**Are We Human or Are We Monsters**

**Mary Smith-Feinberg**

***“If I am to be a voice for animals, then how should I speak? Am I to whisper, when they are screaming in pain? Am I to be calm, when they tremble in fear? Am I to shout for mercy, as their throats are being slit? Tell me how I need to speak, for you to grant them their freedom.”***

***-Davegan Raza***

Many people have wondered over the years, what is it exactly that makes us different from other animals? Is it our intelligence? Our ability to empathize? Our sympathy? Or is it our huge capacity of destruction, our power to end any other creature’s existence on a whim? I would like to say what makes humans what we are is that we have the ability to differentiate between right and wrong. I think once humans utilize this ability and stop behaving like animals we will be able to say that humans are the pinnacle of creation. As Thomas Edison once said, “Non-violence leads to the highest ethics, which is the goal of all evolution. Until we stop harming all other living beings, we are still savages”.

This leads into the topic of veganism, if humans want to reach our full potential we have to give up our unsustainable and cruel practices involving the enslavement, torture, rape, and consumption of beings who are defenseless against us. Not only that, but also our use of animals as goods and inanimate objects is very literally destroying this planet. Animal agriculture is the most destructive thing to the environment, more so than all the cars and humans. When someone tells me they are an environmentalist, logically I would also assume they are vegan. Because why would anyone who cares about the environment participate in the thing that creates the most pollution? The answer to that is adly simple, because it is hard for some to go vegan. Throwing a plastic bottle in a recycle bin or turning off their lights is simple, but no one actually wants to change to help the planet. Humans do things to feel better about ourselves as long as we don’t have to put any effort into it, and everything that we deem too difficult or even impossible is concealed behind a thick wall of ignorance.

“By eating meat we share the responsibility of climate change, the destruction of our forests, and the poisoning of our air and water. The simple act of becoming a vegetarian will make a difference in the health of our planet.” ([Thích Nhất Hạnh](http://www.goodreads.com/author/show/9074.Th_ch_Nh_t_H_nh), The World We Have: A Buddhist approach to Peace and Ecology). Discussing all the benefits veganism has for the environment is difficult, because there are so many favorable results from it. Veganism has positive effects on all aspects of the environment, which I’ve grouped into four categories. Greenhouse Gases/Waste, water/land, oceans/rainforests/wildlife, and humanity.

Animal agriculture has always been a top producer of greenhouse gases, most just aren’t aware of the scale to which livestock contribute to these gases. **Livestock and their byproducts account for at least 32,000 million tons of carbon dioxide per year, about 51% of all global greenhouse gas emissions. Not only this but** animal agriculture is accountable for 18 percent of greenhouse gas emissions, more than the combined exhaust from all transportation. So is that hybrid car really the solution to global warming? A good idea, yes, but will it solve this crisis? No. If we eliminated all **fossil fuels, humans would still surpass our CO2 limit of 565 gigatonnes by 2030, because of animals. Another aspect of animal agriculture that is often overlooked is that it produces gases that are even more destructive than CO2, such as methane and nitrous oxide. Methane is far more dangerous than CO2, on a twenty year time scale it has a global warming potential eighty six times that of CO2. Now consider the fact that the cows of this planet produce 150 gallons of methane every day. Nitrous oxide has 296 times the global warming potential of CO2 and will stay in our atmosphere for 150 years. Animal agriculture causes 65% of all human-related emissions of this extremely hazardous greenhouse gas. There is nothing that contributes to global warming more than animal agriculture, yet we continue to focus on clean energy and hybrid cars while remaining blissfully ignorant of the most important causes.**

Everyone talks about how wasteful people are, how we produce so much garbage and need to take it into our own hands to recycle and make a difference. It’s a pleasant idea to think that recycling my garbage is saving the planet, but it’s just not true. Think about how much waste just one person produces in a year, about 1,600 pounds. So how much animal waste would there be? Around five tons of animal waste per person in the U.S. Animals produce 130 times more waste than people, for example the meat industry produces 1.4 billion tons of waste every year. To put this to scale even more, a farm with 2,500 cows produces the equivalent amount of waste as a city of 411,000 people.

The animals that produce this waste are dairy cows, cattle, pigs, sheep/goats, and poultry. There are 9 million dairy cows in the U.S., each cow produces120lbs of waste daily. Ninety million beef cattle, each producing 63lbs daily. Sixty seven million pigs each pig making 14lbs daily, nine million sheep/goats each making 5lbs of waste daily. Poultry create one pound of waste daily, and there are nine million birds. The average person creates only 4lbs of waste per day. So once again, who is really the one we need to blame for the environmental crisis? Even though that redneck with a hummer wearing a confederate flag is the easiest option you may have to look at your own actions as well. You may not be as different from him as you would like to be if you are also freely choosing to participate in the consumption of animal products. And if your reason for not changing is “But bacooonnnn!!!” you should probably take a nice long look at your priorities and maturity.

Now onto the topic of land and water, what do you think is the primary cause of destruction to those? Big surprise, animal agriculture it is once again. Shocking. Taking short showers isn’t a bad idea, even if human water use in the U.S. is only 5 percent of the total use of water here. Another 55 percent of the water usage in the U.S. goes to animal agriculture. Annually that 55 percent comes to around 76 trillion gallons of water. To put things on a small scale, if you buy one pound of beef about 8,000 gallons of water went into the production of that. And when you go to buy your gallon of milk you might as well dump 1,000 gallons of water down the drain on your way, because it that’s how much you waste with every gallon of milk you buy. For a 1 lb. container of eggs that 477 gallons, and for 1lb of cheese that 900 gallons. Now consider how much land animal agriculture uses, about one third of this planets ice free land is devoted to livestock and their feed. These farms on the land effect the ocean as well, already having created around five hundred nitrogen flooded dead zones in the ocean. About half of the land in the United States is used for animal agriculture.

The use of land for animal agriculture is the cause of ninety-one percent of rainforest destruction, and every day because of this about 137 plant and animal species go extinct. Some of these animals are going extinct before humans even discovered them, and with the rate of extinctions increasing how it is now its probable many more will be lost without us ever knowing they existed. Protecting the rainforest is a dangerous job, tragically 1,100 lives have been lost in the effort to protect the rainforest in the past twenty years. Wildlife in other areas has suffered greatly from animal agriculture as well, in the U.S. the USDA promotes the murder of wild animals in the name of protecting livestock. For example Washington State murdered the Wedge pack of wolfs for the sake of livestock. The human takeover has caused anything that we don’t perceive as a benefit to us, for consumption or entertainment, to be at risk of extinction. Just **ten thousand years ago, 99% of biomass was wild animals. Now humans and the animals that we raise as food make up 98% of the biomass. What humans have done to this planet really shows how we only value our own species, and our use of other beings as food and clothing makes it impossible for animals we don’t use to survive.**

The oceans and the wildlife they contain aren’t doing any better off than the land and its creatures. The amount of fish left is rapidly decreasing, **3/4 of the world’s fisheries are exploited or depleted already. About 100 million tons of fish are taken from the ocean every year. The waste produced by these fisheries includes fish that are thrown out and all the other fish and creatures that weren’t meant to be caught. This comes out to around 5 lbs. of unwanted creates for every 1 lb. of wanted fish. As much as forty percent of the fish that are wanted that are caught are thrown out as waste. Marine mammals and sharks also suffer from fishing, about 640,000 whales, dolphins, and seals die every year because of fishing vessels. About fifty million sharks are killed in fishing lines and nets, and this doesn’t include the number of sharks killed for consumption.**

There is one final thing that animal agriculture harms as it is harming the environment, and that is people. If the idea of consuming large amounts of drugs concerns you, you may want to know that eighty percent of antibiotics in the U.S. are sold for the animals you eat. An even more important issue directly relating to humans now is starvation. As of now it is possible to feed every single person on earth yet there is still starvation. This is because the food people could be eating is going to animals who take in more than they produce. Right now enough food is produced to feed 10 billion people, and fifty percent of the grain that could be for humans is fed to livestock. The starving populations aren’t even getting to benefit from the grain they grow. Eighty two percent of starving children live in countries that grow feed for animals, and the animals that get that grain are fed to western countries. Especially Australia and the United States, the two largest consumers of meat. How humans can be so selfish as to allow starvation when it could be solved by reducing meat consumption is beyond me, but meat just isn’t something those living in rich western countries are going to give up easily.

Now you’re probably wondering what the point of being vegan is when the problems with this planet are so huge. Can one person really make any difference? The short answer to that is yes, yes one person can and does make a difference. As a vegan you would lower your waste and carbon footprint significantly, while also saving lives. A vegan produces fifty percent less CO2 and uses 1/11 oil, 1/13 water, and 1/18 land in comparison to an omnivore for food. That means that every day a vegan saves 45 pounds of grain, 30 sq. ft. of forested land, 1,100 gallons of water, 20 lbs. of CO2 equivalent, and the life of one animal who otherwise would have been cruelly murdered. If going vegan is too far a stretch to switch too, vegetarians also help the environment. The amount of land need to feed a vegan for a year is 1/16 acre, and a vegetarian needs three times as much land as a vegan. A person who eats non-human animals needs eighteen times the amount of land that a vegan needs. The less land used for animal agriculture the more will be left for more beneficial types of agriculture, for example **1.5 acres can produce 37,000 pounds of plant-based food. 1.5 acres can produce 375 pounds of meat. Any area of land can produce fifteen times more protein than that same area with animals.**

**So, being vegan really does make a difference for the environment, but what about the animals? The most important and crucial reason for one to go vegan is for the animals, not for yourself. There is no ethical way to farm animals, the labels of free range and grass fed have little meaning. The conditions most farm animals are kept in are horrific and unsanitary. The practices that are common and considered normal on all factory farms are cruel and disturbing punishments for beings who did nothing but be born as what they are.** “A man can live and be healthy without killing animals for food; therefore, if he eats meat, he participates in taking animal life merely for the sake of his appetite. And to act so is immoral.” –Leo Tolstoy

**I’ll start with the poultry industry, eggs and meat. Often people think that the egg industry can’t be inhumane because hen’s naturally lay eggs. Sadly the image of hens running around outside and laying eggs in nest boxes is far from the truth, a paradise the hens now couldn’t even imagine. Leghorn chickens are the most common breed for factory farms, while “free-range” farms use Red Sex-Link, both of which produce an unnatural amount of eggs and have weak immune systems. At an egg producing factory farm the chick’s lives start by being sorted and separated by gender at just a day old, the males are immediately taken and murdered in a variety of disturbing and painful ways. The most common ways to discard of these baby male chicks, around 250 million per year in the U.S., is by grounding them alive in a machine similar to a woodchopper, boiling them alive, leaving them in trash bags to suffocate, or burying them alive in the ground. Really makes you see those cute little chicks on Easter cards differently, after you’ve seen them flung down a shoot and ground up.**

**The female chick’s fate isn’t any better, as chicks they are de-beaked, they have a fair amount of their beak chopped off, with no anesthetic. Then they are taken and put into cages so small that they can’t spread their wings where they will spend the rest of their short lives. The cages have wire bottoms and often hens become ill and are left in the cage after they die. The buildings are dark and have no windows, these hens will never see the sun or step foot on grass or dirt. In order to keep egg production as high as possible the hens are forced to have continuous egg laying cycles, by starving them until their feathers fall out and then feeding them which starts a new cycle. Then they are taken to slaughter once they are “spent”, at just a fraction of how long hens naturally live. They are killed after one year while naturally chickens can live to twenty years. They are packed into hot and cramped trucks with no water and food and driven to a slaughterhouse. If they survive the trip they begin the disgusting process of slaughter, they are strung upside down and attached to a conveyor belt by their feet and then their throats are slit by rotating blade as the conveyor belt moves along. Sometimes they are still alive when they are boiled after the blades.**

**Meat birds, Cornish Rock chickens, are transported to the warehouse where they will spend the short five weeks of their lives. They are crammed up to 20,000 birds in one warehouse with no natural light. These birds grow so unnaturally fast that they often can hardly walk by the time they are sent to be killed. The building they live in isn’t cleaned the entire time they are there, causing poor air conditions and sickness. Then like laying hens they are stuffed into trucks and sent to slaughter with no food or water. Chickens are intelligent beings that suffer and feel emotion just like any other animal. They each have a unique and interesting personality and when allowed to live in their natural environment. They form a complicated pecking order and form lasting bonds with each other and sometimes their human caretaker. Soon after hatching chickens have the same intelligence and skills of a four year old human. They can keep track of numbers up till 5 almost immediately after hatching, show empathy early on in life, have self-control, have an understanding of basic physics, and can understand that an object out of site still exists as soon as they hatch (this takes human babies an entire year to learn. Since a chick is more intelligent than a human baby, would it be acceptable to treat a four year old like a hen? Of course not. Putting all that information aside, even if chickens weren’t as intelligent as they are there is still no reason that the way they are treated is acceptable. Nothing deserves the torture that these animals go through, factory farms are a hell on earth. Hens that are rescued from these farms sometimes never recover completely and remain depressed and anti-social. From my own experience with my chickens the research showing their intelligence was no surprise, I have yet to meet a hen who isn’t unique and different from the others in some way.**

**The production of turkeys is similar to that of meat chickens, up to 10,000 of them are crammed into a building that is keep bright twenty four seven to encourage them not to sleep, just eat. These turkeys grow unnaturally quickly and have many problems with their legs and health in general. They are de-beaked and sometimes also have a portion of their toes removed as well. Turkeys are transported and slaughtered like chickens, the Humane Methods of Slaughter Act (I know, ironic. Humane slaughter?) does not apply to any poultry because the USDA has decided that birds are in fact not animals. I’m unsure what the USDA has decided birds are in that case, saying a turkey is a plant seems a bit off. Especially since turkeys are very social, curious, and playful contrary to the stereotype that they are stupid. Turkeys can recognize each other by their voices and have at least twenty unique vocalizations. They will play with nearly anything you give them, they’ll kick and toss around a ball or in the case of my turkeys, play catch with chipmunks (the chipmunks survived intact). One of my turkey hens enjoyed sitting in my lap and being pet, while the other hen was very adventurous and couldn’t be kept still for long. Most see turkeys as little more than a holiday meal, if people could for once look at their food from its perspective one day maybe they’ll see an animal not as a piece of flesh, but rather as a loving, loyal, and intelligent companion.**

**The dairy industry is another cruel form of factory farming. Dairy cows start their short lives in a traumatizing manner, the calves are taken away from their mothers almost immediately after birth. This separation is a terrible experience for both the calf and the mother, mother cows scream and cry out while their calf is literally torn from their body and shoved into a wheelbarrow or truck. The male calves are taken away and chained by the neck in a small crate to become veal. They live in these crates where they can’t turn around or move for 18 to 20 weeks before being slaughtered. The diet veal calves are fed is deficient in iron and fiber so that the calves have anemia, giving their flesh the pale color that people enjoy. No bedding is placed in the crates that have slated bottoms because the calves might eat it and gain iron and fiber, making their flesh too colored. Cows are very social animals and this confinement causes the calves to show many signs of chronic stress such as head tossing and chewing air.**

**The female calves suffer the same fate as their mothers, they are made to have a calf every year and produce 100 pounds of milk every day. They spend most of their time confined by being tied by their neck or kept in crates, or attached to a milking machine. The manure is sometimes so thick at these farms that the cows have to wade through liquid manure that covers at least a foot of their leg. Having a calf every year is destructive to the body of the cows, they lactate for seven months out of their nine month pregnancies. The dairy industry produces many downed cows, cows that become so weak and ill they can’t walk or stand and are often pushed by bulldozers to be transported for slaughter. Mastitis, infection of the udder/nipples, and calcium deficiency are also common. After becoming “spent” after at most five years out of their natural twenty year lifespan, they are sent to slaughter in crowded trucks with no food or water. There they have a bolt fired into their head, but the line moves so quickly that often the cows are still conscious when they are strung upside down by their feet and have their throats slit. Some cows have been seen being dismembered while still alive and kicking.**

**Cows, like most animals, are intelligent and form very strong bonds especially between mother and calf. A cow often cries and screams for days after having her baby taken away, and the baby cries until his throat is sore. Cows also have a social order, a cow can recognize 100 different cows in her herd. Cows also all have unique personalities, some are more intelligent than others, some are social, and some are introverted. They are very playful and friendly animals when in natural conditions, and show their emotions through their tails like dogs.**

**As you can probably tell by now, all the other animals that people consume the flesh of also face similar horrific lives at factory farms. Even “free-range” and “humane” farms are a myth, free-range birds never set foot outside and all animals face excruciating methods of slaughter. No animal wants to die, and every animal fights or its life before being unnecessarily murdered. There are countless stories of cows, pigs, and chickens escaping or attempting to escape their cruel fate. One cow even leapt from the slaughterhouse truck and swam across a large river, while pregnant, in order to survive. Stories like this are not uncommon as any being forced to live how we force “food” animals to live would fight to escape. Even knowing all this many people still find ways to excuse their consumption of meat, and it’s about time to debunk those myths about veganism.**

**One common myth is that people need meat to live, and that dairy products like milk are healthy. Interestingly enough meat actually kills, unlike a vegan diet, due to the huge increase in chances of having heart disease which also happens to be one of the most common cause of death in rich countries that consume too much meat. The human body wasn’t made to consume cow’s milk, so it absorbs very little of the calcium in it. Also lactose intolerance is very common, around 75 percent of people are intolerant of dairy. It has actually been proven that a vegan diet is healthier in every aspect in comparison to an omnivore’s diet, and increases lifespan. One study has shown that eating a diet high in animal protein and dairy is just as dangerous as smoking cigarettes. A person who has a high meat and dairy diet is four times more likely to have cancer, and a person who smokes is four times more likely than a non-smoker to have cancer. The study also showed that 74 percent of people who ate a large amount of meat and dairy had a significantly shorter lifespan than those who ate little or no animal protein and dairy.**

**Another common myth is that vegans have no way of getting protein, when in reality the average vegan consumes a healthy amount of protein. Protein is easy to get as a vegan; through beans, lentils, tofu, seitan, nuts, peas, and other soy products are some vegan options. All other nutrients are easily and more adequately met in a vegan diet, a vegan diet is full of fruits, vegetables, soy products, whole grains, nuts, and beans. Vitamin B12 is a vitamin people often say animal products are needed for, but there are actually vegan ways of getting it such as nutritional yeast (a delicious cheese like food) or vegan vitamins. Going vegan has other health benefits as well, disease prevention and physical benefits. Veganism can help prevent a long list of diseases; heart disease, high cholesterol, high blood pressure, type two diabetes, prostate cancer, colon cancer, breast cancer, macular degeneration, cataracts, arthritis, and osteoporosis. The physical benefits include more energy, healthy skin, longer lifespan, better breathe, less body order, healthier hair, stronger nails, less severe PMS, migraine relief, and reduced allergies.**

**Another misconception is that being vegan is expensive or unrealistic for most people. This stems from the idea that in order to be vegan you must buy large amounts of fake meat (usually not vegan anyways), cheese, ice-cream, and really any other dairy product. And while it is true that is you want these products and can afford them that’s great, but most only get them as a treat not an everyday food. But if you do truly need something to satisfy your craving for animal products (dairy is addictive thanks to casein) there is almost certainly a vegan option out there. There are many great articles on how to be vegan on food stamps, for five dollars a day, or just on a budget. Instead of replacing meat with factory made fake meat, use beans as a source of protein. There is a huge variety of beans to choose from to add variety, pinto beans for example are high in amino acids. The best place to get fat from is nuts, a serving or two of this is a way to get healthy fat unlike the saturated fat in meat. Even fruits and vegetables can be bought at a good price, going vegan doesn’t mean going organic even though going organic as well is good. I enjoy getting my vegetables from Walmart, which also has other cheap vegan options like Uncle Ben’s rice packets. And if you think vegan snacks are expensive, you’ll be happy to know that Oreos, Pop-Tarts with no frosting, and many flavors of Lay’s chips are vegan.**

**Many also think that going vegan is expensive because vegan fast food can be difficult to find, but is fast food really what you want to be putting in your body? And don’t worry, there is vegan fast food if you need it on a road trip or for any other reason. Taco Bell has several vegan options of different burrito’s and burrito bowls. Papa John’s pizza serves completely vegan pizza with no cheese, and breadsticks with a garlic dipping sauce that is also vegan. Top their pizza with some TVP for protein and nutritional yeast for a yummy cheese like taste. Subway has many vegan options as well. The list of places to get vegan fast food is a long one, but a simple internet search will show you every option. And if you have children there are cookbooks available such as PlantPure Nation that have great vegan ideas that kids will love. It is also easy to find guides on what to pack for children’s lunches and meals good for the whole family. Vegan mac n’ cheese is fairly simple to make, and tastes wonderful.**

**I have also heard that due to humans “canines” we were meant to eat meat. This makes little sense seeming how humans are healthier on a plant based diet, but if humans want to feel ferocious due to feeling a slight point on their teeth it’s hard not to let them. In fact, humans are biologically herbivores and in the past, unlike what the meat industry would like you to think, humans had a diet similar to apes of things we could pick with our hands such as berries and other fruits and plants. Our teeth that are called canines have essentially no resemblance to the canines of carnivores at all, and like herbivores humans have very long intestines. Carnivores have short intestines so they can process rotting meat quickly. Another thing that all carnivores have that we lack is sharp claws (or teeth), instead we have hands that are perfectly made to pick fruits and vegetables. And although some hunters may pretend to have a thirst for blood, unlike carnivores humans don’t have any want or enjoyment in chasing down animals with their own hands and feet. And humans also prefer not to gorge into the flesh of a still breathing cow or deer, in fact we can’t even tear through their hide with our teeth like a carnivore.** “You put a baby in a crib with an apple and a rabbit. If it eats the rabbit and plays with the apple, I'll buy you a new car.” –Harvey Diamond. I’ll believe that humans are carnivores the day I watch a human run through a field and rip out the throat of his next beef dinner, before ravenously tearing into its flesh and shoving its meat dripping in blood down his throat. Until then the biological and logical evidence is more than enough to show me that eating meat has never been, and never will be, natural for our species which has the audacity to call itself the height of creation.

**That covers all the myths that I am aware of, if there are more I will gladly help explain the truth. In conclusion, the amount that animal agriculture is talked about needs to be changed. Al Gore (far from a good example of a person who cares about the environment) failed to mention the leading cause of global warming even once. This may be because he is scared of the industry, there are many examples of the meat industry suing individuals for millions just for saying the truth of what happens at their farms. Or maybe it’s because Al Gore owns cattle himself, and probably consumes more expensive steak than any person could possibly need. Most people that live in a mansion with several pools and many cars aren’t the best at helping the environment, their private jet is just too tempting to stop using.**

**On another note I found it strange that animal agriculture was almost never brought up in this class, you would think people would want to talk about the leading cause of the destruction of the environment. But animal agriculture hits a nerve with meat-eaters, and they will become emotional very quickly if someone attempts to point out the many flaws in their lifestyle. Instead of being able to talk about it they often take it as a personal insult to themselves, and then become so offended their ability to think logically is thrown out the window with cries of “Bacon!” and “Plants have feelings too!”. Unless they happen to be a part of PETA (people for the ethical treatment of broccoli) I’m sure they can take the time to see the facts that plants don’t have a nervous system or brain, and therefore don’t feel pain. If they are super determined to make the argument that plants are people too (yes this has happened to me while attempting to talk to a carnist) then it is always good to kindly explain that eating animals results in the deaths of many more innocent plants then just eating plants does. So if not for the environment or the animals, go vegan so plants aren’t sad.**

**More seriously, can anyone truly call themselves human when they contribute to this industry? Is the torture and horrors those innocent beings go through not important? Or are humans just inherently evil? I highly recommend watching Earthlings for anyone who wants to see how they get the body parts they eat. When people go to a store do they see food or do they see murder? I see murder everywhere I look in this disturbing society where it is the norm to torture and kill for every meal. After having close relationships with most of the animals that most people see as “bacon” or “nuggets” I’ve learned the hard way that they aren’t valued for their individuality or personality, but instead for the flesh that covers their bones and their very own bodies that they value so dearly. Eating meat isn’t a personal choice, not when it doesn’t have the consent of the being that is murdered. If humans actually have any empathy, souls, or kindness in us we will not continue to eat other living, breathing, suffering beings. Until then humans will remain as we are, monsters. Make the choice to not be a monster, and for once you can look into the eyes of an animal in peace. I was a meat-eater till I was six years old, then I looked into the big dark eyes of an Angus cow waiting for slaughter at a fair and knew it was so deeply wrong to hurt her. For once, instead of a hunk of flesh I looked up and saw someone with a heart and soul who wanted to live just as much as me. Have you ever though there were monsters under your bed? Then you realized the monsters are all in your head. All monsters are human, and all humans are monsters.**

**Veganism: The Environment Facts**

**Greenhouse Gases:**

1. Animal agriculture is responsible for 18 percent of greenhouse gas emissions, more than the combined exhaust from all transportation.   [i][*Fao.org. Spotlight: Livestock impacts on the environment.*](http://www.fao.org/docrep/010/a0701e/a0701e00.HTM)
2. **Livestock and their byproducts account for at least 32,000 million tons of carbon dioxide (CO2) per year, or 51% of all worldwide greenhouse gas emissions.** Goodland, R Anhang, J. “Livestock and Climate Change: What if the key actors in climate change were pigs, chickens and cows?”
3. **Methane is 25-100 times more destructive than CO2 on a 20 year time frame.** [“Improved Attribution of Climate Forcing to Emissions.” Science Magazine.](http://www.sciencemag.org/content/326/5953/716.figures-only)
4. **Methane has a global warming potential 86 times that of CO2 on a 20 year time frame.** [“Improved Attribution of Climate Forcing to Emissions.” Science Magazine.](http://www.sciencemag.org/content/326/5953/716.figures-only)
5. **Livestock is responsible for 65% of all human-related emissions of nitrous oxide – a greenhouse gas with 296 times the global warming potential of carbon dioxide, and which stays in the atmosphere for 150 years.** [“Livestock’s Long Shadow: Environmental Issues and Options.” Food and Agriculture Organization of the United Nations. 2006.](http://www.fao.org/docrep/010/a0701e/a0701e00.htm)
6. **Cows produce 150 billion gallons of methane per day.** [Ross, Philip. “Cow farts have ‘larger greenhouse gas impact’ than previously thought; methane pushes climate change.” International Business Times. 2013.](http://www.ibtimes.com/cow-farts-have-larger-greenhouse-gas-impact-previously-thought-methane-pushes-climate-change-1487502)
7. **Even without fossil fuels, we will exceed our 565 gigatonnes CO2e limit by 2030, all from raising animals.** Oppenlander, Richard A. Food Choice and Sustainability: Why Buying Local, Eating Less Meat, and Taking Baby Steps Won’t Work. . Minneapolis, MN : Langdon Street, 2013. Print.

Water:

1. **Animal agriculture water consumption ranges from 34-76 trillion gallons annually.   [ii]  [xv]**[Pimentel, David, et al. “Water Resources: Agricultural And Environmental Issues.” BioScience54, no. 10 (2004): 909-18.](http://bioscience.oxfordjournals.org/content/54/10/909.full)[Barber, N.L., “Summary of estimated water use in the United States in 2005: U.S. Geological Survey Fact Sheet 2009–3098.”](http://pubs.usgs.gov/fs/2009/3098/)
2. **Growing feed crops for livestock consumes 56% of water in the US.   [xv]** [Jacobson, Michael F. “More and Cleaner Water.” In Six Arguments for a Greener Diet: How a More Plant-based Diet Could save Your Health and the Environment. Washington, DC: Center for Science in the Public Interest, 2006.](http://www.cspinet.org/EatingGreen/pdf/arguments4.pdf)
3. **2,500 -8,000 gallons of water are needed to produce 1 pound of beef.** [Oxford Journals. "Water Resources: Agricultural and Environmental Issues"](http://bioscience.oxfordjournals.org/content/54/10/909.full) [The World's Water. "Water Content of Things"](http://www2.worldwater.org/data20082009/Table19.pdf)
4. **477 gallons of water are required to produce 1lb. of eggs; almost 900 gallons of water are needed for 1lb. of cheese.** [“Meateater’s Guide to Climate Change & Health.” Environmental Working Group.](http://www.ewg.org/meateatersguide/interactive-graphic/water/)
5. **1,000 gallons of water are required to produce 1 gallon of milk.** [Water Footprint Network, "Product Water Footprints".](http://waterfootprint.org/media/downloads/Hoekstra-2008-WaterfootprintFood.pdf)
6. **5% of water consumed in the US is by private homes. 55% of water consumed in the US is for animal agriculture.   [xv]** [Jacobson, Michael F. “More and Cleaner Water.” In Six Arguments for a Greener Diet: How a More Plant-based Diet Could save Your Health and the Environment. Washington, DC: Center for Science in the Public Interest, 2006.](http://www.cspinet.org/EatingGreen/pdf/arguments4.pdf)
7. **Animal Agriculture is responsible for 20%-33% of all fresh water consumption in the world today.**[“Freshwater Abuse and Loss: Where Is It All Going?” Forks Over Knives.](http://www.forksoverknives.com/freshwater-abuse-and-loss-where-is-it-all-go)

Land:

1. **Livestock or livestock feed occupies 1/3 of the earth’s ice-free land.** [FAO. "Livestock a major threat to environment"](http://www.fao.org/newsroom/en/News/2006/1000448/index.html)
2. **Livestock operations on land have created more than 500 nitrogen flooded deadzones around the world in our oceans.** [PRESS RELEASE, LOUISIANA UNIVERSITIES MARINE CONSORTIUM August 4, 2014](http://www.gulfhypoxia.net/research/shelfwide%20cruises/2014/hypoxia_press_release_2014.pdf)
3. **Nearly half of the contiguous US is devoted to animal agriculture.**[U.S. extrapolated data from EPA, Land Uses.](http://www.cowspiracy.com/epa.gov/agriculture%20andhttp:/www.ers.usda.gov/data-products/major-land-uses.aspx#25988)
4. **1/3 of the planet is desertified, with livestock as the leading driver.   [xviii]** [“UN launches international year of deserts and desertification.” UN news centre, 2006.](http://www.un.org/apps/news/story.asp?NewsID=17076#.VAodM17E8ds)

Waste:

1. **Every minute, 7 million pounds of excrement are produced by animals raised for food in the US.** [“What’s the Problem?” United States Environmental Protection Agency.](http://www.epa.gov/region9/animalwaste/problem.html)
2. **A farm with 2,500 dairy cows produces the same amount of waste as a city of 411,000 people. [vi]** [“Risk Assessment Evaluation for Concentrated Animal Feeding Operations.” U.S. Environmental Protection Agency – Office of Research and Development. 2004.](http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=901V0100.txt)
3. **130 times more animal waste than human waste is produced in the US** **– 1.4 billion tons from the meat industry annually. 5 tons of animal waste is produced per person in the US.[xii]**[Animal agriculture: waste management practices. United States General Accounting Office.](http://www.gao.gov/archive/1999/rc99205.pdf)
4. **In the U.S. livestock produce 116,000 lbs of waste per second:**

* Dairy Cows, [120lbs of waste per day](http://www.epa.gov/region9/animalwaste/problem.html) x 9 million [cows](https://www.aspca.org/fight-cruelty/farm-animal-cruelty/cows-factory-farms).
* Cattle, [63lbs of waste per day](http://www.uri.edu/ce/healthylandscapes/livestock/how_manure_overall.htm), x 90 million [cattle](http://www.nass.usda.gov/Newsroom/2015/01_30_2015.asp).
* Pigs, [14lbs. of waste per day](http://www.uri.edu/ce/healthylandscapes/livestock/how_manure_overall.htm), x 67 million [pigs](http://copork.org/education/pork-facts/).
* Sheep/Goats. [5lbs of waste per day,](http://www.uri.edu/ce/healthylandscapes/livestock/how_manure_overall.htm)x 9 million [sheep/goats](http://usda.mannlib.cornell.edu/usda/current/SheeGoat/SheeGoat-01-30-2015.pdf).
* Poultry, [.25-1lbs of waste per day](http://ohioline.osu.edu/b804/804_3.html), x 9 billion [birds](http://usda.mannlib.cornell.edu/usda/current/PoulProdVa/PoulProdVa-04-29-2014.pdf).

Oceans:

1. **3/4 of the world’s fisheries are exploited or depleted.**[“Overfishing: A Threat to Marine Biodiversity.” UN News Center.](http://www.un.org/events/tenstories/06/story.asp?storyid=800)
2. **90-100 million tons of fish are pulled from our oceans each year.   [vii]** [“World Review of Fisheries and Aquaculture.” UNITED NATIONS FOOD AND AGRICULTURE ORGANIZATION (FAO). 2012. (pg 6, 20)](http://www.fao.org/docrep/016/i2727e/i2727e01.pdf)
3. **For every 1 pound of fish caught, up to 5 pounds of unintended marine species are caught and discarded as by-kill.   [viii]** [“Discards and Bycatch in Shrimp Trawl Fisheries.” UNITED NATIONS FOOD AND AGRICULTURE ORGANIZATION (FAO).](http://www.fao.org/docrep/W6602E/w6602E09.htm)
4. **As many as 40% (63 billion pounds) of fish caught globally every year are discarded.** [Wasted Catch: Unsolved Problems in U.S. Fisheries](http://oceana.org/reports/wasted-catch-unsolved-problems-us-fisheries)
5. **Scientists estimate as many as 650,000 whales, dolphins and seals are killed every year by fishing vessels.** [Wasted Catch: Unsolved Problems in U.S. Fisheries](http://usa.oceana.org/reports/wasted-catch-unsolved-problems-us-fisheries)
6. **40-50 million sharks killed in fishing lines and nets.** [Shark Savers, "Shark Fin Trade Myths and Truths: BYCATCH”. Bonfil, R. 2000.](http://www.sharksavers.org/files/8613/3185/9956/Shark_Bycatch_FACT_SHEET_Shark_Savers.pdf)

Rainforest:

1. **Animal agriculture is responsible for up to 91% of Amazon destruction.** [World Bank. "Causes of Deforestation of theBrazilian Amazon”](http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2004/02/02/000090341_20040202130625/Rendered/PDF/277150PAPER0wbwp0no1022.pdf)
2. **Up to137 plant, animal and insect species are lost every day due to rainforest destruction.**[“Rainforest statistics and facts.” Save the amazon.](http://www.savetheamazon.org/rainforeststats.htm)
3. **1,100 Land activists have been killed in Brazil in the past 20 years.   [x]**[Batty, David. “Brazilian faces retrial over murder of environmental activist nun in Amazon.” The Guardian. 2009.](http://www.theguardian.com/world/2009/apr/08/brazilian-murder-dorothy-stang)

Wildlife:

1. **USDA predator killing of wild animals to protect livestock.** <http://www.predatordefense.org/USDA.htm>
2. **Washington state killed the wedge pack of wolves.** <http://www.thewildlifenews.com/2012/09/22/wedge-wolf-pack-will-be-killed-because-of-increasing-beef-consumption/>
3. **Ten thousand years ago, 99% of biomass (i.e. zoomass) was wild animals. Today, humans and the animals that we raise as food make up 98% of the zoomass.** [Vaclav Smil, Harvesting the Biosphere: The Human Impact, Population and Development Review37(4): 613-36, December 2011](http://postgrowth.org/the-bomb-is-still-ticking/)

Humanity:

1. **80% of antibiotic sold in the US are for livestock.** FDA 2009, "Antimicrobials Sold or Distributed for Use in Food-Producing Animals".
2. **We are currently growing enough food to feed 10 billion people.** [Common Dreams, "We Already Grow Enough Food for 10 Billion People… and Still Can’t End Hunger".](http://www.commondreams.org/views/2012/05/08/we-already-grow-enough-food-10-billion-people-and-still-cant-end-hunger)
3. **Worldwide, at least 50% of grain is fed to livestock.**[FAO, "Livestock - a driving force for food security and sustainable development".](http://www.fao.org/docrep/v8180t/v8180t07.htm)
4. **82% of starving children live in countries where food is fed to animals, and the animals are eaten by western countries.**<http://comfortablyunaware.com/blog/the-world-hunger-food-choice-connection-a-summary/>

**Benefits of veganism**

**15x more protein on any given area of land with plants, rather than animals.**[“Soy Benefits”. National Soybean Research Laboratory. Retrieved 2010-04-18.](http://nsrl.illinois.edu/content/benefits-soy)

1. **Land required to feed 1 person for 1 year:**

* Vegan: 1/6th acre
* Vegetarian: 3x as much as a vegan
* Meat Eater: 18x as much as a vegan

Robbins, John. Diet for a New America, StillPoint Publishing, 1987, p. 352 [“Our food our future.” Earthsave.](http://www.earthsave.org/pdf/ofof2006.pdf)

1. **1.5 acres can produce 37,000 pounds of plant-based food. 1.5 acres can produce 375 pounds of meat.** [Oppenlander, Richard A. Less Meat, and Taking Baby Steps Won’t Work. Minneapolis, MN : Langdon Street, 2013. Print.](http://www.johnnyseeds.com/assets/information/vegetablecharts.pdf)
2. **A person who follows a vegan diet produces the equivalent of 50% less carbon dioxide, uses 1/11th oil, 1/13th water, and 1/18th land compared to a meat-lover for their food.   [xx]** [CO2:  "The Carbon Footprint of 5 Diets Compared." Shrink The Footprint.](http://shrinkthatfootprint.com/food-carbon-footprint-diet)
3. **Each day, a person who eats a vegan diet saves 1,100 gallons of water, 45 pounds of grain, 30 sq ft of forested land, 20 lbs CO2 equivalent, and one animal’s life.   [xiv]** [“Water Footprint Assessment.” University of Twente, the Netherlands.](http://www.waterfootprint.org/)

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