

Anthropogenic Climate Disruption (ACD): Alaskans Witness Collapsing Mountains, Shattered Lives

By Dahr Jamail

Global Research, August 04, 2016

Truthout 1 August 2016

Region: <u>USA</u>
Theme: Environment

In-depth Report: Climate Change

The impacts of anthropogenic climate disruption (ACD) across Alaska are devastating to witness.

In late June, due to glaciers melting at unprecedented rates, the side of a mountain nearly a mile high in Alaska's Glacier Bay National Park, which had formerly been supported by glacial ice, <u>collapsed completely</u>. The landslide released over 100 million tons of rock, sending debris miles across a glacier beneath what was left of the mountain.

This is something that has been happening more often in recent years in the northernmost US state. While Alaska's local conservative media often tend to feign ignorance of the cause of such phenomena, what's causing it is all too clear. The state has been hitting and surpassing record temperatures over the last year, and the same can be said for the globe. It's plainly obvious why ice is melting at record rates.

Mountains that have been largely covered by glaciers for eons are losing their ice cover and the soggy, unstable land underneath is giving way. The landslides are <u>usually large</u> <u>enough</u> to cause seismic tremors and sometimes, when close enough to the ocean, tsunamis.

Also in June, Arctic sea ice had melted down to a <u>record low</u>, with 29,000 miles of it disappearing each day. By month's end, the sea ice was 100,000 square miles below the previous record for June — set just six years ago — and more than half-a-million square miles below the 1981-2010 long-term average, according to the <u>National Snow and Ice Data Center</u>. Excepting March, every single month of this year thus far has set a new record low for ice cover in the Arctic.

To Alaskans, at least those who are not making a living off the oil industry that dominates the state's financial and political economies, the evidence before them is impossible to ignore.



Image: Helicopters ferry water to drop on a wildfire just south of Anchorage, Alaska. (Photo: Dahr Jamail)

I recently spoke with several young Alaskans from the Aleutian Island of Unalaska, and their worry, anger and fear about what they are witnessing did not take long to surface.

"I've lived in Unalaska all my life, and we are watching the climate change dramatically, and I talk to my friends all over Alaska and they tell me the permafrost is melting and their houses are melting into the ocean," 18-year-old Lynett Tham told Truthout. "I can't even understand the emotions they must feel, because their whole family histories are being erased. Yet people don't believe them... that is hard for me to get my head around."

Tham was referring to her frequent run-ins with ACD deniers, both in and outside of Alaska. She wonders how people can continue to refuse to see the facts, when the physical evidence of ACD is right in front of them.

"We are watching massive bird die-offs, the ocean water keeps heating up, there are less and less fish, and it's scary," she said. Tham plans to attend the University of Alaska to study public health next year. She spoke ever more quickly and intensely, now that someone was finally listening to her. "We're watching the seals go extinct, and every single year there is less and less snow."

Her 19-year-old friend Jeffrey Moore, also from Unalaska, sat with us.

"We've lived a subsistence lifestyle forever, and most people not from here just don't understand what that means," said Moore, who is a pre-med student at Eastern Washington University. "Growing up here, a lot of my family has always lived this way, living off the land and ocean. But it's getting harder and harder for them to do this. So it affects how we live, our lifestyle."

Like Tham, Moore says many of his peers are not paying attention to their rapidly changing planet.

"It's frustrating to experience this stuff first hand, and then [go] to college and meet folks who aren't even aware of this," he said. "I think the media is a big part of the problem, people just aren't paying attention because it's not in the news enough. I'm interested in climate change at my university, but there are a limited number of classes on it you can even take."

One of his favorite things to do when he lived in Juneau was to visit the Mendenhall Glacier, Moore said. "But, after visiting the Mendenhall over time and watching it melt more and more each year, that really moved me, seeing how much it's changing. And it's so small now, so tiny, and it's not going to be there much longer."

Moore couldn't be more right. The Mendenhall, which is an icon of Alaska's capital city, is now in <u>record retreat</u> and causing record flooding in the area.

Meanwhile, across the Bering Sea from Alaska, Russia's Yamal Peninsula in Siberia is also seeing its <u>permafrost melting</u> at a record pace with temperatures in the mid-80s of late. Stunningly, earlier this summer, temperatures across much of the Arctic reached the mid-80s for several days — matching temperatures in the equatorial regions of the planet. <u>One scientist said</u> of the radical melting happening across the Arctic: "The extraordinary years have become the normal years."

In the US, Heat Records Have Become the Norm

Last June was the <u>hottest on record</u> and became the second June in a row to hit that record. May was the 13th month in a row for record-breaking planetary temperatures — the longest stretch recorded since the National Oceanic and Atmospheric Administration (NOAA) began keeping records in 1880.

"What we've seen so far for the first six months of 2016 is really quite alarming," David Carlson, director of the World Meteorological Organization's Climate Research Program <u>said</u> recently. "This year suggests that the planet can warm up faster than we expected in a much shorter time.... We don't have as much time as we thought."

Earth is on track for another hottest year on record, Carlson said at a press briefing, and it's warming at a far faster rate than previously expected.

Like the last one, this summer has been full of record-high temperatures across Alaska, including in the state's largest city, Anchorage.

Image: Smoke and scorched Earth from a recent wildfire that burned in South Anchorage and Alaska's Chugach State Park (Photo: Dahr Jamail)

A few days prior to this writing, a <u>wildfire in south Anchorage</u> snarled traffic along the Seward Highway, the one artery linking the state to the Kenai Peninsula and other locations south. I was traveling back to Anchorage from down south and smoke burned my eyes as I skirted the <u>perimeter of the fire</u>, which had grown rapidly enough that fire-jumpers from out of state had to be flown in to relieve weary Alaskan firefighters who had been battling the fire for several days.

For days, the smoke lingered around Anchorage, a city with a front-row seat to the dramatic impacts of ACD.

Image: Smoke from a wildfire in Alaska filled dozens of square miles of Alaska's Turnagain Arm recently (Photo: Dahr Jamail)

This month's dispatch reveals the ever-quickening signs of a planet changing before our very eyes, in Alaska and beyond.

Earth

<u>Several scientific studies of recent years</u>, taken together, issue a stark warning for us: Forests around the world are becoming mass casualties to ACD. Millions of trees have died off across Europe, the US Southwest and California, and these die-offs have been tied directly to ACD. Scientists are warning that things will most assuredly continue to worsen.

In the Siberian Arctic, <u>Russian scientists are finding</u> what they refer to as "fountains of gas" — massive amounts of methane and carbon dioxide bubbling up from beneath the tundra — to the extent that it's causing the Arctic tundra to jiggle "like jelly," forming what's been referred to as "blisters" of heat-trapping gasses in the immediate atmosphere that contain shockingly high levels of CO2 and methane. According to a <u>recent report in the Siberian Times</u>, the areas are recording CO2 levels of 7,500 ppm (19 times our current atmospheric levels) and 375 ppm of methane (200 times current atmospheric levels).

Water

From massive droughts to sea level rise and everything in between, ACD makes itself the most obvious in the watery realms of Earth.

In India, there has been a marked increase in violence and murders as people facegrowing water wars in the northern and central regions of the country, which have been afflicted by severe drought and record-breaking heat.

Meanwhile, as global sea levels continue to rise, New York City is planning on spending \$3 billion to <u>build a 10-foot high wall</u> around lower Manhattan to protect it from storm surges and rising seas.

The <u>UN warned again recently</u> that at least two Pacific Ocean atolls and their corresponding island nations could be completely underwater "by 2050." This begs the question: Where will the residents go and who will finance the move?

In Australia, the chief investigator for the citizen science program, Coral Watch, reported recently that large sections of the Great Barrier Reef were suffering from "complete ecosystem collapse," as fish numbers are down dramatically and the coral is continuing to bleach well into the southern hemisphere's winter months.

A <u>recent study showed</u> that as oceans continue to warm around the globe, stronger currents are now releasing heat into larger storms. The researchers warn that this will increase the risk of destructive storms along the extremely heavily populated coastlines of Japan and China in the coming years, and beyond.

Another report revealed recently that, along a 100 km stretch of coastline in Nova Scotia,

Canada, warming ocean temperatures have caused a nearly 100 percent decrease in kelp forests in just three decades.

As usual, native populations around the globe, who tend live much closer to the Earth than most people in the industrialized world, continue to experience the impacts of ACD most intensely.

For instance, in Bolivia, Lake Poopó <u>has been erased</u>, thanks to ACD, and with it, the indigenous group that depended upon it for its survival and its very identity. The majority of the Uru-Murato people have had to leave to look for work elsewhere and the lifestyle and culture the lake made possible for them is gone.

Another example of this displacement will soon be occurring in Alaska, where coastal villages in the north are imperiled by melting permafrost and receding coastlines. Eventually, they will have to be evacuated, though at the moment, they are actually experiencing increases in population.

Glacier National Park in Montana is also displaying dramatic signs of ACD's impact. The park used to contain 150 glaciers, and is now down to 25. Those that are left are shrinking rapidly, as evidenced by this moving National Geographic video essay, which shows before and after photos of the glaciers. The melting is happening so rapidly now that scientists who at first thought that taking photos and measurements of the retreating ice every two years would be too often, now understand that the two-year schedule is actually not frequent enough to keep up with the vanishing glaciers.

Furthermore, <u>recent NASA imagery shows</u> large ponds and streams forming atop the Greenland Ice Sheet, which is melting at a near-record pace due to unusually warm weather and early-season ice surges caused by rapid warming.

Fire

Wildfires across the northern hemisphere are continuing to increase in frequency, scope, and heat.

A scientific team that included a NASA member <u>published a paper recently</u> warning that an already parched Amazon rainforest is likely to see a record-setting wildfire season. Given that the Amazon is known as the "lungs of the planet," this does not bode well.

Experts have <u>also stated</u>, unequivocally, that wildfires burning across the western US, particularly in California, are being fueled by ACD-amplified factors, such as droughts, beetle infestations, winds and record-breaking heat.

The same is also happening in Canada, where the Fort McMurray wildfire earlier this summer became the most expensive natural disaster Canada has experienced with damages caused in excess of \$3.6 billion.

Siberia has been ablaze throughout most of the summer and an area larger than the state of Maryland has already burned. "This year's forest fires are close to becoming one of the most devastating in recent Russian history," <u>stated Greenpeace</u>.

Records All Around

High temperature records continue to topple around the world as ACD progresses unchecked. In the US, nowhere is this more obvious than in Alaska, from where this dispatch was written.

For Alaska, 2016 has been full of records. It was the warmest year to date and the month of June, the <u>warmest on record</u>. To give you an idea of just how hot it has been up here: Deadhorse, located on the Arctic coast, saw a temperature of 85 degrees F on July 13, the same as New York City on that day. Needless to say, that was a record for Deadhorse. It was also the mildest temperature on record for Alaska for a location anywhere within 50 miles of the Arctic Ocean.

Overall, from January to June of this year, the average statewide temperature has been nine degrees F above average, beating the old record by 2.5 F, which is a staggering margin.

As the atmosphere continues to warm, it naturally holds even more water. This is making itself all too <u>evident across China</u>, where rainstorms this summer have left hundreds of people dead, displaced over one million people, and destroyed tens of thousands of homes and buildings.

Storms there have also generated record-breaking tornadoes, caused \$7.7 billion in damage, and impacted at least 32 million people.

ACD is also causing cloud cover to shift more towards the poles, <u>according to a recent study</u>, which means that there will be less cloud cover during the day across the planet's midlatitudes, causing even warmer temperatures.

The <u>UN recently released a report</u> showing that searing heat across the world will literally make it too hot for many people to work in the coming years. Loss of work hours during the hotter parts of the day will cost global economies over \$2 trillion by 2030, and the losses will impact the poorer countries of the world the most.

Denial and Reality

As usual, there is never a dull moment on the denial and reality front of the climate dispatch.

The GOP policy towards ACD has been to <u>move in the opposite direction</u> of embracing reality. A recent report showed that in 2008, the <u>GOP actually acknowledged</u> that CO2 emissions exacerbated the negative impacts of ACD. Yet, <u>the GOP platform this year</u> does not, in any way, acknowledge the reality of ACD.

Indeed, if Donald Trump becomes the next US president, he will be the <u>only national leader</u> in the world to officially reject climate science (i.e. reality). It's important to note that even North Korea's Kim Jong-un accepts the reality of ACD.

A <u>US survey carried out by the Guardian</u> shows, clearly, the glaring omission of ACD from election year issues, despite the fact that more respondents felt that ACD was the most critical issue needing to be addressed.

Interestingly, a politically conservative businessman from North Carolina haspledged to spend a minimum of \$5 million to back five Republican congressional candidates who have supported taking action to mitigate ACD.

Yet, while some discussion around mitigating, "addressing" and even "reversing" the impacts of ACD exists, a <u>recently published study in the journal Nature</u> shows that the window that was available within which it may have been possible to avoid a 1.5 degree Celsius global temperature increase has already closed.

<u>Truthout reported in March</u> that a <u>study published in Nature Climate Change</u>showed that the planet was already warming a stunning 50 times faster than when it came out of the last ice age.

"Bear in mind that 2 degrees Celsius is the arbitrary, politically agreed-upon warming limit, above which warming is considered "dangerous to humanity," Truthout reported in March. "Former NASA scientist James Hansen debunked that goal over two years ago, when he published a paper showing that 1 degree Celsius was the scientifically proven point of no return."

And, according to the 2016 edition of the <u>EIA International Energy Outlook</u>, projections predict that by the year 2040, fossil fuels will still have a grip on 78 percent of the world energy market, despite strides being made in renewable energy.

"Oil use is expected to grow in China by 57% between 2012 and 2040, and at a faster rate (131%!) in India," energy expert Michael Klare wrote recently for TomDispatch.

All we need to do is look clearly at the evidence before us today — as temperature records break, cities hover on the brink of being swallowed by the ocean, and Arctic villages that are thousands of years old melt into the sea — to see how far along we already are. And there is nothing to indicate that humans and governments will make the dramatic behavior alterations necessary to provide meaningful mitigation.

Meanwhile, young people like Lynett Tham watch in horror as the world they are being left to live in degrades dramatically before their eyes.

"Yesterday, we drove out to Summers Bay and there is garbage everywhere, there are people littering, just disregarding the earth," she said.

Tham's family, like most on the remote island where she lives, is there because of the fishing industry, so she is acutely aware of the fact that ocean life is in grave danger and already in a state of collapse.

She talks about how she used to go fishing with her father in one of the local bays each summer. They would walk to the river at the head of the bay where there were so many fish, they could catch them with their bare hands. Those fish have since disappeared.

"The fish just aren't there anymore," she said quietly.

Her friend Jeffrey Moore is having a similar experience.

"You used to be able to catch halibut off the shore here," he said, "but not anymore."

"The fishing industry is so important here," Tham continued. "This is why my family came here to work. My folks are here because of it; all my friends here are tied to it."

After a pause, she added: "My childhood will be erased. Kids will never get to experience

what I did because this place won't even be recognizable."

Our thanks to Truthout. Copyright, Truthout. 2016. Reposted with permission

Dahr Jamail, a Truthout staff reporter, is the author of <u>The Will to Resist: Soldiers Who Refuse to Fight in Iraq and Afghanistan</u>, (Haymarket Books, 2009), and <u>Beyond the Green Zone: Dispatches From an Unembedded Journalist in Occupied Iraq</u>, (Haymarket Books, 2007). Jamail reported from Iraq for more than a year, as well as from Lebanon, Syria, Jordan and Turkey over the last 10 years, and has won the Martha Gellhorn Award for Investigative Journalism, among other awards. His third book, <u>The Mass Destruction of Iraq: Why It Is Happening</u>, and Who Is Responsible, co-written with <u>William Rivers Pitt</u>, is available now on Amazon. He lives and works in Washington State.

The original source of this article is <u>Truthout</u> Copyright © <u>Dahr Jamail</u>, <u>Truthout</u>, 2016

Comment on Global Research Articles on our Facebook page

Become a Member of Global Research

Articles by: Dahr Jamail

Disclaimer: The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: publications@globalresearch.ca

www.globalresearch.ca contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: publications@globalresearch.ca