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By Koohan Paik-Mander / Independent Media Institute
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Whales Will Save the World's Climate—Unless the Military Destroys Them First

The U.S. military is famous for being the [single largest consumer of petroleum products](#) in the world and the largest emitter of greenhouse gases. Its carbon emissions [exceed](#) those released by “more than 100 countries combined.”

Now, with the Biden administration’s [mandate](#) to slash carbon emissions “at least in half by the end of the decade,” the Pentagon has [committed](#) to using all-electric vehicles and transitioning to biofuels for all its trucks, ships and aircraft. But is only addressing emissions enough to mitigate the current climate crisis?

What does not figure into the climate calculus of the new emission-halving plan is that the Pentagon can still continue to destroy Earth’s natural systems that help sequester carbon and generate oxygen. For example, the plan ignores the Pentagon’s continuing role in the annihilation of whales, in spite of the [miraculous role](#) that large cetaceans have played in delaying climate catastrophe and “maintaining healthy marine ecosystems,” according to a report by Whale and Dolphin Conservation. This fact has mostly gone unnoticed until only recently.

There are countless ways in which the Pentagon hobbles Earth’s inherent abilities to regenerate itself. Yet, it has been the decimation of populations of whales and dolphins over the last decade—resulting from the year-round, full-spectrum [military](#)

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[practices](#) carried out in the oceans—that has fast-tracked us toward a cataclysmic environmental tipping point.

The other imminent danger that whales and dolphins face is from the installation of space-war infrastructure, which is [taking place](#) currently. This new infrastructure comprises the development of the so-called “[smart ocean](#),” rocket launchpads, missile tracking stations and other components of satellite-based battle. If the [billions of dollars](#) being plowed into the 2022 defense budget for space-war technology are any indication of what’s in store, the destruction to marine life caused by the use of these technologies will only accelerate in the future, hurtling Earth’s creatures to an even quicker demise than already forecast.

Whale Health: The Easiest and Most Effective Way to Sequester Carbon

It’s first important to understand how whales are indispensable to mitigating climate catastrophe, and why reviving their numbers is crucial to slowing down damage and even repairing the marine ecosystem. The importance of whales in fighting the climate crisis has also been highlighted in an [article](#) that appeared in the International Monetary Fund’s Finance and Development magazine, which calls for the restoration of global whale populations. “Protecting whales could add significantly to carbon capture,” states the article, showing how the global financial institution also recognizes whale health to be one of the most economical and effective solutions to the climate crisis.

Throughout their lives, whales enable the [oceans to sequester](#) a whopping 2 billion metric tons of carbon dioxide per year. That astonishing amount in a single year is nearly double the 1.2 billion metric tons of carbon that was emitted by the U.S. military in the entire 16-year span between 2001 and 2017, according to an [article](#) in Grist, which relied on a [paper](#) from the Costs of War Project at Brown University’s Watson Institute.

The profound role of whales in keeping the world alive is generally unrecognized. Much of how whales sequester carbon is due to their symbiotic relationship with phytoplankton, the organisms that are the base of all marine food chains.

The way the sequestering of carbon by whales works is through the piston-like movements of the marine mammals as they dive to the depths to feed and then come up to the surface

to breathe. This “[whale pump](#)” propels their own feces in giant plumes up to the surface of the water. This helps bring essential nutrients from the ocean depths to the surface areas where sunlight enables phytoplankton to flourish and reproduce, and where photosynthesis promotes the sequestration of carbon and the generation of oxygen. More than half the oxygen in the atmosphere [comes](#) from phytoplankton. Because of these infinitesimal marine organisms, our oceans truly are the lungs of the planet.

More whales mean more phytoplankton, which means more oxygen and more carbon capture. According to the authors of the [article](#) in the IMF’s Finance and Development magazine—Ralph Chami and Sena Oztosun, from the IMF’s Institute for Capacity Development, and two professors, Thomas Cosimano from the University of Notre Dame and Connel Fullenkamp from Duke University—if the world could increase “phytoplankton productivity” via “whale activity” by only 1 percent, it “would capture hundreds of millions of tons of additional CO₂ a year, equivalent to the sudden appearance of 2 billion mature trees.”

Even after death, whale carcasses function as carbon sinks. Every year, it is estimated that whale carcasses [transport](#) 190,000 tons of carbon, locked within their bodies, to the bottom of the sea. That’s the same amount of carbon produced by 80,000 cars per year, [according](#) to Sri Lankan marine biologist Asha de Vos, who appeared on TED Radio Hour on NPR. On the seafloor, this carbon supports deep-sea ecosystems and is integrated into marine sediments.

Vacuuming CO₂ From the Sky—a False Solution

Meanwhile, giant concrete-and-metal “direct air carbon capture” plants are being planned by the private sector for construction in natural landscapes all over the world. [The largest one](#) began operation in 2021 in Iceland. The plant is named “Orca,” which not only happens to be a type of cetacean but is also derived from the Icelandic word for “energy” (*orka*).

Orca captures a mere 10 metric tons of CO₂ per day—compared to about 5.5 million metric tons per day of that currently sequestered by our oceans, due, in large part, to whales. And yet, the minuscule comparative success by Orca is being celebrated, while the

effectiveness of whales goes largely unnoticed. In fact, President Joe Biden’s \$1 trillion infrastructure bill contains [\\$3.5 billion](#) for building four gigantic direct air capture facilities around the country. Nothing was allocated to protect and regenerate the real orcas of the sea.

If ever there were “superheroes” who could save us from the climate crisis, they would be the whales and the phytoplankton, not the direct air capture plants, and certainly not the U.S. military. Clearly, a key path forward toward a livable planet is to make whale and ocean conservation a top priority.

‘We Have to Destroy the Village in Order to Save It’

Unfortunately, the U.S. budget priorities never fail to put the Pentagon above all else—even a breathable atmosphere. At a [December 2021 hearing](#) on “How Operational Energy Can Help Us Address Logistics Challenges” by the Readiness Subcommittee of the U.S. House Armed Services Committee, Representative Austin Scott (R-GA) [said](#), “I know we’re concerned about emissions and other things, and we should be. We can and should do a better job of taking care of the environment. But ultimately, when we’re in a fight, we have to win that fight.”

This logic that “we have to destroy the village in order to save it” prevails at the Pentagon. For example, [hundreds of naval exercises](#) conducted year-round in the Indo-Pacific region [damage](#) and kill tens of thousands of whales annually. And every year, the number of war games, encouraged by the U.S. Department of Defense, increases.

They’re called “war games,” but for creatures of the sea, it’s not a game at all.

[Pentagon documents](#) estimate that 13,744 whales and dolphins are legally allowed to be killed as “incidental takes” during any given year due to military exercises in the Gulf of Alaska.

In waters surrounding the Mariana Islands in the Pacific Ocean alone, the violence is more dire. More than [400,000 cetaceans](#) comprising 26 species were allowed to have been sacrificed as “takes” during military practice between 2015 and 2020.

These are only two examples of a myriad of routine naval exercises. Needless to say, these ecocidal activities dramatically decrease the ocean's abilities to mitigate climate catastrophe.

The Perils of Sonar

The most lethal component to whales is sonar, used to detect submarines. [Whales will go to great lengths to get away](#) from the deadly rolls of sonar waves. They “will swim hundreds of miles... and even beach themselves” in groups in order to escape sonar, according to an article in Scientific American. Necropsies have revealed bleeding from the eyes and ears, caused by too-rapid changes in depths as whales try to flee the sonar, revealed the article.

Low levels of sonar that may not directly damage whales could still harm them by triggering behavioral changes. According to an [article](#) in Nature, a 2006 UK military study used an array of hydrophones to listen for whale sounds during marine maneuvers. Over the period of the exercise, “the number of whale recordings dropped from over 200 to less than 50,” Nature reported.

“Beaked whale species... appear to cease vocalising and foraging for food in the area around active sonar transmissions,” concluded a 2007 unpublished UK report, which referred to the study.

The report further noted, “Since these animals feed at depth, this could have the effect of preventing a beaked whale from feeding over the course of the trial and could lead to second or third order effects on the animal and population as a whole.”

The report extrapolated that these second- and third-order effects could include starvation and then death.

The ‘Smart Ocean’ and the JADC2

Until now, sonar in the oceans has been exclusively used for [military purposes](#). This is

about to change. There is a “[subsea data network](#)” being developed that would use sonar as a component of undersea Wi-Fi for mixed civilian and military use. Scientists from member nations of the Institute of Electrical and Electronics Engineers (IEEE), including, but not limited to Australia, China, the UK, South Korea and Saudi Arabia, are creating what is called the “[Internet of Underwater Things](#),” or IoUT. They are busy at the drawing board, designing [data networks](#) consisting of sonar and laser transmitters to be installed across vast undersea expanses. These transmitters would send sonar signals to a network of transponders on the ocean surface, which would then send [5G](#) signals to satellites.

Utilized by both industry and military, the data network would saturate the ocean with sonar waves. This does not bode well for whale wellness or the climate. And yet, promoters are calling this development the “[smart ocean](#).”

The military is orchestrating a similar overhaul on land and in space. Known as the Joint All-Domain Command and Control ([JADC2](#)), it would interface with the subsea sonar data network. It would require a grid of satellites that could control every coordinate on the planet and in the atmosphere, rendering a real-life, 3D chessboard, ready for high-tech battle.

In service to the JADC2, thousands more satellites are being launched into space. Reefs are being dredged and forests are being razed throughout Asia and the Pacific as an ambitious system of “mini-bases” is being erected on as many islands as possible—missile deployment stations, satellite launch pads, radar tracking stations, aircraft carrier ports, live-fire training areas and other facilities—all for satellite-controlled war. The system of mini-bases, in communication with the satellites, and with aircraft, ships and undersea submarines (via sonar), will be replacing the bulky brick-and-mortar bases of the 20th century.

Its data-storage cloud, called [JEDI](#) (Joint Enterprise Defense Infrastructure), will be co-developed at a cost of tens of billions of dollars. The Pentagon has [requested bids](#) on the herculean project from companies like Microsoft, Amazon, Oracle and Google.

Save the Whales, Save Ourselves

Viewed from a climate perspective, the Department of Defense is flagrantly barreling away from its stated [mission](#), to “ensure our nation’s security.” The ongoing atrocities of the U.S. military against whales and marine ecosystems make a mockery of any of its climate initiatives.

While the slogan “Save the Whales” has been bandied about for decades, they’re the ones actually saving us. In destroying them, we destroy ourselves.

This article was produced by [Local Peace Economy](#), a project of the Independent Media Institute.

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