



the weekly anthropocene



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

By Sam Matey, January 6, 2020

Coastal Dolphins. Scientists at the Marine Mammal Center in Sausalito, California have shed new light on a lethal skin disease that in recent years has begun affecting coastal dolphins around the world. Ulcerative dermatitis, also known as freshwater skin disease (pictured) is a new threat caused the climate crisis, and outbreaks have affected coastal dolphin communities worldwide. Increasingly powerful storms



are dumping more rain into coastal waters, decreasing their salinity to a level that causes patchy and raised skin lesions on dolphin bodies (pictured, above) and often eventually kills them. The disease was first noted in 40 bottlenose dolphins (*Tursiops truncatus*) near New Orleans after Hurricane Katrina in 2005. It resurfaced in Galveston Bay in 2017 after Hurricane Harvey struck Texas. And there is currently a major outbreak in Australian waters, devastating populations of the rare Burrnunan dolphin (*Tursiops australis*). This is yet another deadly indignity of the Anthropocene. For more, see tinyurl.com/FreshwaterSkinDisease.

Sri Lanka. For decades, the island nation of Sri Lanka has been plagued by human-elephant conflict. Wild Asian elephants raided farming villages looking for food and water in rice paddies-sometimes hand the villagers felt forced to protect their livelihoods by killing them. In 2019, over \$10 million of crops and property were destroyed, over 90 people were killed, and 405 elephants were killed. Conservationists have tried an array of measures to protect both the elephants and the people. In the 1990s, an array of electric fences were built, but they were too expensive to repair. Some groups tried beehive fences around villages, a tactic that's worked well to keep elephants away from people in Africa. But Sri Lankan bees don't sting as hard as African bees, and so aren't as much of a deterrent. Plus, the bees would leave to search for water in the dry season, right when the elephants were getting desperate enough to seek out farmland. Now, the Sri Lankan Wildlife Conservation Society has found a low-cost, long-term, and so far highly effective solution: planting orange trees. Observers on the ground noted that the elephants would never pull up citrus trees or eat citrus fruit, and hypothesized they were repelled by the strong smell. A pilot program planted orange trees around a few villages, and the elephants, sure enough, took detours to avoid them. Now, the program is expanding, with the clever coexistence solution of planting orange trees protecting the villagers and elephants from each other as well as providing shade and extra income. Great news! For more, see tinyurl.com/SriLankaElephantsCitrus.



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Kenya. On the Kenyan savanna, eight young Maasai women are breaking down barriers and supporting their families while protecting wildlife.

Team Lioness (pictured, thanks to Atmos), founded in 2019, consists of eight women in their twenties (current members include Beatrice Sailepu, Purity Lakara, Sharon Nankinyi, Eunice



Peneti, Eunice Maantei, Loise Soila, and Ruth Sikeita). They are the first all-female ranger squad in Kenya. Funded by the International Fund for Animal Welfare, (IFAW), Team Lioness patrols the Olgulului rangeland, a vast swath of traditional Maasai community land that surrounds 95% Amboseli National Park, an area home to a plethora of iconic African wildlife including lions, giraffes, buffaloes, cheetahs, elephants, gazelles, and hippos. All eight were the first women in their families to get paying jobs, and some are the sole breadwinners for their families. “It’s a risky job! We are not armed. We encounter snakes, aggressive buffaloes, lions, and bushmeat poachers armed with machetes in the bushes. We risk our lives to protect those of the animals,” said ranger Purity Lakara. So far, the rangers has done an exceptional job at protecting wildlife and helping compensate the community for occasional loss of livestock, while serving as role models to local girls and women along the way. Team Lioness are true heroes of the Anthropocene! For more on their epic story, see ifaw.org/projects/team-lioness, tinyurl.com/TeamLionessKenya. For updates on their lives in 2020, see tinyurl.com/TeamLioness2020.

Earth in 2020. A new study from the World Meteorological Organization found that 2020 was the hottest year since records began in 1850, a full 1.2 degrees Celsius (2.16 degrees Fahrenheit) hotter than an average year in the late 1800s. Scientists agree that a rise of 1.5 to 2 degrees C will herald catastrophic climate change. That shift of a few degrees may not sound like a lot, but here’s some context: the average global temperature in the 20th century, the 1900s, was 14 C (57 F). During the last Ice Age, the average temp was just 6 degrees C (11 F) colder. (See tinyurl.com/IceAge6Degrees). The WMO report also noted that 2011-2020 was the hottest decade on record, and the last six years have been the six hottest record. California and Colorado saw their largest wildfires ever in 2020, the North Atlantic saw a wild season with 30 tropical cyclones (Honduras is still devastated) and 9.8 million people worldwide were forced from their homes due to weather-related disasters in the first half of 2020 alone. This report is a grim reminder that even as renewables make progress, the climate crisis is just getting worse. We have a long way to go. For more, see tinyurl.com/2020Heat.