

Katherine Muzik is a marine biologist, studying corals for nearly 50 years, in both deep and shallow-water, in the Atlantic and Pacific Oceans. She has described and named species of Octocorallia, her scientific specialty, from Barbados, Fiji, Hawaii, New Zealand, Japan and Okinawa. Leaving her home in Okinawa in 2011, directly after the Fukushima meltdown, she now resides in Kaua'i, where she continues to devote her life to environmental protection and education.  
(website: [www.ourwaterdrop.org](http://www.ourwaterdrop.org); email: [kmuzik@gmail.com](mailto:kmuzik@gmail.com))

“Harm or Harmony?”

Down down down...

...deeper and deeper we sank, in our little yellow submarine, into a dark, cold and lovely world, on the undersea volcanic slopes of Makapu'u, right off the East Coast of O'ahu. Although he initially refused, Bo Bartko, the Star II's brilliant operator/engineer, finally acquiesced to my insistent requests to please turn off the lights. (Bo's job was to collect pink and gold corals for Maui Divers Jewelry Company. He needed lights to see his targets.) Collection of precious corals was now restricted, but with me along in the tiny sub (I, a graduate student from the University of Miami, studying octocorals as a Smithsonian Fellow with world-expert Dr. Bayer), the Jewelry Company could once again briefly collect. One for me, one for them. Deal! I fled snowy DC, and arrived in sunny O'ahu! And sank happily in the sub, into the deep, dark blue, living sea.

Forty years ago, February 1978, in the tranquil darkness, at 1200 feet, with the searchlights finally turned off, Bo and I suddenly beheld bioluminescent corals! Peering out my window, I was astonished, as was Bo! Tangled on my side of the sub, a long, coiled, whip-like octocoral was blinking with incredible pulses of light! The first time it had ever been witnessed by humans, alive in the sea, I published its scientific name, *Lepidisis olapa* Muzik. Nowadays, videos of these remarkable animals are available for everyone to see, on Youtube!



DOER Hawaii 2016 - Bioluminescent Corals captured in color HD video for first time

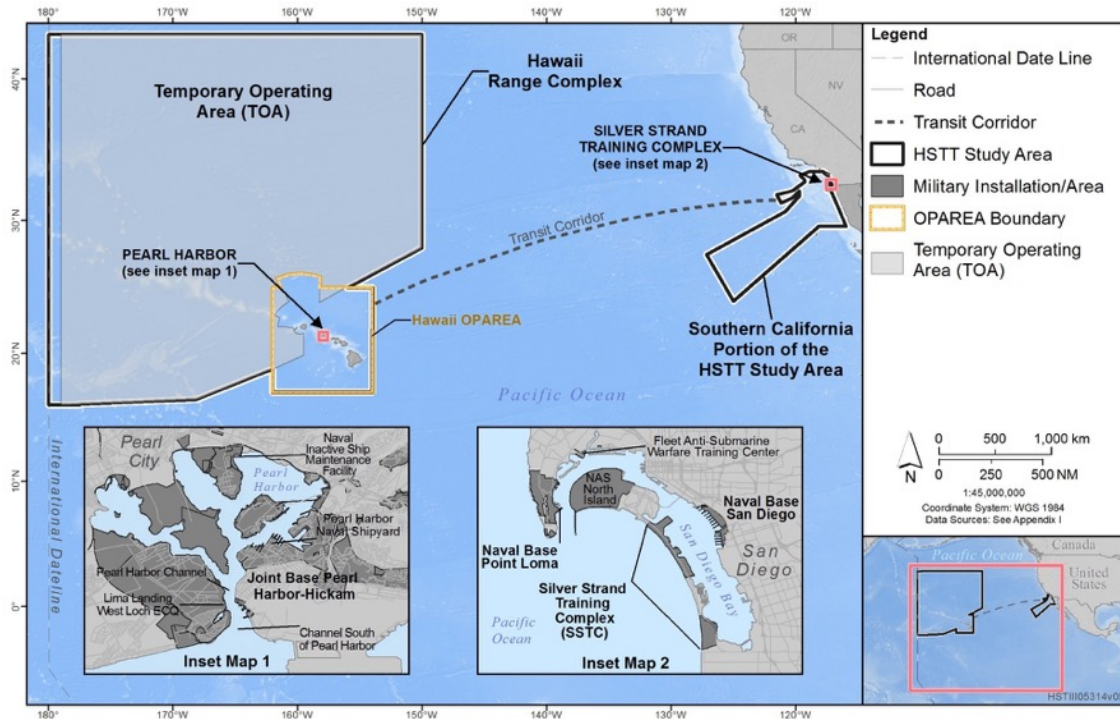
<https://youtu.be/GGFhNjY-zkA>

I was so lonely then, lacking appropriate camera technology to share my observations, but now I am not. Researchers from Woods Hole, the Smithsonian, National Geographic, NOAA and Hawaii Undersea Research Laboratories have all recently confirmed what I saw! At the Musicians Seamounts, at Johnston Atoll, at the Emperors and Midway, octocoral forests are abundant, especially at 2,000m! Some individual colonies of “my” octocorals are, amazingly, over 6,000 years old, older than the Pyramids. Their life-spans are longer than the Sequoias, the Galapagos tortoises or the Bowhead Whales, they are the oldest life known on earth.

Recent researchers have documented these extraordinarily diverse and ancient forests, which festoon ocean ridges, valleys and sea mounts, all the way from Hawaii to California. These beautiful forests, the subject of my lifelong study,, support a splendid array of fish, brittle stars, starfish, snails, crinoids, glass sponges, anemones, oh my. Even a monk seal has been recorded, swimmingly visiting a coral forest at 543m.

 Hawaiian Monk Seal diving at -543m!  
<https://youtu.be/3agzXao70bl>

Despite this phenomenal marine life, with many hundreds of still-undescribed species of octocorals, the US Navy plans to bombard an area (larger than the continental US) from 150 to 180 W longitude, and 44 to 15 N latitude, surrounding the Hawaiian chain, and a “transit zone” all the way to California, with missiles, ship-sinkings, torpedoes and low, medium and high sonar, for five years, from 2018-2023!



The proposed US Navy HSTT EIS/OEIS Study Area

Aegis missiles, built in Bath, Maine at the General Dynamics factory, have long been practicing war from Kauai’s PMRF (Pacific Missile Range Facility), blasting them to Kwajalein. The new excuse for even more missile practice in the Pacific is to ostensibly prepare for eventual war with N. Korea? Spent missiles already litter the nearby sea floor at Kwajalein, with deadly fuels and contaminating metal waste continuing to extinguish life there.

The biennial RIMPAC “war games” have assaulted this Pacific area of Hawai‘i since 1970. Every two years, during 4-5 weeks, “they” (recently, navies from 26 countries in 2016) “play war games”, sinking ships and crushing sea life with torpedoes, sonar and bombs. This year, 2018, will be the RIMPAC 25th anniversary! Uh oh!

During 2017 there were three reported major accidents in the Pacific involving US Navy ships, which incurred multiple US Navy seamen deaths. Can you imagine the potential accidents, during non-stop “testing and training” here, for five years? During training exercises with nuclear-powered ships, and nuclear-powered submarines with nuclear weapons, human mistakes will undoubtedly occur, rendering the seas of Kaua‘i Island uninhabitable, not just for innocent whales and corals, but also for hapless residents and tourists. And the Navy projects 470,000 hours of sonar use, from low to high frequencies. But, hey, there are only 43,800 hours in 5 years! Such steady sonar bombardment means that the quivering corals will be unable to feed, escape predation, or reproduce. Yet the Navy claims, blatantly and falsely, on p. 42 of their 2,800-page Preliminary EIS, that there is “extremely sparse coverage of corals in the deep ocean”.

That is a colossal lie.

Therefore, I am beyond disbelief, I am beyond sad. I am enraged. I spoke up for the corals (in the 3 minutes the Navy allotted me at their November 2017 hearing here in Kaua‘i). Next, I wrote a 534 page document, submitting academic evidence, and underwater videos of the ancient, magnificent sea life living here, to meet their December 2017 deadline.



Prelude - NOAA Office of Ocean Exploration & Research

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Bamboozled - NOAA Office of Ocean Exploration & Research

[https://www.dropbox.com/s/uoqaage3ldbpm1/EX1708\\_VID\\_20170916\\_DIVE10\\_BAMBOOZLED\\_Web.mov?dl=0](https://www.dropbox.com/s/uoqaage3ldbpm1/EX1708_VID_20170916_DIVE10_BAMBOOZLED_Web.mov?dl=0)



Old Growth Forest - NOAA Office of Ocean Exploration & Research

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All That Glitters - NOAA Office of Ocean Exploration & Research

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Can these innocent corals, surviving successfully since way before humans inhabited the Hawaiian Islands, be dismissed, attacked, maimed and killed by the Navy? Is this the Military’s playground?

Deep-sea corals are already facing deadly circumstances, being inundated by plastics, pesticides, pharmaceutical and noise pollution, global warming and ocean acidification (even more intense at depth). Soon they might also endure poisonous fuels, such as “exotic volatiles” and nuclear waste, toxic leftover bomb and ship components, entanglement by drifting decelerators and parachutes, and worst, lethal noise, from bombs, ship-sinkings and sonar.

I recently spoke to 2nd grade children, here at a Kaua’i school, introducing them to the beautiful underwater life I know and love, and then the proposed destructive Navy activities. They were aghast. Even 7 & 8-year olds understand.



Kauai 2nd Grader’s drawing of the Navy threat to our sea. Alana Jones, age 8

Therefore, I pose the question: Harm or Harmony? I choose Harmony, so do the children... will the Navy?

I urge the Navy to listen to the voices of the children, the voices of the whales and turtles and monk seals, to the silence of the deep-sea corals, which evolved millions of years ago in quieter, cold dark seas. I ask the Navy to change their plans, to abandon them or to modify them to spare the corals, which cannot escape their destruction. I suggest they use their manpower and equipment to clean up our oceans, instead of wrecking them. Just as at Bath Ironworks, let’s convert from Aegis missile production to windmill propeller blades!

Harm or Harmony?

