

A Raft of Volcanic Stone Could Save the Great Barrier Reef

(September 2019)

There is a large mass of hardened lava drifting toward Australia and it might help the Great Barrier Reef replenish itself. Just a few weeks ago, sailors said they noticed a raft of pumice bobbing up and down on the Pacific waves. Some other sailors claimed they saw smoke coming from the volcanic island known as Fonualei in the Kingdom of Tonga. Could it be there was an eruption and the pumice raft was a result of that? Maybe—pumice rafts are formed when an underwater volcano erupts. The eruptions release chunks of lava, or volcanic stone, that are chock-full of holes. These holes help the chunks float. Because of its sheer size, this particular pumice stone could be dangerous to ships and other sailing vessels. However, the pumice could lend a much-needed hand to the Great Barrier Reef. Or it could do even more damage.

A satellite picture, combined with the sailors' reports, led volcanologists from the Smithsonian Institution to figure the pumice stone came from the eruption of an unnamed underwater volcano. The tip of that volcano is roughly 130 feet below the surface. The pumice raft, which is estimated to be the size of Manhattan, has drifted southwest and broken up a bit. However, it's still on the move and its path seems pretty

clear—it's headed straight for Australia and the Great Barrier Reef.

This might be good news for the Great Barrier Reef which suffered a mass bleaching event in 2016 and 2017. Half the corals in the Reef were killed as a result. How? A bleaching event occurs when water becomes too warm, causing corals to expel the algae living inside their tissue. In turn, the corals become completely white and eventually die. This is where the pumice raft comes in. The raft of pumice stone that might crash into the Great Barrier Reef could bring along lots of friends, such as new barnacles and corals. On the other hand, the pumice raft could introduce invasive species to the Reef that will do damage, but hopefully this will not be the case.

Queensland University of Technology geologist Scott Bryan told the Guardian: “Based on past pumice raft events we have studied over the last 20 years, it's going to bring new healthy corals and other reef dwellers to the Great Barrier Reef.”

Currently, the raft is still making its way toward the Land Down Under. For now, the world will have to wait and see if it and its many passengers will be able to save the Great Barrier Reef from a sad fate.

Teacher Resources – Vocabulary

Potential Words for Further Study: These words not only help with comprehension of the passage, they also appear more frequently in a wide spectrum of reading, especially in academic text. Therefore, further study of the meaning of these words may be beneficial. The words on this list can be incorporated into subsequent lessons.

Wilson Reading System Vocabulary Level: AB

estimated (adj) approximate; roughly calculated

release (v) to let go or let loose

Words for Quick Discussion: Consider discussing these words as they are encountered to help students comprehend the passage. A quick discussion in student-friendly language while reading the text is best.

Wilson Reading System Vocabulary Level: B

barnacles (n) small shellfish that fix themselves tightly to rocks and the bottoms of boats

erupt (v) to throw forth lava, water, steam, etc., as a volcano or geyser

geologist (n) a specialist in geology

pumice (n) an extremely porous, glassy, extrusive igneous rock typically light enough to float on water, used as an abrasive and in making soaps, polishes, etc.

Definition Source: *Collins English Dictionary. Retrieved from*
<https://www.collinsdictionary.com/us/dictionary/english>

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