

# HUFFPOST GREEN

## Thanksgiving 2011: Earth Calling... SOS

### Dr. Reese Halter

*Conservation biologist, broadcaster*

Posted: 11/21/11 06:38 PM ET

Recently I had a cup of coffee with a very intelligent law student. He, like millions of our youth, is concerned about our future. Students, I found, pull no punches when they ask questions -- and as **my students** know; my answers are never sugarcoated.

The law-student asked if I had five minutes with President Obama what would I identify as the top priority to save our world?

Here's my abridged response: "The most important issue that requires immediate attention is climate change -- for it has moved into a frightening phase: Climate disruption. It's altering our lives and threatening our food supply.

I've spent the last 30 years of my life working in forests, deserts, prairies, mountains and dabbling in the sea. Ecologists and conservation biologists observe patterns in nature. After three decades of observations, nature's patterns are revealing some staggering trends. Beneath are a few of those examples that I've observed and there are hundreds of others that my colleagues have meticulously documented, clearly showing that nature is perishing from an overheating, human-forced, climate change.

Mr. President, the economy is a wholly owned subsidiary of the environment: if the environment is too warm or toxic for life -- there is NO economy.

**Over one billion temperature sensors** undeniably proved that temperatures have risen between 1 and 2 degrees Celsius -- more than three times that of the IPCCs 0.64 degrees C predictions.

Each day on our planet we are spewing more than 82 million metric tons of greenhouse gases into the biosphere. **It is rising faster than ever before** as China and India race towards greater industrialization.

In the spring of 2011 the largest ever recorded hole in the Northern Hemisphere Arctic was detected -- an a priori. Rising temperatures in the Arctic caused bitterly cold temperature inversions to form and rising levels of sulfuric acid from burning coal fueled that massive hole. An intact ozone layer is the life-sustaining shield protecting Earth from cancer-causing ultraviolet radiation. Sperm, blue and fin whales from the Gulf of California are clearly revealing evidence of this hole because it's giving them skin cancer lesions.

As rising levels of CO2 are absorbed by our oceans -- which account for about 30 percent of Earth's natural CO2 processing -- they are becoming acidic (as CO2 is absorbed carbonic acid is created). The oceans are acidifying faster than any time over the past 60 million years. Moreover, as ocean currents warm, upwelling which carries essential nutrients are prevented, and 40 percent of Earth's oceanic phytoplankton -- the base of the entire marine food chain -- is missing.

And if this isn't disturbing enough Mr. President, more than 2 billion people require their daily protein intake from fished-out, unsustainably mismanaged oceans. Let me remind you that earlier this year starving people in Tunisia and Egypt overthrew their respective governments.

Across western United States the temperatures have risen more than 2 degrees Celsius (3.8 degrees Fahrenheit) over the past 40 years. In the illustrious history of conifers -- that spanning 300 million years -- we cannot find any evidence of the epic feeding frenzy that is currently underway across the entire western half of North America. Native bark beetles have killed billions of mature trees and this feeding frenzy is far from over.

Those trees, amongst other things, are the vanguard of our fresh water. That water is the lifeblood for 50 million people, intensive agriculture and our mighty economic industries.

The insatiable bark beetles are on a tear because cold temperatures -- nature's ecological check -- have been removed. And a fire suppression policy over the past century has inadvertently created an enormous food source. Most of the thrifty whitebark and limber high elevation pine ecosystems across western United States will not be able to recover. Those forests hold the winter snowfall and slowly release it in the springtime - recharging the water cycle for agriculture across the West.

Furthermore, those billions of dead trees, now in graveyards, are adding heat-trapping CO2 into the atmosphere -- instead of removing it as they evolved to do so. Warm temperatures have enabled the ravenous beetles to wreak havoc **further north into British Columbia** where half their commercial forests were consumed. Those dead trees are now beginning to release 250 million metric tons of CO2 -- the equivalent emissions of five years worth of all cars and light trucks in Canada or enough wood to build a city of 8 million homes.

The Ferrari of Earth's forests -- **the Amazon jungle is now breaking down regularly**; it's being destroyed by repeated droughts and vicious storms uprooting as many as a half a billion trees at a time. Those forests Mr. President contain the highest concentration of life forms on the planet, **a cornucopia of potential medicines for all known diseases**; and they make vast amounts of clouds, which reflect incoming radiation back to space, keeping Earth from over-heating. Instead, gigantic graveyards in the Amazon are now releasing 5 billion metric tons of heat-trapping CO2. (In 2009 the U.S. alone emitted 5.4 billion metric tons of CO2 from fossil fuel use). Moreover, those equatorial graveyards are not making clouds and in addition to **record amounts of missing sea** and land ice, Earth's natural cooling systems are shutting down.

Over the past four years **a quarter of a trillion honeybees have prematurely died**. Of the 100 crop species providing 90 percent of the world's food -- about 74 percent are pollinated by bees.

There are stunning examples all over the world demonstrating that rising temperatures are causing trees, shrubs and annual plants to flower in some cases a month earlier than bees are awakening. This is known as a **climate-driven match**. In concert with known lethal insecticides like **neonictinoids**, introduced parasites and diseases, air pollution and loss of habitat **our global food security is in peril**. If that weren't bad enough, **millions of pounds of unsafe Chinese honey are being laundered into America**, placing our health and food security at risk.

**Catastrophic weather events around the globe are irrefutably piling up**. Scientists from every country are lining up telling the general public that we are headed for **irreversible climate change if indecisive political action continues**.

Your 2008 campaign promised to lower greenhouse gases, providing leadership for America and the world; and promoting our best friend in

the 21st century: Innovation.

Australia, the largest coke-coal supplier, [has recently ratified a carbon-tax.](#)

Chief Seattle's sagacious words are timelier now than ever before: "Man did not weave the web of life, he's merely a strand in it. Whatever he does to the web, he does to himself."

[The eleventh hour has past](#); no more deferring climate decisions Mr. President - make the call for your children - Earth is calling... SOS, please respond and protect our planet."

*Earth Dr Reese Halter is an award-winning science communicator: voice for ecology and distinguished conservation biologist at California Lutheran University. His latest books are [The Incomparable Honeybee](#) and [The Insatiable Bark Beetle](#). [Contact Earth Dr Reese Halter](#)*

[http://www.huffingtonpost.com/dr-reese-halter/thanksgiving-2011-earth-c\\_b\\_1103958.html](http://www.huffingtonpost.com/dr-reese-halter/thanksgiving-2011-earth-c_b_1103958.html)

**Follow Dr. Reese Halter on Twitter:**  
[www.twitter.com/DrReeseHalter](http://www.twitter.com/DrReeseHalter)