

## It's Cold...so much for global warming

by Rick Weller, Founder of Organically Done Plant Products

Yep, we've gotten a lot of cold and snow this winter, more than 'normal'. Depending on where you live, this is the coldest winter in 20 years and the 10<sup>th</sup> coldest in the last century. This global warming thing must be just a bunch of people trying to scare us (why would anyone do this?).

Its amazing how many people have commented to me this winter that I am obviously wrong in my belief that the globe is getting unnaturally warmer - "*just look how cold its been all winter*".

So, the basic questions. Is the planet really getting warmer? Is this just a normal fluctuation like the planet has experienced throughout its history? Are the actions of humans impacting the climate?

**The Science.** Over 14,000 peer-reviewed papers have been published since 1991 on global climate change and its causes. Of those, 24 reject the claim that human causes are contributing to the change, the rest (>13,976) support the claim at least to some degree. To me, this is pretty overwhelming. Yet most of us, including the world's governments, seem to want to ignore it.

### ***So, is the planet really getting warmer?***

- The average global temperature has risen 1.4 degrees F over the last century
- Ocean temperatures have risen about 1.0 degree F over the last century and the rate has accelerated to about 0.2 degrees F per decade
- Sea levels have risen 4"-8" over the last century and the rate has accelerated to about 0.13" per year over the past 20 years
- Ice caps and glaciers are melting all over the globe at different rates. Arctic ice thickness has decreased 40% since the 1960's. Greenland ice pack is currently melting at a rate of 290 millions tons of ice each year. Glacier National Park had 150 glaciers in 1910 - it now has 30 and these are about 1/3 of the size.



***Is this just part of the normal global cycle?*** No doubt, our world has had warming and cooling cycles throughout its history. The trend we are currently witnessing is happening over decades – historical shifts happened over thousands of years. If we were following 'normal' cycles, scientists believe we would actually be in a cooling period.

***Are we humans to blame?*** This is really the pivotal question. If our society says 'no', we continue on our current path since there is nothing we can do about it. If the answer is 'yes', we might start making the hard decisions required. In the end, we each have to decide what we believe is true.

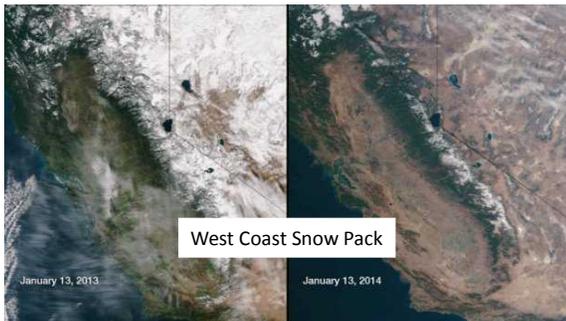
- The global community currently emits 40 billion tons of carbon into the atmosphere each year
- Atmospheric CO2 levels are 20% higher than they were in 1960 and the highest they have been in 15 million years
- Atmospheric methane (CH4) levels are double what they have been at any time in the past 650,000 years
- Atmospheric nitrous oxide (N2O) is 50% higher than at any time in the past 100,000 years

**The Costs.** The steps we would need to take to reverse this path of environmental destruction are mind-boggling and the economic and social impact huge. So instead, we do nothing. However, the cost of doing nothing is not cheap either...

- Obama pledges \$180M to help California farmers impacted by drought – primarily for crop insurance, Congress spent \$136B on disaster relief between 2011 and 2013 (\$400 per household per year), The Army Corps of Engineers spent \$7B on flood control (2011 – 2013)
- Currently in prolonged or record setting droughts: Northern Mexico, California/Western States, Northern China, South/Central Australia, Brazil, Argentina, East Africa
- Winemakers are starting to move out of the famous french wine growing regions to areas now more conducive to

growing grapes. Kansas farmers are planting okra and cotton (historically southern crops) because its becoming too hot for corn. Brazilian coffee plantations are moving to higher (cooler) ground.

- When ground water is not available, farmers tap in to underground aquifers – these take centuries or more to replenish
- The oceans have absorbed about 50% of the CO<sub>2</sub> emitted by humans since the industrial revolution, dropping ocean pH by about 0.1 units (pH is logarithmic scale so that's a lot)
- New York, London, Venice, Shanghai, Mumbai and Bangkok are basically at sea level now (along with millions of other individuals around the globe) - scientists project sea levels to rise 8 - 36 inches rise by 2100



I found myself going on and on with this list so I finally stopped. The point? Climate change is already happening. We are already absorbing huge costs around the globe in response. Where will we be (and at what cost) by the end of the century if scientific projections are even close to reality? People say scientists are just trying to scare us – yeah, this is scary.

**What Does This Have To Do With Organics?** Current global farming operations contribute 15-20% of total greenhouse gases – when we add related processes like fertilizer production, transportation, etc., this jumps by an additional 5-10%. 23,000 square miles of forests

(consumers of CO<sub>2</sub>) are cleared each year, primarily to provide more tillable land. Over 50% of total agricultural emission is nitrous oxide released from the application of chemical fertilizers.

Our soil sequesters (absorbs) huge amounts of carbon. As topsoil is depleted of its elements (a result of chemical and mono-culture farming), its ability to sequester carbon is greatly reduced. Organic growing methods help to improve the carbon sequestration capacity of our soils and reduce emissions caused by the application of chemical fertilizers.

As individual growers, every time we add a bit of chemical fertilizer and don't promote healthy soil we add a bit to the problem. Multiply that by millions of small gardeners and growers and our combined impact adds up.

**Organically Done** ([www.organicallydone.com](http://www.organicallydone.com)) is a Michigan manufacturer of organic fertilizers and soil amendments. Our mission is to produce high-quality truly organic products that provide everything your plants need while being free of potential contaminating sources that are found in many of today's "organic" alternatives – NOT ALL ORGANICS ARE CREATED EQUAL.