

the weekly anthropocene





Dispatches From The Wild, Weird World Of Humanity And Its Biosphere **April 13 2022**

British Columbia



In recent decades, populations of caribou (Rangifer tarandus, aka reindeer) in the Canadian province of British Columbia have declined precipitously. Logging, mining, and dams fragmented British Columbian caribou habitat in the late 20th century, and climate change brought more mosquitoes and flies, extreme weather, and diseases from northward-moving white-tailed deer to caribou around the world in the 21st. By 2013 the once thousands-strong Klinse-Za herd of southcentral British Columbia had dwindled to just 38 animals, and looked likely to completely disappear. In response, the local West Moberly and Salteau First Nations jointly started the Klinse-Za Caribou Maternity Pen program in 2014. Every March, they capture pregnant female caribou from the herd (using nets fired from helicopters!) and transport them to a "maternity pen" of fence-enclosed forest, where they are guarded from predators around the clock and fed

handpicked lichen to supplement their natural grazing within the pen area. Once the calves are born and have their legs under them, they and their mothers are released back to the wild herd in June. This targeted intervention keeps the caribou safe during the period where they're most likely to die from predator attacks, and rapidly led to much faster population growth. (<u>Pictured above</u>: the first female Klinse-Za caribou of 2022 to be captured and relocated to the maternity pen).

Furthermore, the maternity pen program is part of a broader caribou rescue strategy. The tribes started a short-term legal wolf-hunting program in the area to give the caribou a slightly less risky environment during their years of maximum vulnerability. And in 2020, the First Nations involved also signed an agreement with the provincial and federal governments to protect 3,000 square miles in the area for the caribou, and have begun restoration work including "unbuilding" logging roads.

Now, the Klinse-Za herd has tripled to 114 individuals in 2022-a world-beating rate of growth for caribou herds in the Anthropocene!

This is yet another example of how highly interventionist conservation programs, sometimes disquieting to a traditionalist pure-wilderness ethos, are often the best solutions available to pull threatened species back from the brink and forge a human-supported path forward in the Anthropocene. It's also reminiscent of other Indigenous-led innovative conservation projects that have sprung up in recent years, from the Yurok Tribe's work reintroducing California condors to the Comcáac Nation group that has released thousands of sea turtle hatchlings on the coast of the Mexican state of Sonora. Sterling work!



Electric Vehicles

Global EV fleet set to top 25 million this year China Europe ■ North America Rest of World 25M 20 2014 '15 '16 '17 '18 '19 '20 '21 2022

Source: BloombergNEF Includes battery electric and plug-in hybrid passenger vehicles. 2022 is based on BNEF forecast. European data includes EEA + UK.

Electric vehicles are seeing incredible growth, with Bloomberg estimating that there will be over 26 million plug-in vehicles on the roads worldwide by the end of 2022, up from just 1 million as recently as 2016. China, the EU, and the US have

driven most of this, but there are encouraging signs that EVs will soon start taking off in other countries, from India to Japan to Latin America! There's still a long way to go-there are an estimated 1.2 billion cars on the roads on Earth total, and by the year's end we'll just be at 2% EVs-but this looks to be the start of exponential growth. Plus, it'll be greatly helped along by the wide array of countries, states, and carmakers (including General Motors, Mercedes, Audi, Hyundai, and many more) that have pledged to switch to 100% EVs by the 2030s or earlier. Great news!



More Energy Progress!

The United Kingdom has announced a new government energy plan in response to Putin's brutal aggression in Ukraine and the associated oil and gas supply issues. The government increased the national target for installed offshore wind capacity by 2030 from 40 GW (gigawatts) to 50 GW, will fund a competition to make British heat pumps to reduce demand for gas, and plans to build eight new nuclear power plants by 2030 as a complement to renewables, targeting 24 GW of nuclear by 2050. Although the plan also calls to allow more oil drilling in the North Sea (a short-sighted and likely economically irrelevant move), it's overall a big investment in a decarbonized economy, also setting an aspirational goal of 95% low-carbon, non-fossil-fueled electricity by 2030. (For context, the UK already gets 40% of its electricity from renewables and another 15% from nuclear, so this is well within reach!).

British energy and climate minister Greg Hands <u>said</u> "Boosting our renewable energy supply is the only way for us to take control of energy prices. We are already a world leader in offshore wind, but we want to go further and faster so that clean, cheap energy becomes the norm."

<u>Taiwan</u> and <u>Germany</u> are also mulling ambitious investment in clean energy buildout, which we'll cover more in-depth when it's finalized.

Maryland passed one of the most ambitious climate action laws in the US. The Climate Solutions Now Act of 2022, now law (passed by veto-proof majorities in the Democratic-controlled state legislature) sets a target of reducing greenhouse gas emissions by 60% below 2006 levels by 2031 and reaching net-zero emissions across Maryland's economy by 2045. It also creates a smorgasbord of smaller policies in support of that, including: creating a state "green bank," the Climate Catalytic Capital Fund, with a budget of \$5 million per year, recommending extending the operating license of a nuclear power plant which provides 41% of the state's electricity (a good call, as we can't afford to lose sources of low-carbon energy), and setting an emissions reduction schedule for commercial buildings above 35,000 square feet, with penalties if targets aren't met.

For years, energy planners have fantasized about building massive solar farms in the sun-rich Sahara and selling that power northwards to Europe. Now, **Italy and Tunisia** have taken a tentative first step towards that vision, signing an agreement on April 30th to <u>lay an undersea power cable between Partanna, Sicily, and El Haouaria, Tunisia</u>, integrating the EU and North African grids. The potential is vast!