GHOST NETS AND PLASTIC DEBRIS REMOVED BY THE OCEAN VOYAGES INSTITUTE OF UNITED STATES

In August 2020 the Ocean Voyages Institute's marine plastic recovery vessel, S/V KWAI, docked in Honolulu after 35 days at sea, successfully concluding <u>the</u> <u>second 2020 open ocean recovery</u> <u>mission</u>, adding 67 tons to the recordsetting 103 tons removed in June.

The Institute total for the 2020 summer season amounts to 170 tons of ghost nets and plastic debris removed from the *North Pacific Gyre* (Great Pacific Garbage Patch). This staggering amount quadruples the group's previous year's record and has been recognized by the international press as the Largest Ocean Clean-Up.



The 2020 Ocean Voyages Institute's high seas clean-up expedition began in May, with a 48-day mission, followed by a second 35-day leg which departed on July 1st, with the KWAI logging more than 5000 nautical miles from Hawaii to the Pacific Gyre and back twice. During 2019, the team of the Ocean Voyages Institute had removed 48 tons of plastics during two ocean clean-up trips.

The Ocean Voyages Institute' vessel returns from missions with a cargo of *ghost fishing nets* and plastic debris. While docked in Honolulu, the ship's crew sorts the debris into various types of plastics for upcycling and recycling with help from groups and partners organizations. Whit the help of the <u>Honolulu-based</u> <u>Matson navigation company</u> for example, the debris collected, including piles of ropes, fishing nets and discarded consumer plastics, are sent to different destinations to be transformed into fuel or other useful materials. For the 2020 expedition, the <u>ByFusion® manufacturing company</u> is committed to repurpose 20 tons of the debris collected into approximately 4,000 construction building blocks.

During the 2019 clean-up expeditions, the Ocean Voyages Institute started adopting new and effective technologies to remove the so-called *ghost nets*, nets of nylon or polypropylene drift for decades, amassing plastic debris, ensnaring wildlife, killing marine mammals and entangling ships. Tons of this abandoned gear ends up in the oceans every year. The Institute recruited yachts and ships to attach GPS satellite trackers to the ghost nets they encountered. The bowling ball-sized trackers, once activated, signal the nets' locations in real time, enabling the Institute to find and retrieve the trackers and ghost nets.

The Ocean Voyages Institute (OVI) is a non-profit organization based in California (United States), founded in 1979 by Mary T. Crowley and a group of international sailors, educators and



conservationists with the mission of teaching maritime arts and sciences and preserving the world's oceans. Over the past 40 years the Ocean Voyage Institute has provided sail training programs, visiting over 15 countries, crewed by volunteers from over 26 nations, and creating a network of supporters.

In 2009 the Ocean Voyages Institute began realize clean-up expeditions in the <u>North Pacific Subtropical Convergence Zone</u>, located halfway between Hawaii and California and known as the area with the most plastic in the world's oceans. In this area, four oceanic currents converge to create a vortex that collects huge amounts of plastics: ghost nets, one sees detergent bottles, beer and soft drink crates, bleach and cleaning bottles, plastic furniture, packaging straps, buckets, children's toys, and myriad types of plastic floating mid-ocean.

In 2010, the Institute established collaborations with naval architects, marine engineers, sailors, oceanographers, marine biologists, and maritime industry professionals to study the best ways to utilize maritime industry equipment to carry out effective ocean clean-up operations, using data and experience from the Institute's research voyages to the North Pacific Gyre.

Through a large network of collaborations and partnerships, including universities, specialized centers and maritime companies, which are mentioned on the Institute's website, new technologies have been developed that make it possible to carry out waste recovery operations at sea more effectively, as demonstrated by the results achieved in the 2020 clean-up mission.

The Ocean Voyages Institute has received numerous awards, including the United Nations (UNEP)'s Climate Hero Award and the Google Inc's Earth Hero Award.

The Ocean Voyages Institute commits to removing 500 tons of plastic from the Ocean. They are planning to have three vessels operating in 2021 in the North Pacific Gyre for three months, all bringing in large cargos of debris. The Institute also aims to offer assistance throughout the world to other groups needing efficient cleanup technologies and wishing to partner on ocean clean-up projects.

To know more

- Ocean Voyage Institute website
- 2020 expedition in OVI website
- Ocean Voyage Institute in Facebook
- Article in oceansplasticleanup.com

Article in prweb.com

- ByFusion company website
- Article in intelligentliving.co
- Article in staradvertiser.com
- Article in thesouthafrican.com



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