



## THE GEOLOGICAL SOCIETY OF TRINIDAD & TOBAGO

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## Historic and recent mud volcano eruptions in Trinidad, impacts on surrounding communities

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Mud volcanism in Trinidad extends from Pedernales in Venezuela into the Atlantic off the east coast. The activity primarily occurs to the south of the Central Range in formations dominated by thick claystones that were impacted by compression associated with thrusting, strike slip faulting and hydrocarbon generation.

Features associated with mud volcanism range from small vents to large cones and mud lakes. Activity ranges from a few gas bubbles, water and liquid mud oozing from vents and large pools to explosive eruptions lasting less than 5 minutes. The earliest record of activity was in 1821 in the Cedros area of SW Trinidad.

More recent eruptions in 2000 and 2001 offshore Chatham, Devil's Woodyard in 1995 and 2018, Piparo in 1997, Offshore Point Radix in 2006 and Tabaquite in 2019 have had some impact on their surrounding communities. These range from destruction of houses and roads, forest, crops or individuals not being able to access their property due to safety restrictions. Other negative impacts include, fire, offshore navigation hazards, gas and liquid hazards. One positive impact has been a constant stream of curious people who visit the mud volcanoes, some collecting mud for use as a beauty aid on their skin.

The Office of Disaster Preparedness and Management (ODPM), regional corporations and Ministry of Works have been coordinating responses to recent eruptions and activity. For example, in the Piparo area an evacuation plan was developed and warning sirens installed as part of an early warning system.