



NATURAL HAZARDS AND DISASTERS

LANDSLIDES IN THE TURKS AND CAICOS

TURKS AND CAICOS ISLANDS

The Bahamas, an independent country, and Turks and Caicos Islands, a possession of the United Kingdom, are part of the archipelago that extends for about 1,000 kilometers in the Atlantic Ocean from 100 kilometers east of Miami, Florida, to 150 kilometers north of the Dominican Republic. Turks and Caicos Islands are at the southeastern extremity of the island chain. The Bahamas consist of about 700 islands, 22 of which are inhabited, and more than 2400 low, barren rock outcrops that cover an area of 13,939 square kilometers. Turks and Caicos Islands include about 30 islands covering 430 square kilometers (Rand McNally, 1986). The population of the Bahamas is 230,000 and of the Turks and Caicos Islands, 8,100. The overall population density of the archipelago is thus 17 persons per square kilometer, but most of the population is concentrated in a few cities and towns.

The climate is humid subtropical; annual rainfall averages 1200 millimeters, and temperatures normally range between 20 and 30°C. Hurricanes, fairly common between May and November, have caused severe damage on several occasions.

The Bahamas and Turks and Caicos Islands occupy a large carbonate platform along the subsiding continental margin of North America (Curran, 1985). All surficial materials and bedrock are calcareous; most or all exposed materials are Quaternary in age (Curran, 1985). The topography is very subdued; most of the islands are nearly flat, and the maximum elevation of the archipelago is 63 meters. The only significant slopes or escarpments are along some coastlines where low cliffs or steep slopes, no more than several meters high, rise from the ocean (Adams, 1985). Landslides in the Bahamas and Turks and Caicos Islands are limited to small rock falls and rock slides along some of the low sea cliffs and are in response to wave action attacking the base of the slope (Carew and Mylroie, 1985). The only other significant ground-failure phenomenon is the formation of sinkholes (Mylroie, 1983), which is a fairly common occurrence. Thus, landsliding in the Bahamas and Turks and Caicos Islands is very rare, extremely limited in magnitude and areal extent, and economically insignificant.

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Return to:  [Home Page](#)