

# Alan Betts, Green Energy Times, 2023

<http://www.greenenergytimes.org>

**Alan K. Betts** (<http://alanbetts.com/writings> )

This is a collection of my 2023 articles in the Green Energy Times (GET).

This series started in 2016. Many of these articles have been edited or updated from articles I wrote for the Rutland Herald, sometimes with different titles (as well as pictures). Increasingly many are new.

They blend science and opinion with a systems perspective, and encourage the reader to explore alternative and hopeful paths for their families and society. They are written so that a scientist will perceive them as accurate (although simplified); while the public can relate their tangible experience of weather and climate to the much less tangible issues of climate change, energy policy and strategies for living sustainably with the earth system.

Climate change denial will bring immense suffering to our children and life on Earth. It now appears that Mother Nature/the Creator herself has taken over the climate system to save species on Earth but not our criminally corrupt capitalism that has an agenda of destroying half of life on Earth for profit. So I discuss this year the issues of understanding the Truth that sets us free to back the creation.

I believe that earth scientists have a responsibility to communicate clearly and directly to the public<sup>1</sup> – as we all share responsibility for the future of the Earth. We must deepen our collective understanding, so we can make a collective decision to build a resilient future.

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*and articles can be found at*

<http://www.greenenergytimes.org/back-issues-download/>

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**Betts, Alan, Ongoing Flooding of our Landscape,** GET December, 2023

<sup>1</sup> **Betts, A. K. (2011),** Communicating Climate Science. *EOS Transactions*, 92, No. 24, 14 June 2011. Available at <http://alanbetts.com/research/paper/communicating-climate-science/#abstract>

# COP15 Proves to Be Most Important UN Conference for Planet Earth

The UN Biodiversity Conference COP15 in Montreal Reaches Landmark Agreement



Alan Betts

One of the most important conferences on the survival of life

on Planet Earth was COP15 (Conference of the Parties) in Montreal in December, 2022. Representatives from 188 governments gathered in Montreal for two weeks and reached a landmark agreement to guide global action on nature through to 2030.

Chaired by China and hosted by Canada, COP 15 resulted in the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) on December 19th 2022. The GBF aims to address biodiversity loss, restore ecosystems and protect indigenous rights. The plan includes concrete measures to halt



The world is currently facing a human-caused extinction crisis. At COP15, the United Nations biodiversity conference, 196 countries are coming together to try to do something about it. (pxhere.com/Peter Fischer)

and reverse nature loss, including putting 30% of the planet and 30% of degraded ecosystems under protection by 2030. It also contains proposals to increase finance to developing countries for these purposes.

## COP15 UN Conference – Cont'd from p1

The broad context here is that there has been a 69% plunge in wildlife populations over the past 48 years. The global rate of species extinction is already at least tens to hundreds of times higher than it has averaged over the past 10 million years.

Much of this accelerated loss has been caused by the destruction of natural habitats by humanity for commercial or agricultural uses; coupled to the increase in climate extremes linked to the relentless burning of the fossil fuels by “business as usual.”

A key agreement reached is to conserve 30% of the Earth, both terrestrial and marine ecosystems, by 2030 the end of this decade. The expansion of new protected areas will respect indigenous and traditional territories. The language emphasizes the importance of effective conservation management to ensure wetlands, rainforests, grasslands and coral reefs are properly protected, not just on paper. One critical step is the recognition that Indigenous peoples' rights are at the heart of conservation. Several scientific studies have shown that Indigenous peoples are the best stewards of nature, representing 5% of humanity but protecting 80% of Earth's biodiversity. From Brazil to the Philippines, Indigenous peoples are still subjected to human rights abuses, violence and land grabs (after centuries of similar abuse). The language in the text is clear: Indigenous-led conservation models must become the norm this decade if we are to take real action on biodiversity.

The meeting addressed the need to reduce environmentally harmful subsidies. The world spends some \$1.8 trillion every



Woodland Clearance in Ribau foothills of Mozambique (@RBG Kew/L.Derbyshire)

year on government subsidies driving the annihilation of wildlife and a rise in global heating, according to a study earlier this year. Agreement was reached to phase out or reform subsidies that harm biodiversity by at least \$500 billion per year, while scaling up positive incentives for biodiversity conservation and sustainable use.

The final text included watered-down language requiring governments to ensure that large and transnational companies disclose “their risks, dependencies and impacts on biodiversity.” If implemented, this could be the start of a significant change

in business practices. This issue is rapidly moving up the agenda of “corporate” risks, as about half of global GDP is dependent on the healthy functioning of the natural world. Several countries are already developing rules for sustainable sourcing. However a



COP15 recognized clearly that this coming decade is critical for conserving and protecting natural habitats for all wildlife.

widespread change of business strategies this decade will be a challenge.

Key financial discussions at COP15 centered on how much money developed countries will send to developing countries to address biodiversity loss. It was requested that a Special Trust Fund – the GBF Fund – be set up to ensure an adequate, predictable and timely

flow of funds. It was recognized that at least \$200 billion per year were needed from public and private sources for biodiversity-related funding and international financial flows from developed to developing countries would have to be raised

to at least \$ 30 billion (US) per year.

Critical issues of access and benefit-sharing from digital sequence information (DSI) from genetic sources were addressed. Digitized genetic information that we get from nature, which is used frequently to

produce new drugs, vaccines and food products come from rainforests, peatlands, coral reefs and other rich ecosystems. Corporations develop, patent products and profit. Products are hard to trace back to their origin country, but many in the developing world are now expecting payment for the use of their resources. COP15 reached the first international agreement to create a multilateral mechanism for benefit-sharing from the use of digital sequence information on genetic resources, including a global fund. This agreement to develop a funding mechanism on sharing DSI benefits in the coming years was hailed as a victory for African states who called for its creation.

COP15 recognized clearly that this coming decade is critical for conserving and protecting natural habitats and biodiversity, and set some clear targets for governments, businesses and society to follow. The tasks will not be easy as we have no global legal structures to enforce the preservation of life on Earth in the face of a capitalist system that presumes it has the right to exploit and if needed destroy life to increase its profits. COP15 did not focus on the parallel issue of accelerating climate change addressed at COP27, and it did not consider Mother Nature's apparent takeover of the climate system to protect life on Earth, which were both discussed in the December issue of GET. It is worth noting however that Mother Nature is likely to back all COP15's plans to address biodiversity loss and restore ecosystems.

Dr. Alan Betts of Atmospheric Research in Pittsford, VT is a climate scientist. See more at [www.alanbetts.com](http://www.alanbetts.com). ♻️

# Winter Climate Extremes in the USA



Dr. Alan K. Betts

The winter climate extremes across the U.S. have been striking. We know that we are responsible for them, but we listen to the webs of lies and pretend we do not know. Back in 1978, James Black, the chief scientist of the current Exxon-Mobil did the global modeling and correctly concluded that doubling atmospheric CO2 would be a disaster for the global climate and for life on Earth. He told management they had five years to change their business plan. Their response was simple: "Be quiet. We have trillions of dollars to bribe politicians and fund webs of lies and advertising to confuse the public for decades." This is exactly what they have done for 45 years. Hundreds of politicians have accepted large bribes to deny climate change. This criminal behavior of the fossil fuel empire, who are consciously and deliberately killing life on earth to maximize their profits, is staggering. The recent COP 27 meeting in Egypt in November 2022 is typical. There were a record number of 636 paid fossil fuel lobbyists to make sure their companies' profits remain protected. Yet we refuse to hold them responsible and bill them for the damages caused, so we are collaborators.

California has had some remarkable weather extremes this winter as the Pacific El Nina circulation has enhanced the west coast storms. Southern California had blizzard warnings for the first time with five feet of snow to the east of Los Angeles. Some towns in Los Angeles County had temperatures as low as 18oF, which were record lows. Atmospheric rivers of moisture coming in across the Pacific brought heavy rain and flooding on other occasions. San Francisco saw more rain over a two-week period than at any other time in 150 years. Some communities were washed out, powerlines were destroyed and dozens were killed. The heavy rains and heavy mountain snows may partly balance the earlier drought conditions, and may also help with moisture and reservoir supplies in spring. Time will tell.

With 10 feet of snow in the mountains, emergency workers scrambled to help scores of residents and tourists who were unaccustomed to the sheer amount of precipitation. Snow berms trapped people in cabins and cars in driveways, preventing them from leaving Lake Arrowhead and Big Bear Mountain. Day-tripping skiers and snowboarders from Southern California were simply unprepared, and many had insufficient supplies of food and prescription medicines. Natural gas lines were fractured, sparking five fires in two days. When firefighters arrived to extinguish the flames, they found hydrants encased in ice and feet of snow. The first week of March, Gov. Gavin Newsom declared a state of emergency in 13 counties affected by winter storms, as another 3ft of snow fell the first weekend in March and residents were trapped



Snowcapped San Gabriel Mountains from MacArthur Park, Los Angeles, CA after the historic snow storm of February 2023. (Adobe Stock/577249596)

behind walls of snow and concerned about their dwindling supplies. Yosemite National Park, which broke a 54-year-old daily snowfall record, was closed indefinitely. As I write another atmospheric river threatens heavy rain on deep snow and more flooding.

A winter ice storm hit Texas, Oklahoma and Arkansas, from January 31 to February 2, as an Arctic cold front made its way south to meet with warm, moist air from the Gulf of Mexico. Interstates were closed as accumulating ice led to more than 100 car accidents. Many in Texas lost power as ice brought down trees and power lines.

Other thunderstorms across the southern U.S. brought tornados. In January and

February there were more than 173 tornadoes affecting a remarkable list of states: Alabama, Arkansas, California, Florida, Georgia, Illinois, Iowa, Kentucky, Louisiana, North and South Carolina, Tennessee and Texas. The Houston Weather Service office declared a tornado emergency for the first time.

At the beginning of March winter weather advisories and warnings were issued for much of the Upper Midwest and Northeast. The first significant snowfall of what had been a mild winter fell overnight. Up to eight inches of snow blanketed some communities with much more in the mountains. Heavy snow fell across east central New York, western and central Massachusetts, southern New Hampshire and Vermont to western Maine. Road travel was difficult and there were many flight cancellations or delays.

A second much larger snowstorm driven by a powerful Nor'easter followed on March 13-15. New York as far south as Albany and all the New England states were blanketed in heavy, wet snow ranging from one to over four feet in higher terrain.

The weather service does a great job warning the public to prepare for unusual extremes, but it may not explain the ongoing climate situation. However as the public experiences so many unprecedented events, understanding the new climate extremes is spreading. Some of the mass media commented correctly that scientists say climate change, supercharged by humanity's burning of fossil fuels, is making storms more ferocious.

This winter an exceptional number of eleven atmospheric rivers brought heavy rain and snow to California and the west coast, and storms have covered the entire country. The central issue, discussed in the first paragraph, is that our society refuses to face the truth and bill the fossil fuel empire for the widespread damage that these climate extremes have caused this winter. The fossil fuel empire has been consciously destroying life on Earth, including our children and grand-children for decades to maximize their profits. This is clearly a crime against all life on Earth, which we should not accept. It is time to simply bill the fossil empire for all the ongoing damage and death they have caused.

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# CO2 Level Hits a New Alarming High of 425ppm



Dr. Alan K. Betts

Professor Eliot Jacobson said on Twitter, "Here on hot-house planet Earth, on April 28, 2023, CO<sub>2</sub> levels just breached 425.0 parts per million (ppm) for the very first time. This is

a horrific day in the record books of what humans have done in their relentless desecration of this once pristine planet."

The diverse flood of responses shows how poorly many people understand what is going on. So, I will review the critical issues that lie ahead.

The sun heats the Earth. The burning of the carbon-based fossil fuels, which were stored in the Earth for millions of years, is warming the planet and driving rapid climate change, by driving up atmospheric CO<sub>2</sub>, a key greenhouse gas (GHG) that reduces the cooling of the Earth to space. At the start of the industrial revolution around 1700, CO<sub>2</sub> was around 280ppm,



and it had reached 315ppm in 1958 when measurements started at Mauna Loa. CO<sub>2</sub> is important because its atmospheric lifetime is on the order of a century, although the removal processes are poorly understood. Methane (CH<sub>4</sub>) is a more powerful GHG, but its atmospheric lifetime is much shorter, on the order of a decade.

The warming of the Earth and oceans from increasing GHGs has been well understood for about 50 years. Back in 1978, James Black, the chief scientist of the current Exxon-Mobil company did the global

modeling and correctly concluded that doubling atmospheric CO<sub>2</sub> would be a disaster for the global climate and for life on Earth. He told management they had five years to change their business plan. Their response was simple, "Be quiet. We have trillions of dollars to bribe politicians and fund advertising and webs of lies to confuse the public for decades." This is exactly what they have done. For forty-five years the oil companies have deliberately hidden the truth that they are consciously destroying the Earth to maximize their profits. This is clearly a staggering crime against all life on Earth including our children. Millions are starving from climate disasters in poor countries and many have died or been forced to migrate. Catastrophic floods have killed many more. It is shameful that society and politicians have taken bribes and simply accepted these webs of lies and this criminal deceit.

The oil company profits have hit new records since the war in Ukraine started last year. The EU passed

## CO2 Level Hits a New Alarming High of 425ppm – Cont'd from p.1

a windfall tax on oil companies, which of course the oil companies are trying to block. Globally, legal action against the oil companies is moving along, especially in the Netherlands. The district court in the Hague ordered Europe's largest oil company, Royal Dutch Shell, to reduce its carbon emissions by a net 45% by 2030 compared with 2019 levels. The court was also explicit in stating that the harms from climate change are violations of human rights. Last week in the U.S. the Supreme Court allowed state-law climate suits against oil companies to go ahead. Many have been in limbo

for years. For example, the Baltimore suit, filed in 2018 in Maryland state court, alleges that more than 20 energy companies promoted fossil fuels while concealing information about the harmful changes of climate they cause, including rising sea levels and extreme weather. Other cases brought by state and local officials make similar allegations. Perhaps

eventually the oil companies will have to pay for their long-term criminal fraud.

The deeper issues are radically different. Human destruction of life on Earth for profit has been explicit for nearly 50 years. Fortunately for the Earth but unfortunately for capitalism, humanity is no longer in charge. Mother Nature has taken over the climate to save life on the planet more broadly. This is a complex issue that I have addressed in the scientific literature (see [alanbetts.com/research](http://alanbetts.com/research)), and in outline in articles in *G.E.T.*

The oil companies, politicians and practically all of so-

ciety have been bribed to live in webs of lies and deception. They also believe that their money and power give them control through technology. But their lies mean they cannot face the basic Truth that Mother Nature, who is the Creator herself, is far more powerful than humanity. She is now managing radically new climate extremes, amplified of course by climate

change, using new modes we have never seen and we cannot predict before they occur. We think we have climate projections for this century but increasing melting of glaciers and icecaps, along with ocean changes, are driving faster sea-level rise that is likely to flood our coastal cities within decades.

It has been a winter of onshore storms on the west coast and more extreme storms and tornadoes across the country, especially in the south. As I write in early May, a remarkable stationary pattern called an Omega block has brought record snow (for May 1) to Marquette, Michigan, but a remarkable 90°F for Missoula, Montana. Since Hurricane Ian amplified off the west coast of Florida to a Category 5 storm on 28 September 2022, flooding and severe weather have dominated Florida with frontal thunderstorms and tornadoes during the winter. The most recent extreme was a record 26 inches of rain in 24 hours in Fort Lauderdale on 13 April 2023 that closed the port and the airport, cutting off fuel supplies.

Most of society is unable to communicate directly with the Creator, even though she can read our minds and help us. We are the only species on the planet that lives in this isolated world that comes from more than a thousand years of 'male power' over nature, women and indigent thinking. Historically this goes back to the dictates of the Roman Emperor Constantine at the Council of Nicea. It is still an obstacle stopping us dealing with climate change.

The renewable energy world of *G.E.T.* is different. Everything you do to transform our energy system and reduce fossil fuel use will get the Creator's active support. This helps a lot even if you are unaware of her presence – but with awareness come many more connections.

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We at Green Energy Times hope everyone can keep the effects of policies in mind, as we try to address the climate crisis. The answers to our problems are available, as long as we maintain reason and a spirit of kindness. ♻️



Human destruction of life on Earth for profit has been obvious for nearly 50 years. Mother Nature has taken over the climate to save life on the planet. ([deviantart.com/MP-Design](http://deviantart.com/MP-Design))

### Concentration of CO<sub>2</sub> in the Atmosphere

**423.06**  
parts per million (ppm)  
April 11, 2023

**424.72**  
parts per million (ppm)  
June 3, 2023

Learn more at [www.CO2.earth](http://www.CO2.earth).

Above top is the CO<sub>2</sub> level from the front page of the April 15th edition of Green Energy Times showing the CO<sub>2</sub> level at 423.06 ppm. As of June 3, 2023, CO<sub>2</sub> has risen to 424.72 ppm.

# Climate Extremes and Surprises



Dr. Alan K. Betts

Climate extremes and surprises have both been part of life this summer in the Northeast and elsewhere. Smoky hazy air was blown down again from wide-spread fires in Canada.

In big cities like New York, visibility fell to new low values and the smoke pollution was dangerous to those with respiratory problems, and more generally for the young and old. But why the Canadian fires are so severe this year is not fully clear although, although it is clearly a feature of the rapidly warming climate system. In addition Canada refuses to bring its fossil fuel exports under control.

Some places in Vermont got substantial rain in June, followed by many days of sunshine. Then massive floods occurred across the state on July 10 and repairs are still ongoing. With around seven to eight inches of rain in 24 hours across most of the state, almost all the rivers rose above flood stage and flooded many towns and washed away many roads. Montpelier (see photo) and Barre in the north had the worst floods. It was a reminder of the floods from tropical storm Irene in 2011, but this time there was no tropical storm, just day-long bands of heavy rain over the whole state and some surrounding regions. For days, Vermont was effectively closed in order to evacuate people from flooded regions.

On the larger scale, the ocean circulation in the Pacific and Atlantic is shifting to the warmer state known as 'El Nino' after three years of the cooler 'La Nina'. The global temperatures set new records on July 4, 5

and 6. As the oceans warmed rapidly, the evaporation of water and flooding accelerates, so the climate crisis is fast deepening.

We should not be surprised since the US is largely responsible for the catastrophic climate change now under way. Back in 1978, the Exxon senior scientist James Black identified and modeled correctly the impact of doubling CO2 on global climate. He warned management that a climate disaster lay ahead if they did not change their business plan. His report was suppressed. Exxon and its collaborators (that I called the Fossil Empire in reference<sup>1</sup>) bribed 139 Republicans in the US Congress for a mere \$61 million to publically lie and deny climate change. Webs of lies and 'greenwashing' for decades have created an acquiescent public. These are deliberate criminal actions by companies like Exxon-Mobil to make billions destroying life of Earth both now and for our grandchildren; as well as killing so many across the globe in extreme heat waves. We should bill them for the flooding damage this summer, and in future years. Climate change will simply accelerate until society forces the Fossil Empire to take responsibility for its deception. So far there has been absolutely



A Vermont road is washed away due to the extreme flooding experienced this summer. (Greg Whitchurch)

no willingness to do this in the US and other oil companies have noticed. Shell is considering moving its headquarters from the United Kingdom to the United States. Britain has implemented a windfall-profits tax on energy companies, which suggests to Shell that the U.S. is more "supportive of oil and gas companies".

Massive climate change is underway and everything is interconnected. Increased evaporation from warming oceans is the major driver of our summer floods, but our region is mountainous so the distribution of rain is not uniform. Our historic building strategies along the flood plains of rivers need to be reviewed, because extremes are likely to get worse.

The climate system is fully interconnected on a global scale. The Polar Regions

are warming faster than lower latitudes as ice melts and this weakens the N-S temperature gradients and the jet stream circulations. Forests and vegetation are also fully coupled to the climate system in complex ways and our understanding increases every year. This is an area where many indigenous people understand the forest-climate coupling better than our models.

Globally there have been many extremes of both heat waves and floods this summer. In late June 2023, weather extremes gave record-breaking heat waves in China, where Beijing surpassed 40 degrees Celsius (104 degrees Fahrenheit) for the first time. Around China, cities used bomb shelters as cooling centers during a 10-day streak of days above 35°C (95°F). In July 2023, temperatures in Texas surpassed those of Northern Africa, as they reached 43.3°C (110°F). This past week, European temperatures along the Mediterranean in Spain, Italy and Greece all approached 45°C (113°F). A deeper analysis of the summer temperature extremes over land and ocean will emerge this fall.

We have moved into the climate crisis stage that we knew was coming for 45 years and the situation will only get worse. It is bizarre that societies like the US have tolerated the destruction of life on Earth to protect the profits of the fossil fuel companies for so long. When will we face the truth, rather than continue to accept the webs of lies?

<sup>1</sup>*Climate Change and Society 2021. AIMS Geosciences, 7(2): 194–218. DOI: 10.3934/geosci.2021012*

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# Mother Nature's Takeover of Our Climate System



Dr. Alan K. Betts

**This is a review of the takeover of the climate system by the living Earth, colloquially known as Mother Nature,** in response to the refusal of global societies to significantly

reduce the burning of the fossil fuels that are driving the extreme climate change destroying life on Earth. So it covers issues beyond the conventional science perspective. The framework is based on two papers published at alanbetts.com/research in 2022 and 2023 [2, 3].

**In 1976, I realized we were heading for a climate disaster** because our leaders did not accept responsibility for the Earth. I had unusual PhD training from Frank Ludlam, who could look at the sky, clouds, and winds and infer a complete forecast of the weather. No one else could, so he became the in-flight real-time forecaster on the bomber missions over Europe in WW2. I learnt from him that if an issue was critical and you could see possible solutions, it was your responsibility. In my case the issue was climate change. So, in parallel with my climate research career, I restructured my life, bought land in Vermont and built a passive solar house with a few solar panels.

**Then in 1980, I posed the question: "How do we merge science with wisdom?"** I was sent to Tiruvannamalai in southeast India. To my utter surprise, as I sat in a meditation room upon arrival, the Creator took me through my whole life to show me it was all known to her — leaving me ecstatic, transformed with the tools needed to understand living saints and sages.

These are four keys for understanding the living Earth in human terms.

**First, the shift to a more colloquial image "Mother Nature is taking over the climate system" is powerful,** because this indigenous concept is understood by local communities. It has another huge advantage that it is also free from the male power syndrome that has been dominant for thousands of years and has contributed so much to the exploitation of people, the planet and the current destruction of life on Earth for profit.

## CLASH OF REALITIES

### MOTHER NATURE

- Indigenous world
- Preserve web of life
- She is the Truth that sets you Free
- Power Unlimited
- Join her: she can help you!

### CAPITALISM/FOSSIL EMPIRE

- Human/natural resources
- Exploit people and the Earth for profit
- Maximize \$ profit
- Use money and lies to bribe and control
- "We're in charge"

*This Figure from three frames the clash of realities between Mother Nature's powerful perspective and the 45 years of criminal behavior by the capitalist 'Fossil Empire'.*

**The second is that, for European culture, the Council of Nicaea in 325 AD was critical.**

The Roman Catholic Church was created to meet the needs of the Roman Emperor Constantine for male power for warfare and over women, Indigenous people and nature. Constantine insisted that the Aramaic gospels of the Indigenous Aramaic-speaking teacher Yeshua (whom we know as Jesus) be destroyed, because they referred to the birther of the cosmos and the creation — a female concept. The original Aramaic gospels have only recently been retranslated. The male Catholic priests worshiped a male god safely removed to heaven, so he would not interfere with their human power. Indirectly, the priests ruled societies and influenced the rise of science for more than 1,500 years. Christianity split into many groups, but almost none understand how Yeshua and his disciples as indigenous people revered women, and chose the truth of Mother Nature over male power. In the present era, Pope Francis understands many of these issues, and has pushed successfully for wise strategies



*Mother Nature is hot. (Flickr/Philip Edmondson)*

on global climate change, and apologized for the abuse of women and indigenous people by priests. Other male power groups like the Southern Baptists still allow their priests to rape women.

**The third is that the Indigenous world view which understands Mother Nature takes precedence over amoral capitalism.** Historically,

this relates to why European and North American societies tried so hard to stamp out indigenous thought, and suppress the culture. For many centuries, Catholic priests supervised the killing of millions of Indigenous people, both to seize their land, and because they feared the Indigenous teachers, who had a better understanding of the teachings of the Indigenous Jesus. On a more humorous note, there are three groups of Indigenous people across Canada, who are associated with three sets of grizzly bears that have not interbred in the past thousand years. Scientists are puzzled how this is possible. But the Indigenous people laugh. They are "our bears" — we have been together through the seasons for a thousand years.

Will you come into the forest so you can meet mine?

**The fourth is the powerful concept that it is the "Truth that set us Free"** to act on behalf of the Creation and Mother Nature. We attribute this deep understanding to the Indigenous Aramaic teacher Yeshua. He had an intimate connection to the Creation, and embraced women as his disciples, so the Jewish and Roman authorities had to kill him, since he was a threat to their male power. However, it is important to understand that the overt takeover of the climate system by Mother Nature is not a religious issue. It is just the reality of the entire web of life and the Creation here on Earth that Yeshua understood so well. However, this truth is still today a direct threat to human power over nature. Many believe we are the "only" intelligent species and that we are "in charge." Apart from indigenous people, we are the only species on Earth that does not listen to, or communicate directly with Mother Nature, even though we could. The Fossil Fuel Empire lies to bury the fact that "business as usual capitalism" is destroying the stable climate system and much of life on Earth for profit. So Mother Nature, which is far more powerful than we are, appears to be taking over on behalf of all of life on Earth. Buried in well-funded webs of lies, very few in our world can face the truth.

The younger generation must face the truth of the real world we live in, which means also stepping into a frame where Mother Nature can read their minds and help them in deeper collaboration. All the work you do to help the renewable transition will then benefit.

The sequence of papers on my experience are at alanbetts.com/research. The first in an introduction to climate change and the Fossil Empire. The second is a review of my life and journey. The third has this review in the introduction.

(1) Betts AK, (2021). *Climate Change and Society*. *AIMS Geosciences*, 7, (2): 194–218. DOI: 10.3934/geosci.2021012. (2) Betts A.K. (2022): *The Earth's view of climate change*. *AIMS Geosciences*, 8(2): 224–232. DOI: 10.3934/geosci.2022013. (3) Betts, A. K. (2023): *Accelerating Climate Change and the Living Earth*. *International Journal of Environment and Climate Change*, 13, 2, pp 1-11. DOI: 10.9734/ijecc/2023/v13i21639

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# Green Energy Times December 2023



Dr. Alan K. Betts

## Ongoing Flooding of Our Landscape

My article in the October edition of *Green Energy Times* discussed the take-over of the climate system by Mother Nature to save living species on the planet. I contrasted this with frequent flooding of our landscape to weaken capitalist enterprises that are destroying so much for profit. This is very difficult for us, humanity, to grasp since we are not well-connected to the world of nature. I hope some of you (I will use you to refer to all of us) sat with the natural world till she communicated with you, because then the Creator can help your intuitive understanding and connections. I hope also that some of you studied the four keys for understanding the living Earth in human terms, because we have to face the real world and not remain lost



July 2023 flood damage in West Point, NY. (Courtesy image)

in our destructive past. Transferring this real knowledge to the next generation is critical.

The past few months will have shown you all how much our forecasting ability has slipped away into a new world of floods and coastal storms with this different agenda.

Readers in all of New England have had a summer of rainstorms. Parts of northern Vermont had a historic eight to 10 inches of rain on July 9-10 when a large moisture

plume came off the warm Atlantic. This caused catastrophic flooding damage as two months' worth of rain fell in two days on already wet ground. Many rivers hit major flood stage, approaching or exceeding the flood level from tropical storm Irene in 2011. This was a helpful reference for Vermonters for both preparation and recovery.

A slow-moving band of thunderstorms on August 3 slowed down over the Middlebury area and dumped more than six inches of rain in three hours, a typical month's worth. This led to flash floods and major road damage to Routes 125 and 116.

A storm stopped over Leominster, MA, northwest of Boston on September 11 for almost five hours, dropping around 10 inches of rain that caused extensive

## Ongoing Flooding of Our Landscape

*Cont'd from p. 32*

flooding damage. Storms continued in Massachusetts, and then on September 15, Hurricane Lee passed offshore up the northeast coast as a massive weakening storm bringing coastal wind and large waves. Lee then brought major rainfall to eastern Maine on September 16.

Tropical storm Ophelia came ashore in North Carolina on September 23 and moved north up the coast. It dumped a historic eight inches of rain on NYC on September 29, flooding the city including the subway system, causing immense damage.

Our warm months in Vermont ended with a sharp transition. October 28 was warm and sunny for the Saturday Rutland Halloween Parade; but October 29 and 30 were 25 degrees colder with rainy weather, followed by a week with several morning frosts.

On a planetary scale severe storms give a quite stunning global picture. We are moving into a new world.

Mexico was struck by the worst storm ever from the Pacific Ocean, when Hurricane Otis spun up very rapidly in just 12 hours, stunning both modelers and forecasters. It made landfall early on October 25 near Acapulco as a Category 5 hurricane with 165 mph winds and higher gusts. The hurricane left catastrophic devastation, flooding streets, wiping out power and communications, and destroy-



*Hurricane edges towards North Carolina. (ABI imagery from NOAA's GOES-16 Satellite)*

ing or damaging as many as a 200,000 buildings and 60,000 businesses. Acapulco's oceanfront high-rises were built to withstand the region's powerful earthquakes, but weren't designed to handle anything close to Otis's 165 mph winds. Rescue efforts are struggling to help and resupply the community more than a week later, and total casualties

onshore and at sea are still hard to assess.

On October 26, Cyclone Lola struck the islands of Vanuatu in the southwest Pacific Ocean as a category 4 storm, which was the strongest October cyclone on record in that basin. The islands were cut off with severe damage.

Far away in the Arabian Sea, Cyclone Tej built up to a strong Category 3 storm, one of the strongest on record there. While Tej weakened, it still made landfall as a strong tropical storm, a rarity in recent historical records for eastern Yemen. Seventeen inches of rain was recorded in the city of Al Ghaydah, which is over eight times its average annual rainfall of only two inches. This led to massive flooding in eastern Yemen and far southwestern Oman on October 24-25.

The other side of India, 275,000 people were forced to flee as Cyclone Hamoon, a category 2 storm struck south-eastern Bangladesh on October 24.

The Atlantic was by contrast relatively quiet. Hurricane Tammy was a category 2 storm, heading for Bermuda, but then it weakened, stopped moving and faded away.

The UK found itself besieged by a mid-latitude storm Babet. Rivers overflowed their banks in North Yorkshire, the Midlands, and in the southwest, causing major flooding. Residents returned home to scenes of devastation, with their homes damaged by the destructive power of the floods. I am watching because we are planning to visit my 86-yr-old step-mother, but the hotel we had booked was so badly flooded that it will be closed for six months. After Babet came a second storm named Ciarán bringing even stronger winds, heavy rain and flooding to both southern England and north-western France, cutting off power to more than a million people. This storm moved on into Italy bringing eight inches of rain in three hours to a region just east of Florence and went on to flood much of Italy. In Mother Nature's world this may be because the Pope was unable last week to face the power evils of the Catholic Church that are still destroying life on Earth, seventeen hundred years after they were imposed by the Roman Emperor Constantine.

When asked what to expect for the coming winter, I just smile. A few years ago, we have had some warm temperatures and my grandchildren were able to dig under my rye grass cover crop in January, and even February one year. I am planting my rye cover crop as usual, but the rapid shift of extremes as the global

jet stream shifts into new high-amplitude four-wave modes around the Earth, at a time of El Nino in the ocean and near solar maximum, limits our forecasting ability. A large amplitude powerful wave this Halloween spanning the whole US brought freezing temperatures and some snow to many of the central states. Downstream across the Atlantic this strong wave helped drive storm Ciarán.

So much is going on globally on Mother Nature's agenda, like the fast melting of Antarctica, where the ocean circulation is shifting in ways we do not understand or measure. We are also oblivious as a society to the reality that on larger scales, solar flares are under her control and our satellite and communication infrastructure is vulnerable.

The central issue is whether humanity is willing to join the rest of the species on Earth and communicate directly with the Creation, so that she can help us. Or whether our society will remain locked in the criminal destruction of most of life on Earth to maximize profits for a few thousand individuals and businesses. Given the corrupt disintegration of the U.S. political system, it may be quite a while before Mother Nature's flooding wakes us up.

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