= Tropical Storm Earl (2004) =

Tropical Storm Earl caused minor damage in the Windward Islands in mid @-@ August 2004 . The sixth tropical cyclone and named storm of the annual hurricane season , Earl developed on August 13 from a tropical wave centered well east of the Lesser Antilles . The depression gradually organized as it tracked west @-@ northwestward and was upgraded to Tropical Storm Earl roughly a day after genesis . As the system approached the Windward Islands it continued to slowly strengthen , peaking as a 50 mph (85 km / h) tropical storm early on August 15 . However , the system unexpectedly degenerated into a tropical wave that afternoon , likely due to its fast forward motion . The remnants of Earl continued across the Caribbean Sea and eventually re @-@ developed into Hurricane Frank in the eastern Pacific Ocean on August 23 .

Gusty winds in Grenada damaged at least 34 roofs and knocked down twelve trees and six electrical poles . Additionally , a nursing home on the island was evacuated due to significant structural damage . Two houses lost their roofs in Saint Vincent and the Grenadines , while moderate crop damage was reported on the island . Downed trees and power lines in Tobago left 90 % of the island without electricity . Overall , Earl was responsible for one fatality , nineteen missing , and an unknown amount of damage .

= = Meteorological history = =

The formation of Tropical Storm Earl is attributed to a low @-@ latitude , vigorous tropical wave that emerged off the western coast of Africa and into the eastern Atlantic Ocean on August 10 . As the disturbance moved towards the west , satellite imagery revealed a much better structure with much @-@ improved banding features and fair upper @-@ level outflow , leading to the formation of Tropical Depression Five at 1800 UTC on August 13 , situated roughly 1000 mi (1610 km) east of the Lesser Antilles . The depression progressed rapidly towards the west @-@ northwest the following day , embedded and under the influence of a deep easterly flow around the southern periphery of a subtropical ridge to the cyclone 's north . A combination of improved banding features and satellite intensity estimates by the afternoon of August 14 led to the subsequent upgrade of the system to Tropical Storm Earl . At this time , the cyclone was situated about 325 mi (525 km / h) east of Barbados .

Within an environment characterized by low wind shear , high atmospheric humidity , and warm sea surface temperatures , Earl intensified , reaching a peak intensity of 50 mph (85 km / h) by 0600 UTC on August 15 . Initial forecasts from the National Hurricane Center depicted gradual intensification into a powerful hurricane as the system entered the central Caribbean Sea , but these forecasts were lowered in later advisories . Despite an impressive satellite presentation associated with Earl as it passed through the southern Leeward Islands , a hurricane hunter flight reported that the system no longer had a low @-@ level circulation late on August 15 . As a result , the NHC discontinued advisories on the system and declared it an open tropical wave . While not entirely sure , it is suspected that the fast motion of the cyclone attributed to its dissipation . The remnant wave eventually entered the eastern Pacific Ocean , developing into Hurricane Frank by August 23 .

= = Preparations , impact , and aftermath = =

Following the development of Tropical Storm Earl , tropical storm watches were issued for Barbados , St. Vincent , and St. Lucia . This watch was modified to a tropical storm warning by August 14 at 2100 UTC , with the addition of the islands of the Grenadines , Trinidad , Tobago , and Grenada . The tropical storm warning for Barbados was changed to a tropical storm watch the following day at 1200 UTC , and all tropical cyclone watches and warnings were discontinued by 1800 UTC . In preparation of the storm , several hundred people in Grenada evacuated from low @-@ lying areas to schools set up as shelters . Shopkeepers boarded windows , while airports were temporarily shut down across the Leeward Islands . Initial forecasts predicted that Earl would

strengthen considerably into a hurricane and head towards Florida once in the Caribbean Sea , a state already impacted heavily earlier in the month by Hurricane Charley . The local officials urged residents to exercise caution , but not panic due to the large errors in long @-@ range forecasts . These warnings eased upon the system 's degeneration into an open tropical wave .

In Grenada , Earl produced heavy rains and strong winds that caused moderate damage . On the main island , roofs were blown off twelve homes while three others were partially damaged ; twelve trees and six power poles were also knocked down by the winds . The heavy rain associated with the tropical storm triggered nine mudslides and three rockslides on the island . Nearby , six homes had their roofs completely blown off while thirteen others were damaged . Flooding was also reported on both islands ; however , no known damage resulted from them . During the storm , a nursing home had to be evacuated due to significant damage to the structure . On St Vincent and the Grenadines , at least two homes had their roofs blown off and banana crops sustained moderate damage . In Tobago , numerous trees and power lines were downed throughout the island , cutting power to 90 % of the island . The highest surface sustained winds in relation to Earl occurred on the morning of August 15 in Barbados and St. Lucia ; winds were reported at 35 mph (55 km / h) . One person was killed by the storm and nineteen others were listed as missing .

Following the storm , Grenada requested assistance from the United States Agency of International Development . Local crews worked quickly to cover broken roofs and repair other structural damage . The National Emergency Relief organization were sought for assistance .