

Welcome to this week's presentation & conversation hosted by the **Canadian Association for the Club of Rome**, a Club dedicated to intelligent debate & action on global issues.

The views and opinions expressed in this presentation are those of the speaker & do not necessarily reflect the views or positions of CACOR.

Understanding Climate Change as Mother Nature Takes Over.

Biography: Dr. Alan Betts of Atmospheric Research in Pittsford, Vermont, USA, is a leading climate scientist with papers and talks at <https://alanbetts.com>. He is a Fellow of the American Geophysical Union (AGU), the American Meteorological Society (AMS), the Royal Meteorological Society, the American Association for the Advancement of Science, and a past-president of the Vermont Academy of Science and Engineering. He was the AMS Robert E. Horton Lecturer in Hydrology in 2004; the AMS Jule Charney Award winner in 2007, and the first recipient of the Bert Bolin Global Environmental Change Award from the AGU in 2016. The mission of Atmospheric Research is to understand the Earth's weather and climate, to develop improved earth system models; and to help society understand the existential challenge of global climate change as the Creator takes over to save life on Earth.

Description: This talk is an update to my 2022 CACOR talk. We have seen an increasing number of extreme events that suggest the Creator has taken over the climate system with its own agenda. The goal seems to be to reduce the destruction of species on Earth by flooding the fossil fuel industry and the coasts to weaken capitalism. Simultaneously our forecasting ability is being challenged by the increasing global web of managed connections in the complex ocean-atmosphere system.

The presentation will be followed by a conversation, questions, & observations from the participants.

CACOR acknowledges that we all benefit from sharing the traditional territories of local Indigenous peoples (First Nations, Métis, & Inuit in Canada) and their descendants.



Website: canadiancor.com
Twitter: [@cacor1968](https://twitter.com/cacor1968)
YouTube: [Canadian Association for the Club of Rome](https://www.youtube.com/channel/UC...)
2024 April 17 Zoom #193



Understanding Climate Change as Mother Nature (Creator) Takes Over



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Canadian Association for the Club of Rome

CACOR

April 17, 2024

Betts (2021): Climate Change and Society

AIMS Geosciences, 7(2): 194–218. DOI: 10.3934/geosci.2021012

Betts (2022): “The Earth’s View of Climate Change”

AIMS Geosciences, 8(2): 224–232. DOI: 10.3934/geosci.2022013

Betts, A. K. (2023): Accelerating Climate Change and the Living Earth.

IJECC, 13, 2, pp 1-11. DOI: 10.9734/ijecc/2023/v13i21639

January 3 and Feb 5, 2020



January 3, 2020
Digging cover crop
(smart resilience)



February 5, 2020
Soil still unfrozen

Overview

- **Mother Nature is taking over climate**
 - **Since Global Climate Crisis has arrived**
- **Fossil fuel Empire responsible**
 - **“Corporations with fossil fuel interests”**
 - **Lied about climate change since 1978**
- **Historic Clash between the two**

Clash of Realities

Mother Nature/Creator

- 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 & control
- *“We’re in charge”*

Mother Nature Takes over Climate

[*Green Energy Times: Oct 2023*]

Four keys for understanding the living Earth in human terms

First, shift to colloquial image “Mother Nature is taking over the climate system” *Powerful because this indigenous concept has huge advantage that it is free from the male power syndrome that has contributed so much to the exploitation of the planet and the current destruction of life on Earth for profit.*

The second is that the Council of Nicaea in 325AD 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.

He destroyed the Aramaic gospels of the Indigenous Aramaic-speaking teacher Yeshua (Jesus), because they referred to the birther of the cosmos and the creation.

- **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**
- **The fourth is the powerful concept that it is the “Truth that set us Free” to act on behalf of the whole of Creation - originated with the indigenous Aramaic teacher Yeshua – still the Truth!**

“Step into the Creator’s world, see the interconnected web of the whole of creation: this will set you free to back the entire Creation.”

“Mother Nature is taking over to save species on Earth”

[Note: no relation to Catholic/Protestant doctrine]

Indigenous frame is a challenge for many

- **3 Indigenous populations with Grizzly bears**
 - Living close to the Canadian coast in British Columbia
 - **Three distinct groups of Grizzlies in region [900 yrs genetic data] aligned to three indigenous language families**
 - **No physical barriers separates the bears**
 - **Knowledge-sharing connects bears and people**
 - **Culturally connected: Scientists stunned**
- Finally scientist asks **one Elder who smiles**: They have been our bears for ever! Come into the woods and I will introduce you to mine by name. I have known them since I was 5-yrs old! **Scientist gets it – but he can't face a 75yr-old Grizzly!**

Alan Betts (BAMS 1976)

- *“If something is critical & you are the only capable, its your responsibility” (Ludlam)*
- ***After GATE 1974, I asked who will take responsibility for the climate system?***
- **Reply: “Scientists should do what society tells them”**
 - Meant: No-one accepts responsibility for climate
 - 1976 **Critical issue: Understanding climate system came to me**
 - *Stepped out of academia; built passive solar house in Vermont with solar panels in 1978*
 - *5-yr grants (zero overhead) from NSF as individual for 35 years*
 - **1980: Free to go searching for the Truth**
 - **How do we merge Science with Wisdom?**

Fossil Empire Deceit: 1978

- **1978**: Exxon senior scientist James Black modeled impact of doubling CO₂ on climate
 - **Told management** that man has a time window of **five to 10 years** before critical energy decisions
 - **Exxon silenced him and started a web of lies**: first denial, later to shift responsibility to individuals
 - **139 Republican deniers cost a mere \$61 million**
 - **Now most of Congress** accepts money to ignore the Fossil Empire's criminal actions destroying life on Earth
- **Global ecocide by Fossil Empire to keep profits flowing, with political help & large subsidies (US)**

Glimpses of my Journey

[from Betts (2022): “The Earth’s View of Climate Change”]

- In 1980 when I asked: “How can science be merged with wisdom” I was told “Ask Yogi Ramsuratkumar in Tiruvannamalai (India) – he would know” (send a telegram!)
- But first on arrival, I sat in the meditation room of his teacher *Ramana Maharshi* and slipped gratefully into meditation
- The Creator noticed me at once & knew I needed ‘Real Help’
- I was taken back & forward through my life for an hour and shown as a thread in my brain my role on Earth and my connection to Creation.
Transformed, I emerged ecstatic and joyful for days
 - As a ‘scientist’ I had no concept that a Creator was watching!
 - And managing Creation!
 - I then sat with a living saint *Satya Sai Baba* for weeks
 - I learnt the indigenous mindset from *Ven. Dhyani Ywahoo in VT*
 - Much later I learnt the words of indigenous *Aramaic teacher Jesus*
Join the Creation: see the “Truth that will set you Free”

Shift to Earth-system Frame

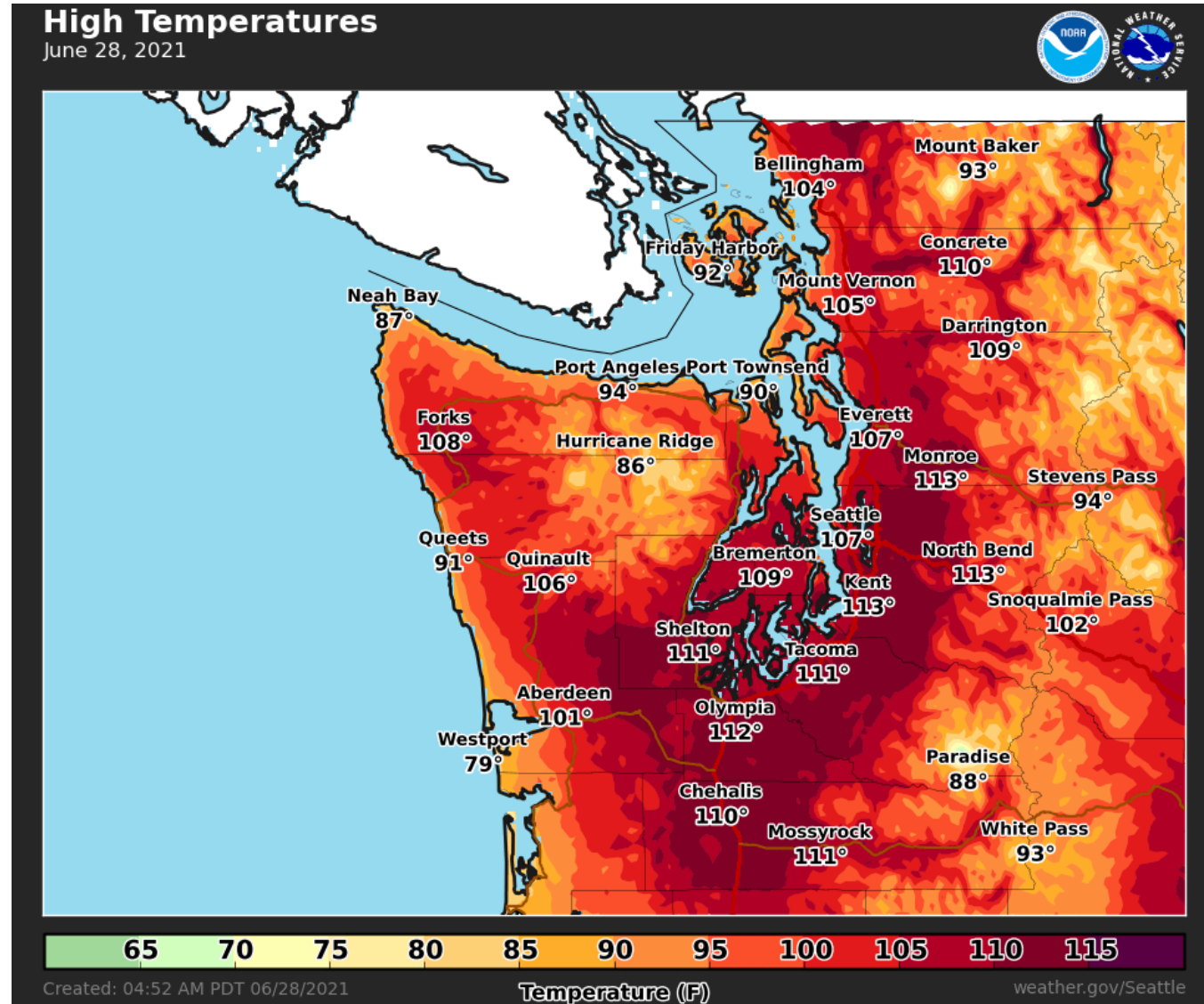
- **Mother Nature or Fossil Empire?**
 - “Mother Nature” (Creator) is in charge: She is the indigenous frame!
 - *Waited 40 yrs (1980-2020) for us to take action, & has now taken over to save life/species – not capitalism*
- **Explore recent climate disasters from Mother Nature’s perspective**

Northwest US & British Columbia

- **Extremes of 27-29 June 2021**
 - Temperatures were 8-10°F (4 to 5°C) above historic maxima
 - Broke all Canadian record that had stood for 80 years by 8°F (4.6°C); Ended in fires
- **November: Pacific atmospheric river**
 - A month of rain in 2 days on burnt region in BC
 - *Landslides closed TransCanada highway & railway*
 - *Cutting export of liquid natural gas, tar sands that are destroying life on Earth*

Pacific NW June 28, 2021

- Washington
- 3 days:
 $T \geq 110^\circ\text{F}$ (43°C)
- Record T's
- “1 in 1000yr”
- Climate Change



Lytton BC, Canada: 3 days of Records



- **Scottduncanwx**
 - Planet Earth
- **Canadian record crushed on all 3 days June 27-29**
- **Total +4.6°C [8°F]**
- **Reached 49.6°C [121°F]**
- **Fire, June 30 on, destroys 90% large scale**
- **Month of rain in 2 days in November closed TransCanadian highway & railway**
- **Closed fossil fuel exports**

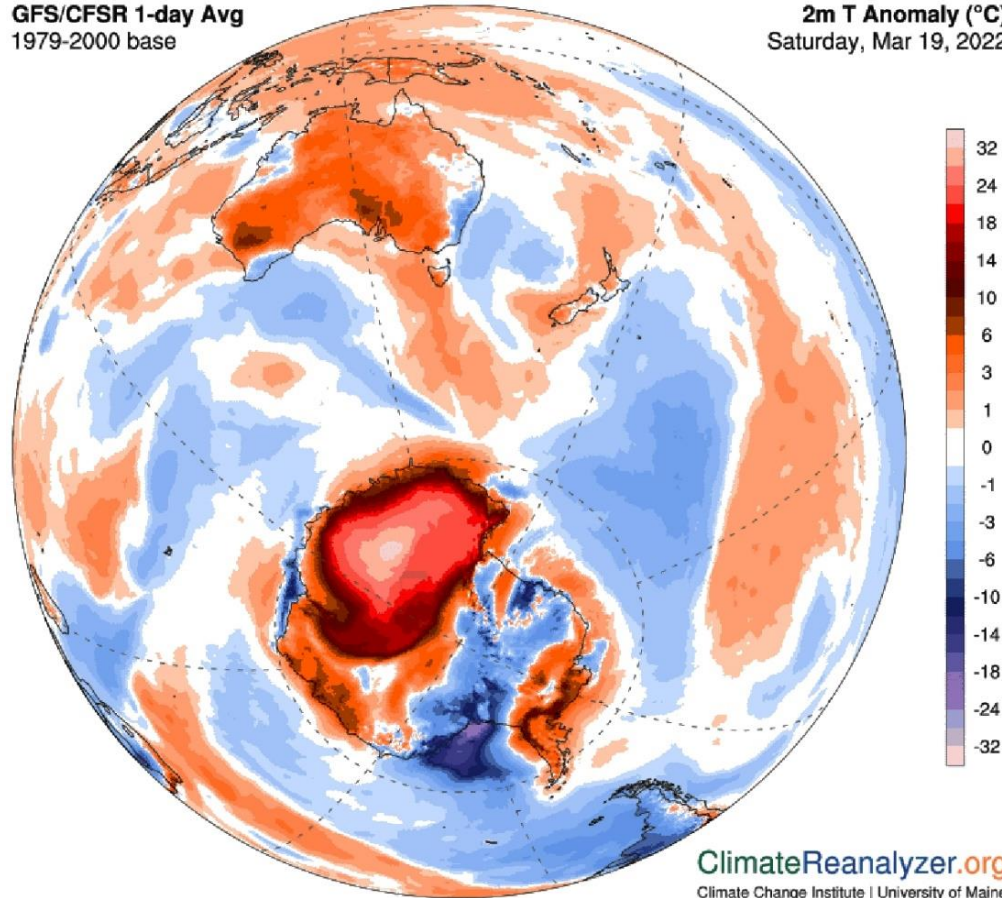
Storm Fiona and Hurricane Ian

- **Sept 23, 2022: Fiona**, “Most extreme storm ever to hit eastern Canada”. \$1B damages. Floods will continue as **Canada develops fossil fuel industries to make billions destroying the Earth**
- **Sept 28, 2022: Hurricane Ian** after slowing down and amplifying to Cat 4+ off west Florida coast, comes ashore with devastating rain, storm surge and floods. *[DeSantis is anti-climate change, anti-renewable energy with a neofascist mentality - and Mother Nature can read his mind]*
 - **Nov 10, 2022: Hurricane Nicole** hit Florida’s east coast: damage/flooding
- **Mother Nature/Creator knows what she is doing**
 - *so don’t build on the coast and wake-up!*

Antarctica: Extreme T Record

GFS/CFSR 1-day Avg
1979-2000 base

2m T Anomaly (°C)
Saturday, Mar 19, 2022



World
+ 0.5 °C

Northern Hemisphere
+ 0.8 °C

Arctic
+ 2.3 °C

Tropics
+ 0.3 °C

Southern Hemisphere
+ 0.3 °C

Antarctic
+ 3.7 °C

- March 19, 2022
- New Antarctic record on 10000 ft icecap
- + 70°F (40°C) in 2 days
- “Impossible”
- Weather station in Concordia on top of the E. Antarctic plateau
- “Looks as if Earth is exploring how to melt all icecaps if needed”
- Icecap melt might give 20-40 ft sea-level rise and rein in catastrophic behavior of humanity

Southern Antarctic Circulation

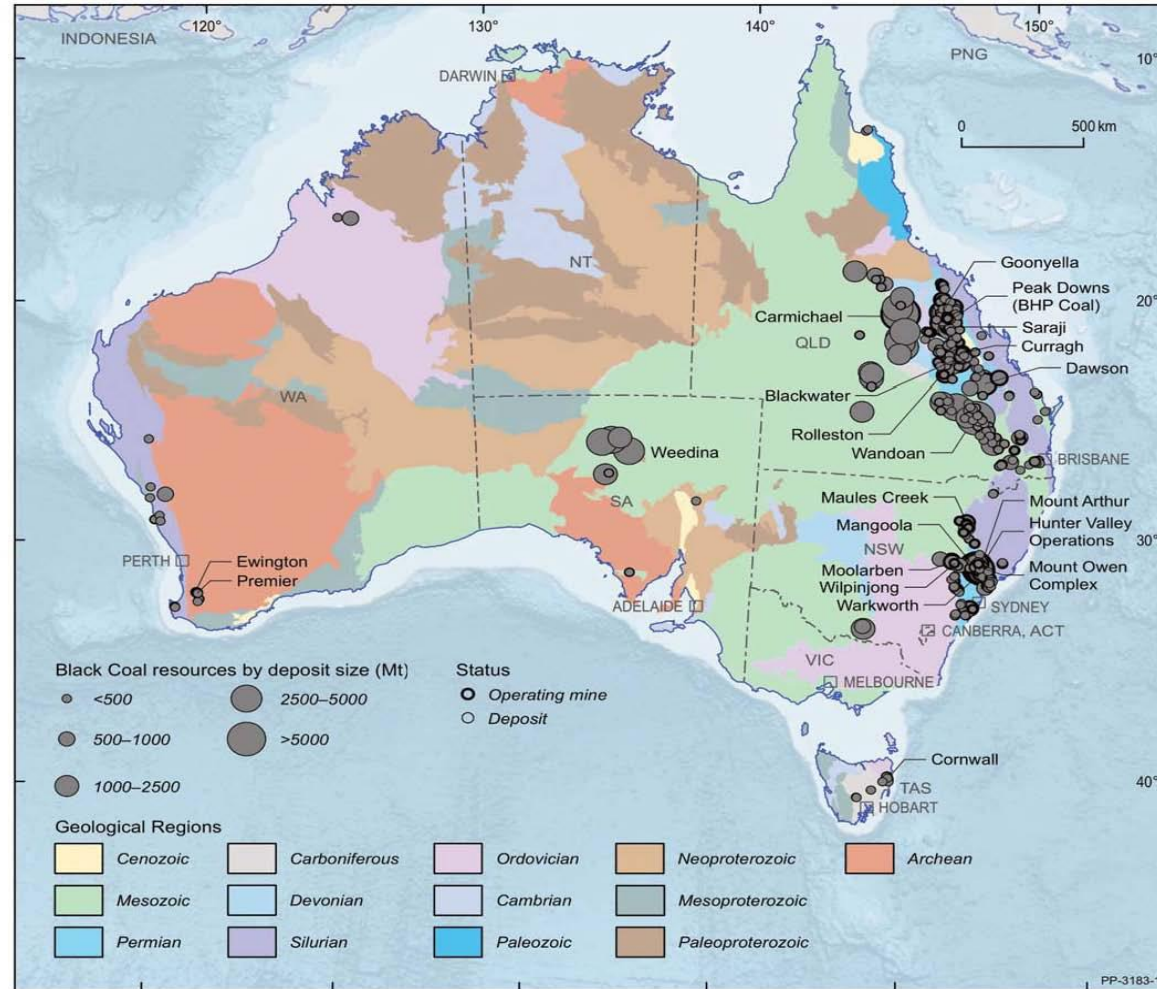
- Antarctic Circumpolar Current (ACC) is the most powerful current on Earth
- Circles Antarctica, free from continental barriers, links all the oceans
- Global climate conveyor belt, redistributing heat and nutrients across oceans.
- ACC is huge and powerful, reaching depths to the ocean floor of up to 4,000 meters and spans widths of up to 2,000 kilometers

- Over the last few decades, observations show it has got about 40% stronger

- Recovery of past 5 million years of ACC behavior shows link of warming, speedup, major loss of Antarctic ice [Lamy, F., Winckler, G., Arz, H.W. et al. (2024): Five million years of Antarctic Circumpolar Current strength variability. Nature 627, 789–796. <https://doi.org/10.1038/s41586-024-07143-3>]

- Fossil Empire's Climate Warming will drive sea level rise and flood coasts

Eastern Australian Coal Mines



Eastern Australia

- *Largest coal exporter in world: 45% annual cash profit on \$44 billion*
- **July 2-4, 2022** : Four ft of rain on Sydney and its coal mines
 - Queensland also had a series of floods
 - Pacific circulation had changed
- **Oct 13-25, 2022**: Massive floods up the whole eastern coast of Victoria, New South Wales and Queensland (*“Uninhabitable”*)
 - Some areas got four times the mean October rainfall in 24 hrs.
 - NSW: More catastrophic floods Nov 11-13. Rescue teams from NZ
- *Australia says it has no responsibility for Climate Change* since the coal is burnt elsewhere (*and its profits are huge!*)
- Mother Nature disagrees!

Review of global climate status

- New record temperatures in 2023 reached the 2015 Paris Agreement threshold 1.5°C
- 2023 strange: global SST's rose in April, May, June, July, Aug, Sept & onward
[Usually the maximum is in March at end of SH summer]
- Since the start of 2024, SSTs continued to climb; new records in Feb, March
- Scientists starting to worry. Gavin Schmidt, NASA-GISS said it is disquieting:
"we haven't really known what's going on since about March of last year"
- Not surprising as the scientific community has not grasped that the takeover of the climate system by the Creator to save life on Earth means the rule-book has changed
 - beyond our historic analyses *in ways we do not understand*
- As waves of storm systems have come up the eastern coast this winter,
 - Vermont where I live has seen flooding along with record winter temperatures

East Coast Rainstorms

- **July 10-11, 2023: Great Vermont Flood; 9” across mountains and Montpelier matched TS Irene**
- **Aug 3-5, 2023: Torrential rain in Addison & Rutland counties**
- **September - Floodwaters from tropical storm Ophelia inundate coast from N. Carolina to New Jersey**
- **Sept. 30th, 2023: 5 inches of rain falling across parts of New York**

Clash of Realities/Goals

Mother Nature/Creator

- Indigenous world
- Preserve web of life
- *She is the Truth that sets you Free*
- *Power unlimited*
- *Join her: she can read your mind and help you!*

Capitalism/Fossil Empire

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- Make money: \$\$\$
- Use money and lies to bribe & control
- *“We’re in charge”*

Human talents and limits

- The massive eruption of the Hunga Tonga volcano on Jan 15, 2022

The global atmospheric shock-wave circled the earth many times in both directions, and first sent a tsunami across the Pacific. *With our network of satellites and models we track everything precisely and issue warnings*

Yet scientists noticed that creatures along the Pacific coast simply moved to higher elevations well before the approaching tsunami was visible (as they always do). They don't read our satellite data, so how do they know?

Mother Nature just tells them to move and they listen. *We think we are the 'intelligent ones in charge' but we are the only species foolish enough not to listen to the Creator! Our technology is our current substitute.*

We will now have to surrender to her perspective as climate extremes increase, but this is going to be hard for many to grasp

My suggestions to you

- **Discuss this talk**
 - *listen to the spread of different reactions*
- **Ask who feels connected to ‘Mother Nature’ and would like to explore deeper**
 - *Connect with her and report back*
 - *Try connection in pairs: with diversity or male/female*
 - **See how your group dynamics change**
 - *And your relation to Mother Nature*

Can Creator Bypass ‘Our Physics’?

- Yes: She is responsible for physics
- She can if she chooses “suspend gravity”
- Example: Sitting meditating on a rock by a rushing stream in the Adirondacks (see paper)
 - I was ‘lifted up’, arms first, joints unfolding up smoothly & elegantly from cross-legged position
 - Into a new dance to the Four Directions to correct my misperception! *(I had a choice to opt out!)*
 - *To show me the Truth of who is in charge!*

“Technology is our substitute”

- When a tidal wave, like from Hunga Tonga, sweeps across Pacific, satellites track precisely when it will hit the West Coast, and issue warnings
- *But always, long before the wave can be seen, mobile creatures move uphill to be safe*
- Scientists mutter: How do they know, without our satellite data?
- *Ecologists whisper: Mother Nature tells them
and they Listen!*
- *We too will have to Listen! [so difficult for politics/science]*