COMMENTARY

Devil's Advocate...Climate change mythconceptions Pt. 3

By Aaron Bishop Harmony, MN Mythconception #9: A News-

now.

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week article in 1974 stated we would be "a frozen ice cube" by believe goal



Aaron Bishop mythcon-

ception from an online commenter in the online Fillmore County Journal is an attempt to convey an air of wild guessing or pure speculation when it comes to the science of climate change. Never mind the fact that it's been 45 years since 1974, and science and technology has progressed by leaps and bounds.

The author of the Newsweek article from 1975, Peter Gwynne, had focused on regional temperatures in the northern hemisphere. What we know is that aerosols cool the planet. Aerosol use by humans starting in the 1930s is now known to have masked partial warming trends by the mid-1970s.

Yes, it was cold in the northern hemisphere in the early 1970s, but not globally. The Newsweek article really was a tremendous setback. Its own author agrees. Gwynne stated in 2014, "While the hypotheses described in that original story seemed right at the time, climate scientists now know that they were seriously incomplete. Our climate is warming—not cooling....'

Mythconception #10: A warm period from 3rd–5th centuries followed by a cool period in the 10th - 13th centuries are evidence against human-influenced

Editorial Cartoon

What Erding was saying here in his May 27 article is that because the climate has changed in the past without humans pumping CO2 into the atmo-

climate change.

sphere, that must mean earth's climate is not subject to the changes humans induce upon it. This is a false premise. The climate has changed without humanity's interventions, true, but that does not mean that modern events must follow the same guidelines.

What could have caused a massive cooling event naturally? According to research published back in 2012, a series of four volcanic eruptions are the likely culprits as they spewed enough aerosols into the atmosphere to temporarily cool the planet by reflecting more sunlight back into space.

Unfortunately, aerosols will not solve our problems now, but compound them. The great work by F. Sherwood Rowlind and Mario Molina resulted in the discovery of negative effects of aerosols (particularly Chlorofluorocarbons, or CFCs) on our Ozone layer (our protective shield from high intensity solar bombardment). Because of their work in 1974, and the U.S. led fight against aerosols, we are seeing the Ozone begin to repair itself. I find this to be a strong affirmation that human activity plays a significant role on the surface of our planet.

Global Warming history: In 1965, 10 years before the Newsweek article was published, Charles Keeling (a researcher focusing on CO2 levels detected at Mauna Loa Observatory) had noticed a steady rise in CO2.

The consequences of increased CO2 prior to the mid '70s was merely known as the "Greenhouse Effect," which was taught in the early '70s in high school science classes. As I described in my "Devil's Advocate... 410" article, it's small changes in CO2 that greatly affects the increase of water vapor; the real trigger for global warming.

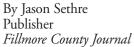
The person who made "Global Warming" into a common phrase in the scientific community (and then later more widely) was Wallace Broecker who passed away February 19 of this year. It was his 1975 scientific article "Climate Change: Are We on the Brink of a Pronounced Global Warming?" which got the ball rolling by the late '70s. There wasn't much access to his article by academics at the time (no internet), and the word wasn't spread as quickly as it otherwise could have been.

By 1977, ExxonMobil (back then just "Exxon") knew and recognized the science behind the use of burning petroleum products in massive quantities. In fact, their employed scientists did some of the original research on the topic. It's been confirmed by some of the notes by their senior scientist James Black that Exxon knew of the effects by at least 1977. I speculate that large companies, which understandably would prefer the public to believe something contradictory to a damaging truth, have the means and motive to alter the narrative.

If you're still unsure that human activity is the source of carbon emissions driving climate change, I challenge you to answer, "What is?"

Cheers.

Sources can be found on the online version of the Fillmore County Journal.



jason@fillmorecountyjournal.com In this

week's edition of the Fillmore County Journal, you will notice an advertisement that



One Moment, Please...

Recognizing farm families

we hope will become a long-term feature dedicated to recognizing our area farm families.

Our local farm families have such an impact on our lives, and a good majority of the population has become disconnected from the farm. It's not our fault. I didn't grow up on a farm and I don't live on a farm, so I feel disconnected, as well. About half of our newspaper staff either lives on a farm or works on a farm, so I get a glimpse of farm life based on conversations we have in the office.

There have been many initiatives to promote farm-to-table, putting a spotlight on where your food comes from.

But what about the people behind the food we consume?

Less than 2% of our U.S. population works in the farm industry, yet they produce the majority of what we consume in America.

According to American Farm Bureau Federation, "One U.S. farm feeds 165 people annually in the U.S. and abroad. The global population is expected to increase to 9.7 billion by 2050, which means the world's farmers will have to grow about 70% more food than what is now produced. And, "98% of U.S. farms are operated by families - individuals, family partnerships or family corporations."

Ŵhat has happened in our farm economy in recent decades, and specifically recent years, has really threatened the family farm.

"Farmers and ranchers receive only 15 cents out of every dollar spent on food at home and away from home. The rest goes for costs beyond the farm gate: wages and materials for production, processing, marketing, transportation and distribution. In 1980, farmers and ranchers received 31 cents," according to the American Farm Bureau Federation.

So, what happens when our farm economy struggles?

It impacts everyone in our small towns whether we realize it or not. A farm in the Chatfield area recently sold off everything, and the farmer shared his story about how 83 vendors (majority local) would be affected by end of his operations. From farm to Main Street, there is a ripple effect.

Just look in every direction

when you travel these roads. We are surrounded by farmland. In Fillmore County, farming is the engine that drives the train. Actually, while we have some big cities in Minnesota, such as Minneapolis, St. Paul, Mankato, St. Cloud, Rochester, and Duluth, the majority of the 87 counties in this state are referred to as "Greater Minnesota." Minnesota is more rural than metro. Our entire state is heavily dependent on farming. As a newspaper publisher,

knowing there is a disconnect between farming and city folk, I feel we need to work even harder - now more than ever — to promote the family farm.

And, this is why we are striving to recognize our local farmers. We just need your help along the way

If you know of a farm family who you feel should be recognized, please let us know. You can e-mail me at jason@fillmorecountyjournal.com or call our office at (507) 765-2151.

Watching the time bomb To the Editor,

Watched the news on Trump in Japan and it seems someone had to have a ship moved because it was named after John McCain. No one really owned up to who moved it.

I guess it really doesn't matter who moved it. The point is, it may have upset Trump if he saw it. I wonder what it must be like for his security, watching him like watching a time bomb. This is part of his disorder despite having what seems like a big ego that can be hurt by the slightest criticism.

Our democracy is in deep trouble when even the military feels obligated to bow before the moods and whims of a small, petty and greedy man at the top.

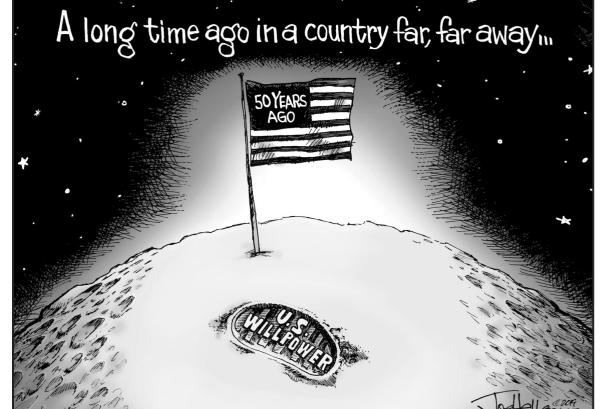
Then they will be asked to watch him at Mar-a-Lago where he mingles with 450 members who all paid \$100,000 more in initiation fees when Trump became president. No wonder he can be patriotic and donate his salary. They all ride around on their golf carts then go in to dine on \$100 steaks.

They all seem to be happy maybe because after being charged \$100,000 more for membership, they all recieved tax cuts that cover their dues.

So all that money funnels back into Trump's pocket. Then the bill is sent to our grandkids because he borrowed it from China.

Another part of his disorder is he only wants to mingle with people as important as him. No one else would understand him. Wayne Stephas

Chatfield, Minn.



All opinions expressed on these pages are those of the authors and not of the Fillmore County Journal.