

August 14, 2023

News and Notes

For this week I'll be blogging lightly. It's summertime and we will be on vacation. The next regular blog on geology and geopolitics will be August 28.

Here are some photos from places we visited this past week on our vacation.



Artist's Paint Pots at [Yellowstone National Park](#)

Old Faithful Geyser





**Turtle Mountain, Crowsnest Pass, Alberta,
Site of the 1903 [Frank Slide](#)**



[Nikka Yuko Japanese Garden](#), Lethbridge, Alberta



[Head-Smashed-In Buffalo Jump, Alberta](#)

Research

- [Global methane emissions from rivers and streams](#); Phys.org summary [here](#).
- [Detrital zircon and apatite U-Pb provenance and drainage evolution of the Newark Basin during progressive rifting and continental breakup along the Eastern North American Margin, USA](#).
- [Early Ordovician seamounts preserved in the Canadian Cordillera: Implications for the rift history of western Laurentia](#).
- New Zealand: [Subducting volcanoclastic-rich upper crust supplies fluids for shallow megathrust and slow slip](#); Phys.org summary [here](#).
- [Refertilized continental root controls the formation of the Mianning–Dechang carbonate-associated rare-earth-element ore system](#).

Paleontology

- [Pre-Younger Dryas megafaunal extirpation at Rancho La Brea linked to fire-driven state shift](#); Eureka Alert summary [here](#); related article in Science [here](#)
- [Functional morphology of the Triassic apex predator *Saurosuchus galilei* \(Pseudosuchia: Loricata\) and convergence with a post-Triassic theropod dinosaur](#); Eureka Alert summary [here](#).
- [You're reading this because an asteroid killed the dinosaurs, allowing mammals to dominate the Earth. But why?](#)

Energy and Mining

- Tim Morgan: [The Surplus Energy Economy](#).

- [Comparison of force and moment tensor estimations of subevents during the 2022 Hunga-Tonga submarine volcanic eruption.](#)
- [A dramatic volcano eruption changed lives in Fiji 2,500 years ago. 100 generations have kept the story alive.](#)
- [On the use of tsunami-source data for high-resolution fault imaging of offshore earthquakes.](#)
- [Aftershock study of the 2019 Ambon earthquake using moment tensor inversion: identification of fault reactivation in northern Banda, Indonesia.](#)
- [M6.3 earthquake shakes central Colombia, seismometer records severe shaking; USGS report \[here\]\(#\).](#)
- [M5.3 earthquake in northeastern Bangladesh is reminder of underlying threat.](#)
- [Predisposing Factors for Shallow Landslides in Alpine and Hilly/Apennines Environments: A Case Study from Piemonte, Italy.](#)
- Wildfires, opinion from the Wall Street Journal: [The Fire in Maui and the Lesson of Greece.](#)
- [Yellowknife fires: Evacuees pack road and air routes ahead of noon deadline.](#)
- We were planning to visit: [B.C. expected to declare state of emergency as homes near West Kelowna destroyed by fast-moving wildfire.](#)
- [What sparks US wildfires: Power lines, burning trash and lightning.](#)
- ['Unprecedented' Storm Strikes California as Emergency Is Declared.](#)

People Acting Badly

- [Nigeria Has Lost \\$46 Billion Worth Of Crude Oil To Theft.](#)
- He didn't check out the geology before building the bridge, then it collapsed: [Sask. engineer slapped with an 18-month suspension after designing bridge that collapsed hours after opening.](#)

Standard Caveat

The purpose of my weblog postings is to spark people's curiosity in geology. Don't entirely believe me until you've done your own research and checked the evidence. If I have sparked your curiosity in the subject of this posting, follow up with some of the links provided here. If you want to, go out into the field and examine some rocks on your own with the help of a good field guide. Follow the evidence and make up your own mind.

In science, the only authority is the evidence.