# Cowspiracy, the sustainability secret - Kip Andersen and Keegan Kuhn, 2014

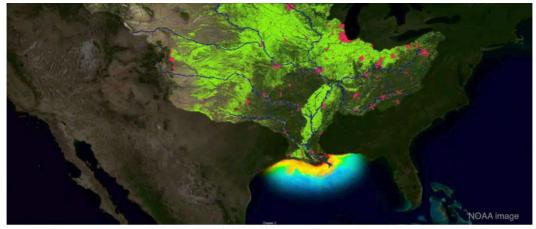
abstract by Marc Resch http://mresch.free.fr

Synopsis: we must stop eating animals, quickly.

# **MEAT PRODUCTION: Environmental impacts**

Animal husbandry causes more greenhouse gases (GHGs) emissions than all means of transportation combined. World Watch Report 2009: "We believe that the life cycle and supply chain of domesticated animals raised for food have been vastly underestimated as a source of GHGs". Indeed, livestock is responsible for 51% of GHGs emission (electricity 15%, transportation 13%, industry 12%, trading 5%, household 5%), consisting mainly of methane, a gas 25 to 100 times more destructive than the CO<sub>2</sub> emitted by cars.

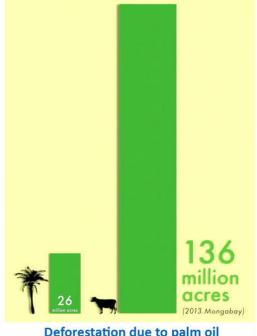
Each day, livestock releases 150 billion gallons of methane, and 130 times more waste than the entire human population, virtually all without any waste treatment. Every second, 116,000 pounds of waste are produced in USA by livestock, enough to cover San Francisco, New York, Tokyo, Paris, New Delhi, Berlin, Hong Kong, London, Rio de Janeiro, the state of Delaware, Bali, Costa Rica and Denmark. There is more than 500 "dead zones" in the world, flooded with nitrates, on land and in the ocean.



Dead zones affected by hypoxia and eutrophication

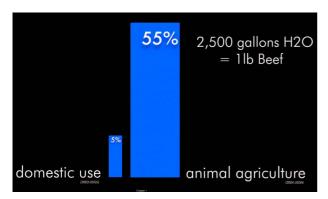
Animal agriculture is responsible for 91% of Amazon rainforest destruction. Palm oil destroyed 26 million acres of rain forest, but livestock production is responsible for 136 million acres of rain forest lost today. Livestock production is a leading cause of loss of species, oceanic "dead zones", and habitat destruction. Rain forest is cleared at a paste of one acre (one football field) per second, to grow GM soy used to feed animals. Because of this destruction, one hundred plant, animal and insect species are lost every day. Amazon rainforest could totally disappear within the next 10 years.

The United Nations reported that 3/4 of fisheries in the world are over-exploited, completely exploited or severely depleted because of overfishing. Oceans are depleted at 75%, we don't "live on the interest without touching the principal" any more, we are extremely in debt. We not only slaughter fish species, but we also destroy their habitat. Scientists forecast that, if nothing happens, we will see fishless oceans by the year of 2048.



Deforestation due to palm oil and to livestock

#### **MEAT PRODUCTION: Resources consumption**



Livestock production uses 1/3 of fresh water, occupies 45% of Earth surface, and consumes almost 50% of grains and legumes produced in the world. In USA, animal feed is 70% to 90% GM soy beans.

Livestock accounts for 55% of water consumption in USA, and household only 5%. Hydraulic fracturing uses 100 billion gallons of water per year to extract oil and gas from the ground. **Each year, livestock consumes 34,000 billion gallons**. And moreover,

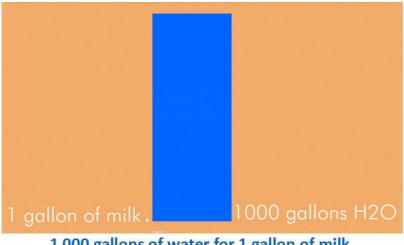
methane emissions of these two industries are nearly equal.

It takes 2,500 gallons of water to produce 1 pound of beef meat. A one quarter pound hamburger needs 660 gallons of water to produce, the amount of water used by one person for showering for two entire months.



660 gallons of water for one hamburger (on the right)

One gallon of milk requires 1,000 gallons of water to produce. One dairy cow eats between 140 to 150 pounds of feed each day, and drinks 30 to 40 gallons of water.



1 000 gallons of water for 1 gallon of milk (little white spot on the left)

To satisfy the demand of 90 million tons of fish, massive fishnets are used and trap everything that is in their way. For every pound of fish caught, there is up to 5 pound of untargeted species trapped, like whales, dolphins, sea turtles and sharks, known as "by-kill". Each year, 40 to 50 million sharks are killed by these massive fishnets as "by-kill". Then their fins might be cut off or not, but they are initially killed as "by-kill" in these fishing nets. Stop eating shark thin soup is really not sufficient to protect sharks. If we really are concerned about sharks, we should ban fishing.

### A SUSTAINABLE MODEL FOR MEAT PRODUCTION?



A sustainable model for meat production might be natural grazing in the field as in days before, with cattle grazing natural grass in the fields. A grazing field of 4,500 acres produces 80,000 pounds of meat. The average American eats 209 pounds of meat per year, so all this grass-fed beef will feed only 382 people, this makes 11,7 acres per person. There is 314 million Americans: it would require 3.7 billion acres of grazing field to produce enough grass-fed beef for all Americans, and there is only 1.9 billion acres in the USA. Currently, almost half of the USA are dedicated to animal agriculture. Feeding all these cattle with grass would require the surface of all of the US, Mexico, half of Canada and a good part of South America, all turned into grazing land, to satisfy US meat demand alone.

A beef fed with grass takes 23 months to grow to the size it will be slaughtered. When it is fed with cereals, it takes only 15 months. Grass-fed beef takes 8 months more of water consumption, feed, land use, and waste. In regard of carbon footprint, it makes a huge difference. Thus it appears that grass-fed beef is even less sustainable than industrial grain-fed beef.

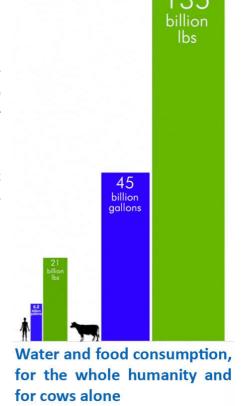
Chinese wish to eat as much meat as Americans, but the whole surface of the Earth would not be sufficient to produce all the feed needed to feed a such amount of animals. Each American eats on average 9 ounces of meat per day, and a sustainable consumption of meat, cheese, milk and egg would be about 2 ounces per week in total. That's what one could produce in the backyard. Might individual backyard production be a sustainable solution? Producing 1.5 pound of duck meat requires 110 pounds of feed, it makes a ratio of 1 to 100, this is really not sustainable.

Conclusion is simple: there is no sustainable way to produce enough meat for the world demand. And it is the same for fish.

# AND WHAT ABOUT OVERPOPULATION?

Every day, 216,000 new babies are born on Earth, and we need every day 34,000 new acres of farmable land. We are 7 billion people, and we raise 70 billion land animals. All human population drinks 5.2 billion gallons of water and eats 21 billion pounds of food every day. The 1.5 billion cows alone consume 45 billion gallons and 135 billion pounds of feed: enough to feed 45 billion and give water to 60 billion supplementary humans. The point isn't really about overpopulation, the real problem is animal products consumption.

We produce enough food to feed between 12 and 15 billion people. We are only 7 billion people, among which 1 billion is starving. And 82% of chilren dying of hunger live in meat producing countries, where food is given to animals that are eaten by wealthy people and people of rich countries.



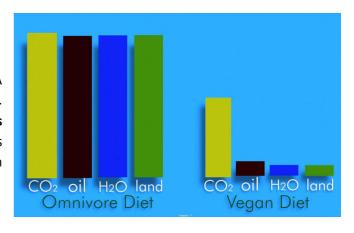
#### WHAT ARE FEDERAL INSISTUTIONS AND NGOs DOING?

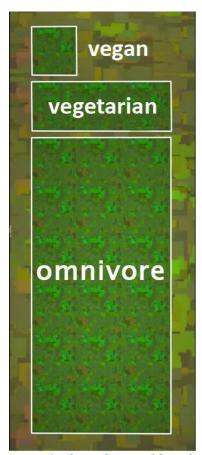
However, federal institutions and NGOs who are supposed to worry about the environment and save the world don't say a word about that: the Pacific Institute, the Department of Water Resources, Greenpeace, Surfrider Foundation, Oceana, Amazon Watch, Rainforest Action Network, The Climate Reality Project, the Sierra Club, the Natural Resources Defense Council... They care about plastic bags, waste, wood exploitation, palm oil, coal industries, oil and gas pipelines, tar sand exploitation, mining industries, dams,... All these problems are real subjects of worry, but they are minor subjects in comparison of livestock production. NGOs like Greenpeace don't talk about livestock because they want to continue receiving donations... In Brazil, a lot of those pointing out agribusiness as a major cause of deforestation have been killed. More than 1,100 activists have been murdered in Brazil the last 20 years. That is a main reason why most people say nothing.

All serious discussions on ocean preservation should talk about the livestock production problem, but the Surfrider Foundation only talks about plastic bags and waste, and doesn't say a word on the livestock industry.

## **DIET CHANGE: What does it change?**

Feeding a vegan for one year requires 1/6th of an acre. A vegetarian eating milk and eggs needs 3 times more land. The average American who has a high meat, milk and eggs diet, needs 18 times more land. Compared to omnivorous diet, vegan diet produces 2 times less CO<sub>2</sub>, requires 1/11th of fossil fuels, 1/13th of water and 1/18th of farmable land.





Needed surface of land for three different diets

The average Californian uses about 1,500 gallons per day. Half of that is due to meat and dairy consumption. No water saving measures take into account livestock and meat and dairy consumption, that are eating up the biggest amount of water. Turn off the tab when we brush our teeth, take the bike rather than car as much as possible, sort waste, choose renewable electricity sources: all of this has only a tiny effect regarding meat consumption. And this will not change, because of the way government is setup, and because people would have to change their behavior.

If we add all water saving measures recommended by <u>saveourwater.com</u> to save domestic water, we save 47 gallons a day. Being vegan, each day we save: 1,100 gallons of water, 45 pounds of cereals, 30 square foot of rainforest, the equivalent of 20 pounds of CO<sub>2</sub>, and the life of one animal.

On any type of land, one produces on average 15 times more vegetable proteins than animal proteins. A 1.5 acre field can produce 37,000 pounds of vegetable but only 375 pounds of meat.

If all human population became vegan, if we stop killing all these cows and all these animals to eat them, we would not have to produce all this feed to feed them, we would not have to cut the rainforest to farm all these lands. Forest and wildlife could come back, oceans could recover and fishes could thrive, rivers would be clean again, air would be fresh again and we could recover our health.

Completely replacing energy production with renewable energy sources would take 20 years and cost at least 18,000 billion dollars. Stop eating animals could be done <u>today</u>, it wouldn't take 20 years, and it wouldn't cost 18,000 billion dollars: <u>it would be free</u>.

#### MAN HAS STOLEN THE EARTH TO FREE LINVING ANIMALS

We have stolen all the Earth from all free living animals, to use for ourselves and for all our cows, pigs, poultry, and farm fishes, and the oceans have been even more devastated. Growing needs of farm land for animal husbandry provoke wild horses capture, and the slaughter of wolfes, linx, coyotes, hyenas, and other predators.





The UN and other agencies declared that not only animal husbandry plays a major role in climate change, but that it is also the leading cause of resources consumption and environmental destruction, who plague the planet every day. Researchers agree on the fact that the primary cause of loss of species is due to overgrazing, livestock production and overfishing. We are in the middle of the largest mass instinction of species in 65 million years.

For Allan Savory, almost 1/3rd of the surface of the Earth is turning into desert, and a large part is due to livestock

production. But in order to solve the problem, he advises to eat more animals grown in a "sustainable" way", just as Oceana advises to eat more "sustainable" fish to protect fishes... And then the best way to protect pandas, is to eat pandas?

#### **MEAT COSTS MORE AND EVERYBODY PAYS**

Externalized costs of meat production are not taken into account by producers. They are imposed onto society: health impacts, environmental damages, federal subsidies, fisheries devastations, and incredible cruelty toward the animals. The total estimated cost is 414 billion dollars. If the meat and dairy industries were forced to internalize these costs, to pay for the damages they cause, the price of meat and milk would skyrocket: a \$5 box of eggs would be \$13, and a \$4 bigmac would be \$11. Regardless if you choose to be vegan, vegetarian, or meat eater, we all pay for the meat consumption of someone else. Everytime someone buys a \$4 bigmac somewhere, the whole society pays \$7.

# LET'S END THE MASSACRE

**Stop eating animals** and their products: no other change of behavior has a greater positive impact on the planet, and on every lives on this planet.

It appears that 75% of Americans consider themselves to be environmentalists. **To solve the** 



problem of the environment in the blink of an eye, it would be sufficient that these "environmentalists" practice what they preach, and the world will change.

Until we stop overgrazing and animal agriculture, we will not be able to save the ecosystem, and to have enough food for everyone on the planet. We will not stop climate change, we will not stop pollution and "dead zones" expansion, and we will not stop the slaughter of sharks, wolves, and of the other predators.

The only sustainable way of living with 7 billion people on the planet is a vegan diet. Stop eating others, eat for others.

We can change the world. We MUST change the world.

# www.cowspiracy.com

