

Earthweek: Diary of a Changing World

Week ending Friday, January 17, 2020

By Steve Newman

Greenhouse Earth

Weather agencies of the United States and United Nations calculate that 2019 was the second-hottest year on record, with the global warming threatening to unleash even more severe weather events in the future.

Worldwide, last year's heat across the planet's land surface was second only to that recorded in 2016.

A new study also found that Earth's oceans have warmed to a level not seen before in modern history.

Researchers say this is because most of the accumulating heat from the greenhouse effect has so far been absorbed by the oceans.

The past decade was also the hottest on record.

Earthquakes



An aftershock of Puerto Rico's destructive magnitude 6.4 temblor on Jan. 7 caused millions of dollars more in additional damage.

- Earth movements were also felt in islands of the eastern Caribbean, Istanbul, Pakistan-controlled Kashmir, Tokyo and the New York-Canada border area.

Prolific Father

A species of Galapagos giant tortoise once on the brink of extinction has been saved with the help of a half-century of tireless breeding from one of only three surviving males.

Since 1976, "Diego" has fathered 800 of the now 2,000 *Chelonoidis hoodensis* of Española Island. But since the species is no longer in danger and the successful captive breeding project is ending, the pressure is now off for the approximately 130-year-old Diego.

Experts say the playboy has a "big personality" and is aggressive, active and vocal while mating.

Diego will be allowed to live out his golden years in leisure after finally being released back into the wild on his native Española Island, where he was captured by scientists 80 years ago.

Philippine Blasts

Strong eruptions of the Philippines' Taal volcano destroyed homes and crops, and sent ash falling as far away as Manila, 60 miles to the north.

The volcanic debris brought the capital to a near standstill and briefly shut down air traffic at the main international airport.

A half a million people whose homes are in the danger zone around Taal were ordered to evacuate, but many were refusing to leave despite ongoing rumblings.

While able to produce powerful and dangerous eruptions, Taal is one of the smallest active volcanoes on the planet.

Circumnavigating Smoke

NASA satellite images show the thick pall of smoke from Australia's firestorms, which reached South America last week, has blown entirely around the Southern Hemisphere, approaching Australia from the west.

Besides choking most of southeastern Australia, the smoke has also created an air pollution crisis downwind in New Zealand and darkened that country's glaciers after falling on them as soot.



Diego will finally retire to his home turf after a half-century of siring 800 endangered Galapagos tortoises. Photo: Galapagos National Park

Radioactive Habitat

Wildlife is thriving in the most contaminated areas around Japan's crippled Fukushima nuclear power plant, which suffered meltdowns following a devastating 2011 offshore quake and subsequent tsunami.

Photos from automatic cameras set up by the University of Georgia showed that more than 20 species are flourishing in various areas of the irradiated landscape.

They found almost three times as many species such as wild boar, hares, macaques, pheasants and fox living there than in the slightly contaminated areas where people are able to live.

The research does not address the health and welfare of the animals in the presence of such radiation.

Tropical Cyclones



Tropical Cyclone Claudia passed well off the coast of northwestern Australia.

- Fiji was on alert late in the week for Tropical Storm Tino, spinning up to the northwest of the South Pacific island nation.

