

= Hurricane David =

Hurricane David was a Cape Verde @-@ type hurricane that reached Category 5 hurricane status on the Saffir @-@ Simpson Hurricane Scale . The fourth named tropical cyclone , second hurricane , and first major hurricane of the 1979 Atlantic hurricane season , traversed through the Leeward Islands , Greater Antilles , and East Coast of the United States during late August and early September . David was the first hurricane to affect the Lesser Antilles since Hurricane Inez in 1966 . With winds of 175 mph (280 km / h) , David remains the only storm of Category 5 intensity to make landfall on the Dominican Republic in the 20th century and the deadliest since the 1930 Dominican Republic Hurricane killing over 2 @, @ 000 people in its path . Also , the hurricane was the strongest to hit Dominica in the 20th century , and was the deadliest Dominican tropical cyclone since a hurricane killed over 200 in September of the 1834 season .

= Meteorological history =

On August 25 , the US National Hurricane Center reported that a tropical depression had developed within an area of disturbed weather , that was located about 1 @, @ 400 km (870 mi) to the southeast of the Cape Verde Islands . During that day the depression gradually developed further as it moved westwards , under the influence of the subtropical ridge of high pressure that was located to the north of the system before during the next day the NHC reported that the system had become a tropical storm and named it David . David continued to strengthen , becoming a hurricane on August 27 . As it moved west @-@ northwestward on from August 27 ? 28 , it rapidly intensified to a 150 mph (240 km / h) major hurricane . It weakened slightly to a 140 mph (225 km / h) hurricane , but restrengthened by the time David ravaged the tiny windward Island of Dominica on the 29th .

David continued west @-@ northwest , and became a Category 5 hurricane in the northeast Caribbean Sea , reaching peak intensity with maximum sustained winds of 175 mph (280 km / h) and minimum central pressure of 924 mbar (hPa) on August 30 . An upper @-@ level trough pulled David northward into Hispaniola as a Category 5 hurricane on the August 31 . The eye passed almost directly over Santo Domingo , capital of the Dominican Republic with over a million people . The storm crossed over the island and emerged as a weak hurricane after drenching the islands .

After crossing the Windward Passage , David struck eastern Cuba as a minimal hurricane on September 1 . It weakened to a tropical storm over land , but quickly re @-@ strengthened as it again reached open waters . David turned to the northwest along the western periphery of the subtropical ridge , and re @-@ intensified to a 100 mph (160 km / h) Category 2 hurricane while over the Bahamas , where it caused heavy damage . Despite initial forecasts of a Miami , Florida landfall , the hurricane turned to the north @-@ northwest just before landfall to strike near West Palm Beach , Florida on September 3 . It paralleled the Florida coastline just inland until emerging into the western Atlantic Ocean at New Smyrna Beach , Florida later on September 3 . David continued to the north @-@ northwest , and made its final landfall just south of Savannah , Georgia as a minimal hurricane on September 5 . It turned to the northeast while weakening over land , and became extratropical on the 6th over New York . As an extratropical storm , David continued to the northeast over New England and the Canadian Maritimes . David intensified once more as it crossed the far north Atlantic , clipping northwestern Iceland before moving eastward well north of the Faroe Islands on September 10 .

= Preparations =

In the days prior to hitting Dominica , David was originally expected to hit Barbados and spare Dominica in the process . However , on August 29 a turn in the hours before moving through the area caused the 150 mph (240 km / h) hurricane to make a direct hit on the southern part of Dominica . Even as it became increasingly clear that David was headed for the island , residents did

not appear to take the situation seriously . This can be partly attributed to the fact that local radio warnings were minimal and disaster preparedness schemes were essentially non-existent . Furthermore , Dominica had not experienced a major hurricane since 1930 , thus leading to complacency amongst much of the population . This proved to have disastrous consequences for the island nation .

Some 400,000 people evacuated in the United States in anticipation of David , including 300,000 in southeastern Florida due to a predicted landfall between the Florida Keys and Palm Beach . Of those , 78,000 fled to shelters , while others either stayed at a friend's house further inland or traveled northward . Making landfall during Labor Day weekend , David forced the cancellations of many activities in the greater Miami area .

= = Impact = =

David is believed to have been responsible for 2,068 deaths , making it one of the deadliest hurricanes of the modern era . It caused torrential damage across its path , most of which occurred in the Dominican Republic where the hurricane made landfall as a Category 5 hurricane .

= = = Dominica = = =

During the storm's onslaught , David dropped up to 10 inches (250 mm) of rain , causing numerous landslides on the mountainous island . Hours of hurricane force winds severely eroded the coastlines and washed out coastal roads .

Damage was greatest in the southwest portion of the island , especially in the capital city , Roseau , which resembled an air raid target after the storm's passage . Strong winds from Hurricane David destroyed or damaged 80 percent of the homes (mostly wood) on the island , leaving 75 percent of the population homeless , with many others temporarily homeless in the immediate aftermath . In addition , the rainfall turned rivers into torrents , sweeping away everything in their path to the sea . Power lines were completely ripped out , causing the water system to stop as well .

Most severely damaged was the agricultural industry . The worst loss in agriculture was from bananas and coconuts , of which about 75 percent of the crop was destroyed . Banana fields were completely destroyed , and in the southern portion of the island most coconut trees were blown down . Citrus trees fared better , due to the small yet sturdy nature of the trees . In addition , David's winds uprooted many trees on the tops of mountains , leaving them bare and damaging the ecosystem by disrupting the water levels .

In all , 56 people died in Dominica and 180 were injured . Property and agricultural damage figures in Dominica are unknown .

= = = Lesser Antilles = = =

Aside from Dominica , other islands in the Lesser Antilles experienced minor to moderate damage . Just to the south of Dominica , David brought Martinique winds of up to 100 mph (160 km / h) and 140 mph (220 km / h) sustained gust in the northeast of the coast of the Caravelle . The capital , Fort-de-France , reported wave heights of 15 feet (4.5 m) and experienced strong tropical storm sustained winds at 56 mph (90 km / h) and gust at 78 mph (126 km / h) . David's strong winds caused severe crop damage , mostly to bananas , amounting to \$ 50 million (\$ 150 million in 2007 USD) in losses . Though no deaths were reported , the hurricane caused 20 to 30 injuries and left 500 homeless .

Guadeloupe experienced moderate to extensive damage on Basse-Terre Island . There , the banana crop was completely destroyed , and combined with other losses , crop damage amounted to \$ 100 million (\$ 280 million in 2005 USD) . David caused no deaths , a few injuries , and left several hundred homeless . Nearby , Marie-Galante and Les Saintes reported some extreme damage while Grande-Terre had some moderate damages .

The island of St. Croix in the U.S. Virgin Islands experienced significant rainfall amounting to 10 ?

12 inches (250 ? 300 mm) but fairly minor damages .

== = Puerto Rico == =

Hurricane David was originally going to hit the south coast of Puerto Rico , but a change in course in the middle of the night spared it the damage that the Dominican Republic suffered .

Though it did not hit Puerto Rico , Hurricane David passed less than 100 miles (160 km) south of the island , bringing strong winds and heavy rainfall to the island . Portions of southwestern Puerto Rico experienced sustained winds of up to 85 mph (135 km / h) , while the rest of the island received tropical storm @-@ force winds . While passing by the island , the hurricane caused strong seas and torrential rainfall , amounting to 19 @.@ 9 inches (505 mm) in Mayagüez , Puerto Rico and up to 20 inches (510 mm) in the central mountainous region .

Despite remaining offshore , most of the island felt David 's effects . Agricultural damage was severe , and combined with property damage , the hurricane was responsible for \$ 70 million in losses (\$ 200 million in 2005 USD) . Following the storm , the FEMA declared the island a disaster area . In all , Hurricane David killed seven people in Puerto Rico , four of which resulted from electrocutions .

== = Dominican Republic == =

Upon making landfall in the Dominican Republic , David turned unexpectedly to the northwest , causing 125 mph (200 km / h) winds in Santo Domingo and Category 5 winds elsewhere in the country . The storm caused torrential rainfall , resulting in extreme river flooding . The flooding swept away entire villages and isolated communities during the storm 's onslaught . A rail @-@ mounted container crane collapsed in Rio Haina at the sea @-@ land terminal . Many roads in the country were either damaged or destroyed from the heavy rainfall , especially in the towns of Jarabacoa , San Cristobal , and Baní .

Nearly 70 % of the country 's crops were destroyed from the torrential flooding . Extreme river flooding resulted in most of the country 's 2 @,@ 000 fatalities . One particularly deadly example of this was when a rampaging river in the mountainous village of Padre las Casas swept away a church and a school , killing several hundred people who were sheltering there . The flooding destroyed thousands of houses , leaving over 200 @,@ 000 homeless in the aftermath of the hurricane . President Antonio Guzmán Fernández estimated the combination of agricultural , property , and industrial damage to amount to \$ 1 billion (\$ 2 @.@ 8 billion in 2005 USD) .

Neighboring Haiti experienced very little from David , due to the hurricane 's weakened state upon moving through the country .

== = Bahamas == =

While passing through the Bahamas , David brought 70 ? 80 mph (115 ? 130 km / h) winds to Andros Island as the eye crossed the archipelago . David , though still disorganized , produced heavy rainfall in the country peaking at 8 inches (200 mm) . Strong wind gusts uprooted trees , and overall damage was minimal .

== = United States == =

David produced widespread damage across the United States amounting to \$ 320 million (\$ 900 million in 2005 USD) . Prior to the hurricane 's arrival , 400 @,@ 000 evacuated from coastal areas . In total , David directly killed five in the United States , and was responsible for ten indirect deaths .

== = = Florida == = =

Upon making landfall , David brought a storm surge of only two @-@ four feet (0 @.@ 6 ? 1 @.@ 2 m) , due to its lack of strengthening and the obtuse angle at which it hit . In addition , David caused strong surf and moderate rainfall , amounting to a maximum of 8 @.@ 92 inches (227 mm) in Vero Beach . Though it made landfall as a Category 2 storm , the strongest winds were localized , and the highest reported wind occurred in Fort Pierce , with 70 mph (115 km / h) sustained and 95 mph (155 km / h) gusts .

Because the hurricane remained near the coastline , Hurricane David failed to cause extreme damage in Florida . The storm 's winds shattered windows in stores near the coast and caused property damage , including blowing the frame of the Palm Beach Jai Alai fronton and downing the 186 @-@ foot (57 @-@ m) WJNO AM radio tower in West Palm Beach into the Intracoastal Waterway . A few roofs were torn off , and numerous buildings were flooded from over six inches (150 mm) of rainfall . A 450 @-@ foot (140 @-@ m) crane was even snapped in two at the St. Lucie Nuclear Power Plant . The hurricane spawned over 10 tornadoes while passing over the state , though none caused deaths or injuries . Total damages in Florida amounted to \$ 95 million (\$ 270 million in 2005 USD) , of which \$ 30 million occurred in Palm Beach County , mostly from crop damage . Two journalists with TODAY newspaper from Brevard County followed the hurricane path from South Florida to Cocoa , FL and experienced extremely high winds as they reported on the hurricane .

== == Georgia == ==

Hurricane David made landfall in Georgia as a quickly weakening minimal hurricane , bringing a three ? five foot (0 @.@ 9 ? 1 @.@ 5 m) storm surge and heavy surf . Its inner core remained away from major cities , though Savannah recorded sustained winds of 58 mph (93 km / h) and wind gusts of 68 mph (109 km / h) . No major damage occurred in Savannah . High winds downed numerous power lines , leaving many without power for up to two weeks after the storm . Offshore , strong seas disrupted a portion of the coastal reef by moving a sunken ship 300 feet (90 m) . Overall , Hurricane David was responsible for minor damage and two casualties from its heavy surf .

== == Southeast , Mid @-@ Atlantic and New England == ==

Upon entering South Carolina , David retained winds of up to hurricane force , though the highest recorded was 43 mph (69 km / h) sustained in Charleston and a 70 mph (113 km / h) wind gust in Hilton Head Island . Numerous U.S. Navy ships that were in port at the Charleston Naval Station sortied , several of which (notably the frigate USS Bowen (FF @-@ 1079) and the destroyer tender USS Sierra (AD @-@ 18) sustained severe damage riding the storm out at sea . Similar winds occurred in North Carolina , and lesser readings were recorded throughout the northeastern United States , excluding a 174 mph (280 km / h) wind gust on Mount Washington in New Hampshire . In addition , David dropped heavy rainfall along its path , peaking at 10 @.@ 73 inches (273 mm) in Cape Hatteras , North Carolina , with widespread reports of over five inches (130 mm) . Storm surge was moderate , peaking at 8 @.@ 8 feet (2 @.@ 7 m) in Charleston and up to five feet (1 @.@ 5 m) along much of the eastern United States coastline .

Overall , damage was light in most areas , though it was very widespread . High winds and rain downed power lines in the New York City area , leaving 2 @.@ 5 million people without electricity during the storm 's passage . David also caused minor to moderate beach erosion , as well as widespread crop damage from the flooding . In addition , the hurricane spawned numerous tornadoes while moving through the Mid @-@ Atlantic and New England . In Virginia eight tornadoes formed across the southeastern portion of the state , of which six were F2 's or greater on the Fujita scale . The tornadoes caused one death , 19 injuries , damaged 270 homes , and destroyed three homes , amounting to \$ 6 million (\$ 20 million in 2005 USD) in losses . In Maryland , David 's outer bands formed seven tornadoes . In New Castle County , Delaware , an F2 tornado damaged numerous homes and injured five .

= = Aftermath = =

= = = Dominica = = =

Immediately after the storm , lack of power prevented communications and the outside world had little knowledge of the extent of the damage in Dominica . A citizen named Fred White ended that by using a battery @-@ operated ham radio to contact the world .

In response to the severe agricultural damage , the government initiated a food ration . By two months after the storm , assistance pledges amounted to over \$ 37 million (1979 US \$) from various groups around the world . Similar to the aftermath of other natural disasters , the distribution of the aid raised concerns and accusations over the amount of food and material , or lack thereof , for the affected citizens . The Hurricane destroyed some important landmarks , including a significant part of the ruins of the Fort Young which had stood since the 1770s .

Another occurrence less typical of the aftermath of other natural disasters was the looting . In supermarkets , seaports , and homes , what was not destroyed by the hurricanes was stolen in the weeks after the storm .

HMS Fife (a Royal Navy County Class Destroyer) was on its way back to the United Kingdom when the hurricane struck , and was turned back to provide emergency aid to the island . Sailing through mountainous seas The Fife docked in the main harbor at Roseau without assistance , and was the only outside help for several days . The crew provided work details and medical parties to offer assistance to the island and concentrated on the hospital buildings , the airstrip , and restoring power and water . The ship 's helicopter (called Humphrey) took medical aid into the hills to assist people who were cut off from getting to other help by fallen trees . The ship also used its radio systems to broadcast news and music to the island to inform the population of what was being done and how to get assistance . This was the first time a Royal Navy ship had provided a public broadcast news service .

= = = United States = = =

Despite the casualties and damages attributed to David , the storm 's effects were not as bad as in other countries . In particular , South Florida escaped relatively lightly . Because of this , NHC Director Neil Frank was accused of overly stirring up panic before the arrival of David : two local psychiatrists even claimed that the experience would make residents more complacent towards future storms . However , the NHC defended their methods , with Neil Frank stating : " If we hadn 't [raised public alarm] and our predictions had been more accurate , the consequences would have been disastrous . " One reporter who covered Hurricane David was Dick Baumbach , a journalist with TODAY newspaper , now known as Florida Today . He along with news photographer Scott Maclay followed the path of the hurricane from Miami to Central Florida . In Cocoa Beach , Baumbach decided to ride out the hurricane in his home with two other journalists . While it was a difficult and trying experience all three reporters survived and ended up winning numerous awards . The hurricane also interrupted the filming of the movie Caddyshack that was taking place at the Rolling Hills Country Club in Fort Lauderdale .

= = = Retirement = = =

The name David was retired following this storm because of its devastation and high death toll and will never be used again for an Atlantic hurricane . It was replaced with Danny for the 1985 season .