



the weekly anthropocene



dispatches from the wild, weird world of humanity and its biosphere

By Sam Matey, January 8 2020

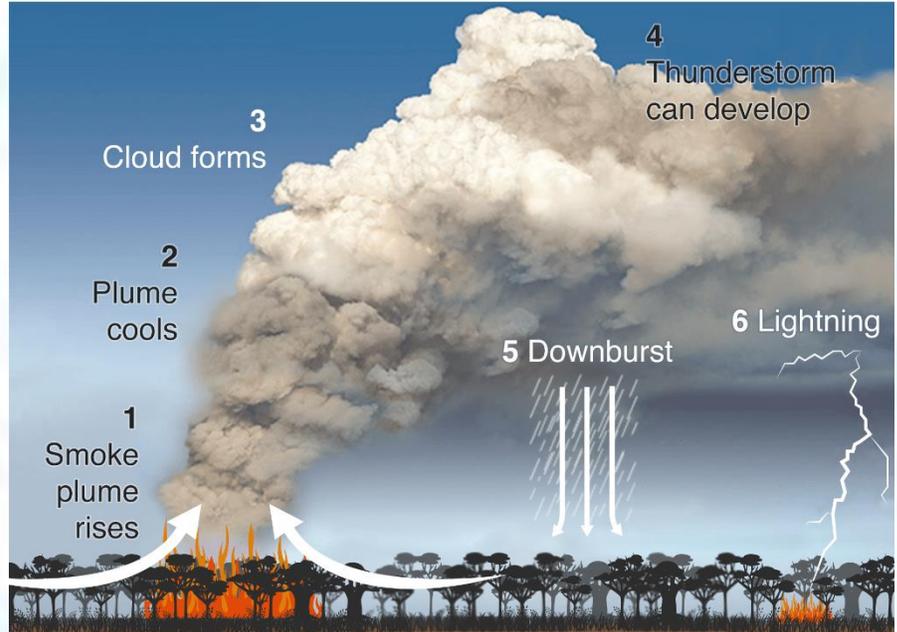
Australia. The unprecedentedly devastating wildfires in Australia rage on, and the situation continues to get both more tragic and more surreal. Despite rain and cooler temperatures, the mega-fires blaze on (and are projected to do so for months), creating their own weather systems in the form of “pyrocumulonimbus events” or fire thunderstorms, that force smoke clouds up into the stratosphere. Smoke from the fires has crossed South America, hazing the skies half a world away from their origin, and NASA reports that the vast pall of smoke “is expected to make at least one full circuit around the globe.” One widely circulated scientific estimate is that one billion animals have likely been affected by the fires, with most probably killed so far. This is as good an estimate as any, but there is no way to know for certain, and the eventual death toll may well be even higher.

Amid this mind-boggling catastrophe, one particularly compassionate effort draws notice. The government of New South Wales, one of the Australian states hardest-hit by the fires, has dropped over 2,000 pounds of carrots and sweet potatoes near brush-tailed rock wallaby colonies. The quick little wallabies (*Petrogale penicillata*, pictured with recent largesse) tend to be able to escape the fires themselves, but are then left with a desolate ash-land with nothing to eat. Amid the climate crisis, such acts of kindness are to be treasured.

For a run-through of options to donate to help protect Australia’s wildlife from the fires, see tinyurl.com/vm2n4sx. For more on the smoke circling the globe, see tinyurl.com/qlu8mt6. For a solid overview of the status of the fires overall, see www.bbc.com/news/world-australia-50951043. For more on Operation Rock Wallaby, see <https://tinyurl.com/thb4r8e>.

Bushfires can create their own weather

How pyrocumulonimbus clouds develop



Source: Australia's Bureau of Meteorology





the weekly anthropocene



dispatches from the wild, weird world of humanity and its biosphere

By Sam Matey, January 8 2020

Indonesia. In the biggest new discovery of new bird species in over 100 years, a research team has identified 5 new species and 5 more new subspecies of songbirds on three Indonesian islands. A six-week ornithological expedition to the islands of Peleng, Taliabu, and Bakudata, all off the much larger island of Sulawesi (aka Celebes) took place in 2013, and final results (after genetic and other analyses) have only now been published. The islands are part of Wallacea, a biogeographic region stretching across eastern Indonesia known for its biodiversity. The new species are the Taliabu Grasshopper-Warbler, Taliabu Leaf-Warbler, Taliabu Myzomela (pictured!), Peleng Leaf-Warbler, and Peleng Fantail, while the new subspecies are the Togian Jungle-Flycatcher, Banggai Mountain Leafoiler, Sula Mountain Leafoiler, Taliabu Snowy-browed Flycatcher, and Taliabu Island Thrush. This new motherlode of birds reminds us of Earth's amazing wealth of unique life-forms. For more, see tinyurl.com/vrdywgm, tinyurl.com/tnn5vkb, and tinyurl.com/s42lxsr.



Japan. In 2011, a wide area was left abandoned after a tsunami and earthquake severely damaged the Fukushima nuclear power plant, causing three nuclear meltdowns and releasing radioactive material to the extent that 154,000 people had to be evacuated. Now, a camera-trap study has taken over 267,000 photos of over 20 species across the still-uninhabited, restricted, and inhabited parts of the Fukushima landscape found that the area is home to a surprising superabundance of wildlife. Wild boars, Japanese hare, Japanese macaques (aka snow monkeys), Japanese martens, red foxes, masked palm civets, Asian black bears, raccoons, raccoon dogs (a small East Asian carnivore that looks like, but is not closely related to, raccoons) pheasants, and Japanese serow (a sort of goat-antelope) are among the wildlife species that the study found to be present in Fukushima. The researchers noted that all animals appeared to be acting normally for their species, with their habitat selection and behavior matching what would be expected if radiation was not causing them any problems. This is a fascinating example of natural rewilding—even after a nuclear accident, a simple nine years' relief from human pressures can lead to amazing growth in wildlife populations and the reestablishment of a complex ecosystem. It also underscores the extreme danger of fossil fuels compared to nuclear power: a healthy ecosystem managed to reestablish itself in nine years after the worst nuclear disaster since Chernobyl, while the worldwide slow-motion disaster of burning fossil fuels continues to wreak havoc through air pollution deaths, toxic spills and waste dumps, and the climate crisis. For more, check out tinyurl.com/yjm3jkdd. For the researchers' YouTube montage of some of the animals, see <https://tinyurl.com/t2o4zna>!