

'Global Weirding': Extreme Climate Events Dominate The Summer

First Posted: 08-12-10 04:36 PM

A heatwave in Russia is sparking wildfires that are driving residents from Moscow and devastating the country's wheat crop. A fifth of Pakistan is underwater and millions are deluged by floods in Asia. Another heatwave is torturing Mexico and the East Coast of the United States. An incomprehensibly large chunk of ice has broken off a glacier in Greenland, the most significant climate event there in 50 years.

Most scientists caution that no single event can be tied specifically to increased greenhouse gases in the atmosphere. But climate-change deniers quickly point to the first snowfall in winter as evidence against global warming. If that's the standard, the extreme climate events all across the globe must say something about whether climate change is already upon us. Indeed, the regularity of the events is beginning to undermine the descriptor "extreme". Extreme is the new normal.

"We're setting climate records at a record-setting pace," David Orr, a professor of environmental studies and politics at Oberlin College, told HuffPost. "More hottest hots, driest dries, wettest wets, windiest wind conditions. So it's all part of a pattern. If you ask is this evidence of climate destabilization, the only scientific answer you can give is: It is consistent with what we can expect." Orr is the author of "[Down to the Wire: Confronting Climate Collapse](#)" and five other books on politics and the environment.

The Pentagon announced in [a report](#) earlier this year that new patterns in the weather "may act as an accelerant of instability or conflict, placing a burden to respond on civilian institutions and militaries around the world." And a new [report](#) from the National Wildlife Federation explores the unsettling implications of continued warming: climate models indicate that if nothing is done -- and nothing is being done -- extreme fluctuations will only become more common. The warning is timely, if the steady rise of international weather-related disasters is any indication.

So far this summer Russia has lost one-fifth of its wheat harvest to raging wildfires, fueled by the worst drought the country has seen in 130 years. Crops in the neighboring countries of Ukraine and Kazakhstan are also suffering from the drought, as the wildfires continue to sweep west.

Wheat crops are failing in other parts of the world, too. The Canadian Wheat Board, a marketing agency for Canada's wheat and barley growers, is forecasting a 35 percent drop in the harvest this year, a falloff caused by unusually heavy rains during the planting season. In a study last month, the National Academy of Sciences [predicted](#) that failing crops produced by inclement weather may drive up to seven million Mexicans to the U.S. over the next 70 years.

In the eastern United States, Americans have been sweating out a summer-long heat wave following a winter of extraordinary snowfall that brought major cities to a halt several times. Scientists [confirm](#) it's been the hottest year globally on record.

In Greenland, a giant ice floe four times the size of Manhattan broke off one of the country's two main glaciers, the biggest such event in the Arctic in nearly half a century. Scientists said it's difficult to state empirically whether global warming caused the halving of the 100 square-mile ice island, since

the records have been kept only since 2003.

"Is it specifically caused by climate destabilization? No one could say that for sure, but it is certainly consistent with what appears to be an accelerating pattern of climate anomalies, or what some people call 'global weirding,'" said Orr. "It isn't global warming. It really is planetary destabilization... And we'll see more of that kind of thing. And the Intergovernmental Panel on Climate Change puts the odds that humans are in fact the driver in such things at well above 90 percent, which means it's a virtual certainty that yeah, that's what's going on."

Two weeks of floods have devastated Pakistan's Indus river basin, killing 1,600 people and threatening rice, cotton and wheat crops. The floods, triggered by unusually heavy monsoon rains -- how much longer will we be able to use "unusually" to describe events that are happening more and more often? -- are the worst in recent history, affecting an estimated 14 million people, or 8 percent of the population, and forcing 2 million civilians to flee their homes. One fifth of the nation is underwater.

The floods were triggered by a rainfall of roughly 16 inches in the northern mountainous parts of Pakistan where it meets Afghanistan. Continuous heavy precipitation between July 28 and 29 unleashed a torrent of water. "That was a record," Qamar-uz-Zaman Chaudhry, director-general of the Pakistan Meteorological Department, told Reuters. "The only explanation can be the link to climate change. Because that area very rarely receives monsoon rains."

Deforestation may also have contributed to the impact of the the floods, Chaundry said, and as the population increases, more people are being forced to live in flood-prone areas.

Climate change scientists fear it could be a harbinger. While a single, massive flooding cannot be shown to be caused directly by greenhouse gases, the sharp rise in extreme weather patterns over the last 20 years is less ambiguous. It's a dangerous trend for Pakistan's 160 million people, many of whom already face severe floods and droughts on a regular basis. In the long run, scientists say the region could suffer from declining amounts of meltwater from glaciers feeding the Indus River, which is the nation's life-blood. If the glaciers melt too fast, the source of fresh water for hundreds of millions of people literally dries up.

Meanwhile, flash floods in the mountains of Indian-occupied Kashmir have killed 140 people and stranded scores of trekkers. The Indian air force evacuated 80 foreign tourists from the popular trekking destination of Zaskar Monday. About 500 people are still missing.

Flash floods have also ruined thousands of homes in North Korea; the Amnok River is at its highest water level in 15 years. The Red Cross reported Monday that some 10,000 people were squatting in public buildings in the border city of Sinuiju to escape the floods.

In China, 337 were reported dead Monday after heavy rains triggered landslides across the province of Gansu, where more than 1,100 went missing. In the county seat of Zhouqu, entire mountain villages have been swamped. Flooding has killed more than 1,100 people in China this year alone, wiping out infrastructure across 28 provinces and regions.

Mexico and the Southwest United States, meanwhile, has been suffering from the driest spell in more than 50 years. Officials have been rationing water. Reservoirs remain low, drinking water scarce, and harvests wilted. The drought has driven millions to the U.S. and left others hoping for a hurricane.

Diplomats met for a climate conference in Bonn, Germany earlier this month, for a followup to the

Copenhagen climate summit. Expectations were low, and results were worse. United Nations climate chief Christiana Figueres called for "incremental" change, but the talks were, if anything, a step backward, leaving diplomats even less common ground for the the upcoming climate talks in Tianjin, China. Monitoring emissions internationally would threaten state sovereignty, China claimed. Developing countries retreated from emissions targets agreed to in Copenhagen, arguing the reductions should be mandatory for richer countries.

The world is largely waiting for the United States -- which derailed efforts to combat climate change by discarding the Kyoto Treaty in the early years of the Bush administration -- to act. The House passed landmark climate change legislation in 2009. But the Senate adjourns for the summer on Thursday without even voting on its proposal. There is little hope the effort will be revived when lawmakers return in the fall. Environmental groups are shifting focus from Congress to the executive branch and courts.

"We really don't have a name to describe behavior of this sort," Orr said of the resistance to dealing with climate change.

"It is criminality beyond any language, concepts or laws that we presently have. It's criminality that places the entire human enterprise at risk. And we simply have not been able to confront inaction that allows the entire human enterprise to slip into catastrophic failure. It really does beggar the imagination to understand why, given the consensus of the scientific community on this issue, why inaction was the order of the day," said Orr, conspicuously referring to the failure to address the issue in the past tense.

"A lot of effort is spent to try to figure out how to cleverly frame issues so as to appeal to people's self-interest. And I don't know that that's always the smart way to do it. I think the smartest way to do it is to tell the truth as best you understand it. And the truth of the matter is, for me personally, all of the events that you've mentioned are yet further evidence that climate is rapidly destabilizing. Would any one of those specific events have been likely to happen in the absence of the human influence of climate? I think the answer would have to be no to almost a vanishing point."