

# Hawaii has 5 other active volcanoes in addition to Kilauea

May 31 2018, by Audrey Mcavoy



In this Aug. 12, 2008, file photo, the Molokai Island's sea cliffs rise in the background in Kalaupapa, Hawaii. Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring down hillsides into the ocean over the past month, but it's only one of many volcanoes in the islands. (AP Photo/Hugh Gentry, File)

Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring



down hillsides into the ocean over the past month.

But Kilauea is only one of many volcanoes in Hawaii. Here's a look at some of the others.

#### WHY DOES HAWAII HAVE SO MANY VOLCANOES?

The Hawaiian Islands are a chain of volcanoes formed over millions of years. They've developed as the Pacific Plate—one of more than a dozen tectonic plates on the earth's outer layer—slowly moves northwest over a stationary hot spot of magma under the earth's surface. The hot spot partially melts an area under the Pacific Plate, sending magma to the ocean floor. Over time, lava accumulates and emerges above the ocean and builds islands.

One <u>volcano</u> is still submerged: The top of Loihi is currently 3,189 feet (975 meters) below <u>sea level</u>. Scientists estimate it will take about 200,000 years for it to pop out over the sea at its current eruption rate.

#### HOW MANY ACTIVE VOLCANOES DOES HAWAII HAVE?

The Hawaiian Volcano Observatory, part of the U.S. Geological Survey, defines an <u>active volcano</u> as one that has erupted within the past 10,000 years.

Hawaii has five such volcanoes in addition to Kilauea, though Kilauea is the only one currently erupting.





In this May 5, 2012 file photo, the moon lights up Waikiki and Diamond Head in Honolulu. Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring down hillsides into the ocean over the past month, but it's only one of many volcanoes in the islands. (AP Photo/Eugene Tanner, File)

Three are on the same island as Kilauea: Mauna Loa, Mauna Kea and Hualalai. One is on Maui: Haleakala. The last is Loihi, which is underwater to Kilauea's south.

#### HAVE ANY OTHER VOLCANOES ERUPTED RECENTLY?

Mauna Loa, which stands 13,679 feet (4,169 meters) above sea level, erupted for 22 days in 1984. Lava cascaded down its eastern flank to get within 4.5 miles (7.2 kilometers) of Hilo, the largest city on the Big Island. Scientists say Mauna Loa has erupted 33 times since 1864, for an average of once every six years over the past three millennia. It's also the world's largest volcano, with a peak that extends 55,700 feet (16,977)



meters) from its base under the sea. Coffee farms and the beach resort town of Waikoloa sit on the mountain's western and northwestern flanks.

To Mauna Loa's northwest is Hualalai, which last erupted between the late 1700s and 1801. Eighty percent of Hualalai's surface has been covered by lava in the past 5,000 years.

On Maui, Haleakala volcano is believed to have erupted last between 1480 and 1600.

#### IS THERE A VOLCANO IN WAIKIKI?



In this May 22, 2018 file photo, lava erupts from Kilauea volcano's fissures in the Leilani Estates subdivision near Pahoa, Hawaii. Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring down hillsides into the ocean over the past month, but it's only one of many volcanoes in the islands. (AP Photo/Jae C. Hong, File)



A volcano commonly known as Diamond Head grandly presides over Waikiki, the world-famous mecca for tourists in the state capital of Honolulu. It's one of several volcanic craters on Oahu that scientists believe were formed between 40,000 and 500,000 years ago.

Diamond Head sits on top of a much larger volcano, called Koolau, that together with a second large volcano called Waianae forms most of Oahu's land mass. The Koolau and Waianae volcanoes are about 2 to 3 million years old. No Oahu volcano is active.

## WHAT DO PEOPLE DO ON THE VOLCANOES?

The highest peaks on each island are considered sacred in Hawaiian culture because they represent the realms of the gods and goddesses. There are shrines at the summits of Mauna Kea, Mauna Loa and Haleakala, including those honoring the heavens, the earth mother and ancestors. Ceremonies are sometimes performed at the summits.

The top of Mauna Kea, which is only slightly taller than Mauna Loa at 13,803 feet (4,207 meters), hosts about a dozen of the world's most advanced telescopes. The observatories take advantage of clear weather and limited light pollution to peer deep into the night sky. Mauna Loa and Haleakala also have several telescopes.

Watching the sunrise from the top of Haleakala and Mauna Kea has become a popular activity for tourists.





In this Oct. 14, 2017, file photo, the sun rises over Hualalai volcano as male athletes start the swim portion of the Ironman World Championship Triathlon in Kailua-Kona, Hawaii. Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring down hillsides into the ocean over the past month, but it's only one of many volcanoes in the islands. (AP Photo/Marco Garcia, File)

Tourists also enjoy visiting the crater at Kilauea's summit, which is 4,009 feet (1,222 meters) above sea level and inside Hawaii Volcanoes National Park. Tourists also like to watch lava flowing down Kilauea into the ocean. But dangers posed by the current eruption have forced the Park Service to close the summit area and Hawaii County officials have restricted the ocean entry point.

Hotels, farms, cattle ranches, beaches and towns line the bases of the mountains.

#### HOW OLD IS THE OLDEST VOLCANO?



Kauai and Niihau islands are the oldest of the eight main islands in the state of Hawaii. They were each formed about 5 million years ago. Erosion and landslides have produced dramatic cliffs on many of the older <u>islands</u>, like the Napali Coast on Kauai's north shore. Molokai has the tallest sea cliffs in the world, according to the Hawaii Tourism Authority. They reach more than 2,000 feet (600 meters) above sea level.

Small atolls and seamounts northwest of the Main Hawaiian Islands are also believed to have been formed by the hot spot. The oldest atoll, Kure, is about 30 million years old.



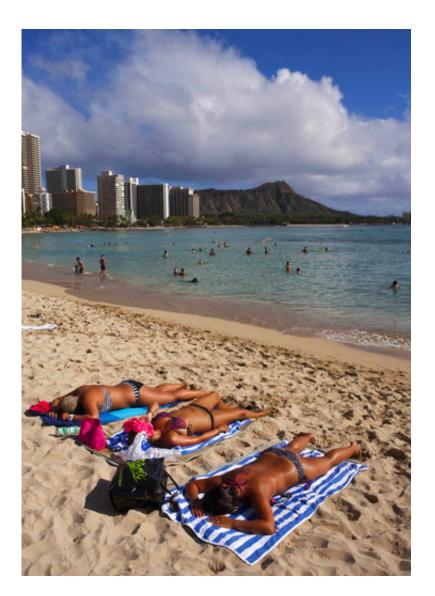
In this May 9, 2018, file photo, steam and gas rise from Kilauea's summit crater in Hawaii Volcanoes National Park, Hawaii. Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring down hillsides into the ocean over the past month, but it's only one of many volcanoes in the islands. (AP Photo/Jae C. Hong, File)





In this March 25, 1984, file photo, lava erupts along Mauna Loa volcano in Hawaii. Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring down hillsides into the ocean over the past month, but it's only one of many volcanoes in the islands. (AP Photo/Ira Schwarz, File)





In this Nov. 10, 2011 file photo, sunbathers enjoy Waikiki Beach in Honolulu with Diamond Head in the background. Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring down hillsides into the ocean over the past month, but it's only one of many volcanoes in the islands. (AP Photo/ Marco Garcia, File—





In this Jan. 14, 2005 file photo, a snow-capped Mauna Kea volcano rises in the background from Hilo, Hawaii. Hawaii's Kilauea volcano has captivated people around the world by shooting lava high into the sky and sending rivers of molten rock pouring down hillsides into the ocean over the past month, but it's only one of many volcanoes in the islands. (AP/Photo Tim Wright, File)

### © 2018 The Associated Press. All rights reserved.

Citation: Hawaii has 5 other active volcanoes in addition to Kilauea (2018, May 31) retrieved 3 July 2024 from <a href="https://phys.org/news/2018-05-hawaii-volcanoes-addition-kilauea.html">https://phys.org/news/2018-05-hawaii-volcanoes-addition-kilauea.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.