
4. avoid the destruction of tropical forest
5. avoid the production of carbon dioxide
6. reduce the destruction of wildlife habitat
7. help to save endangered species.

Food for Thought

“The human appetite for animal flesh is a driving force behind virtually every major category of environmental damage now threatening the human future—deforestation, erosion, fresh water scarcity, air and water pollution, climate change, biodiversity loss, social injustice, the destabilization of communities and the spread of disease,” state the editors of *World Watch*, July/August 2004.

According to Benedictine monk, Brother David Steindl-Rast: “...the survival of our planet depends on our sense of belonging—to all other humans, to dolphins caught in dragnets to pigs and chickens and calves raised in animal concentration camps, to redwoods and rainforests, to kelp beds in our oceans, and to the ozone layer.”

The number of animals killed for food in the United States is 70 times larger than the number of animals killed in laboratories, 30 times larger than the number killed by hunters and trappers, and 500 times larger than the number of animals killed in pounds.

“We must fight against the spirit of unconscious cruelty with which we treat the animals. Animals suffer as much as we do. True humanity does not allow us to impose such sufferings on them. It is our duty to make the whole world recognize it.”

---Dr. Albert Schweitzer

What does the future hold? If the world population triples in the next 100 years and meat consumption continues, then meat production would have to triple as well. Instead of 3.7 billion acres of cropland and 7.5 billion acres of grazing land, we would require 11.1 billion acres of cropland and 22.5 billion acres of grazing land.

But this is slightly more than the total land area of the six inhabited continents! We are already desperately short of groundwater, topsoil, forests and energy. Even modest increases in the world population during the next 100 years would make it impossible to maintain current levels of meat consumption. On a vegetarian diet, however, the world could easily support a population several times its present size. The world's cattle alone consume enough to feed 8.7 billion humans.

Father Thomas Berry, a Catholic priest, author, and founder of the Riverdale Center of Religious Research in New York, wrote, “Vegetarianism is a way of life that we should all move toward for economic survival, physical well-being, and spiritual integrity.”

“If anyone wants to save the planet, all they have to do is just stop eating meat. That's the single most important thing you could do. It's staggering when you think about it. Vegetarianism takes care of so many things in one shot: ecology, famine, cruelty. Let's do it! Linda was right. Going veggie is the single best idea for the new century.”

---Paul McCartney