Facts on Animal Farming and the Environment

Fossil Fuels

- More than a third of all raw materials and fossil fuels consumed in the United States are used in animal production (*"Ecological Cooking" by Joanne Stepaniak and Kathy Hecker*)
- The production of one calorie of animal protein requires more than ten times the fossil fuel input as a calorie of plant protein. (*The American Journal of Clinical Nutrition*)
- Producing a single hamburger uses enough fuel to drive 20 miles and causes the loss of five times its weight in topsoil. (*"The Food Revolution" by John Robbins*)

Water

- Nearly half of all the water used in the United States goes to raising animals for food (*"The Food Revolution" by John Robbins*). It takes more than 2,400 gallons of water to produce 1 pound of meat and only 25 gallons to produce one pound of wheat (*"Water Inputs in California Food Production" by Marcia Kreith*)
- To produce a day's food for one meat-eater takes over 4,000 gallons; for a lacto-ovo vegetarian, only 1200

gallons; for a vegan, only 300 gallons (*The Vegetarian Times Complete Cookbook*)

- Animals raised for food produce approximately 130 times as much excrement as the entire human population and animal farms pollute our waterways more than all other industrial sources combined. Run-offs of animal waste, pesticides, chemicals, fertilizers, hormones and antibiotics are contributing to dead zones in coastal areas, degradation of coral reef and health problems. (*The U.S. Environmental Protection Agency*).

Land

- Raising animals for food (including land used for grazing and land used to grow feed crops) now uses a staggering 30% of the Earth's land mass. (*Livestock's Long Shadow: Environmental Issues and Options, a 2006 report published by the United Nations Food and Agriculture Organization*)
- Seven football fields' worth of land is bulldozed every minute to create more room for farmed animals and the crops that feed them. (*The Smithsonian Institution*)
- Of all the agricultural land in the U.S., 80% is used to raise animals for food and grow grain to feed them—that's almost half the total land mass of the lower 48 states (*"Major Uses of Land in the United States" by Marlow Vesterby and Kenneth S. Krupa*)

Air

- The massive amounts of excrement produced by livestock farms emit toxic gases such as hydrogen sulfide and ammonia into the air. Roughly 80% of ammonia

emissions in the U.S. come from animal waste (*The U.S. Environmental Protection Agency*).

- When the cesspools holding tons of urine and feces get full, factory farms will frequently get around water pollution limits by spraying liquid manure into the air, creating mists that are carried away by the wind. (*"Neighbors of Vast Hog Farms Say Foul Air Endangers Their Health," by Jennifer Lee, The New York Times 11 May 2003*)
- Air pollutants generated by animal farms can cause respiratory illness, lung inflammation, and increase vulnerability to respiratory diseases, such as asthma. Emissions of reactive organics and ammonia from animal farming can play a role in the formation of ozone (smog) and air pollution (*The U.S. Environmental Protection Agency*)

Food

- In the U.S., 70% of the grain grown is fed to animals on feedlots (*"Plants, Genes, and Agriculture" by Jones and Bartlet*)
- It takes up to 16 pounds of grain to produce just 1 pound of meat. (*The Global Benefits of Eating Less Meat by Mark Gold and Jonathon Porritt*). Fish on fish farms must be fed 5 pounds of wild-caught fish to produce one pound of farmed fish flesh (*"The Food Revolution" by John Robbins*)
- The world's cattle alone consume a quantity of food equal to the caloric needs of 8.7 billion people—more than the entire human population on Earth (*"The Global*

Benefits of Eating Less Meat" by Mark Gold and Jonathon Porritt)

Climate Change

- Animal agriculture is responsible for 18% of the total release of greenhouse gases world-wide (this is more than all the cars, trucks, planes, and ships in the world combined) (*Livestock's Long Shadow: Environmental Issues and Options, a 2006 report published by the United Nations Food and Agriculture Organization*)
- Livestock account for an estimated 9% of global CO2 (Carbon Dioxide) emissions, estimated 35-40% of global CH4 (Methane) emissions and 65% of NO2 (Nitrous Oxide) emissions (*Livestock's Long Shadow: Environmental Issues and Options, a 2006 report published by the United Nations Food and Agriculture Organization*)
- By replacing your "regular car" with a Toyota Prius the average person can prevent the emission of about 1 tonne of CO2 into the atmosphere, By replacing an omnivorous diet with a vegan diet the average person can prevent the emission of about 1.5 tonnes of CO2 into the atmosphere. That's 50% more CO2 saved! (*"It's better to green your diet than your car", The New Scientist, December 17, 2005*.)

In addition to all of the above, let's not forget that the expansion of livestock farming is one of the key factors leading to deforestation in parts of the world such as Latin America and posing a significant threat of the Earth's biodiversity. Our Oceans are not being spared either and

over-fishing is having a devastating impact on our marine ecosystems. This is not just a problem that impacts our planet, it's a humanitarian crisis. Our demand for animal based products is diverting precious resources like land, water and fossil fuels to produce farmed animals instead of feeding the estimated billion + people that are malnourished in the world.

We can all start working on sustainable alternatives or attempt to make sustainable choices as a solution to this problem, but the easiest solution is the elimination of the demand for animal based products. Switching to a plant-based lifestyle is the only long term solution that not only benefits the environment, but also the animals and our health.