

= Hurricane Gordon ( 1994 ) =

Hurricane Gordon was a long-lived and catastrophic late-season hurricane of the 1994 Atlantic hurricane season . The twelfth and final tropical cyclone of the season , Gordon formed in the southwestern Caribbean on November 8 . Without strengthening , the storm made landfall on Nicaragua . Later on November 10 , the storm began to strengthen as it tracked further from land , and it quickly strengthened into Tropical Storm Gordon , the seventh named storm that season . Gordon also made landfalls in Jamaica and Cuba while a minimal tropical storm . It entered the southwestern Atlantic while resembling a subtropical cyclone . By the time it entered the Gulf of Mexico , it was fully tropical again . Tropical Storm Gordon later crossed the Florida Keys , and turning to the northeast it made landfall in Fort Myers , Florida . Gordon strengthened after it re-entered the Atlantic Ocean , becoming a hurricane on November 17 . It briefly threatened North Carolina while turning to the northwest , although it turned to the south and weakened . Gordon deteriorated into a tropical depression and struck Florida again at that intensity on November 20 . It turned to the north and dissipated the next day over South Carolina .

Gordon first caused flooding in northern Costa Rica that destroyed 700 houses and caused \$ 30 million in damage . There were six deaths in the country and an additional two deaths in neighboring Panama . Upon affecting Jamaica , the storm was responsible \$ 11 @. @ 8 million in damage and four deaths . Damage was heaviest in Haiti , after a prolonged southwesterly flow dropped 14 in ( 360 mm ) of rainfall in a 24-hour period . The rains resulted in extensive mudslides and flooding that disrupted transportation and damaged 10 @, @ 800 houses , with another 3 @, @ 500 destroyed . There were 1 @, @ 122 deaths in the country , partially due to deforested hills , and damage was estimated at \$ 50 million . In neighboring Dominican Republic , there were five additional deaths , as well as flooding near its capital . In Cuba , Gordon caused \$ 100 million in damage , and 5 @, @ 906 houses were damaged or destroyed . Due to large @-@ scale evacuations , there were only two deaths in the country . In Florida , the storm caused \$ 400 million in damage ( 1994 USD , \$ 639 million 2016 USD ) , much of it agricultural , and there were eleven deaths , eight of them direct . Gordon later affected North Carolina with high waves , causing beach erosion and destroying five houses . Overall damage was \$ 594 million due to Gordon ( 1994 USD , \$ 948 million 2016 USD ) .

International governments and agencies through the United Nations sent relief supplies and monetary assistance to Haiti , following Gordon 's devastating impact there . American soldiers were already stationed in the country to restore ousted Jean @-@ Bertrand Aristide to presidency . The troops helped in rescues and worked to restore a damaged road between Port @-@ au @-@ Prince and Jacmel . Despite the damage , the name was not retired .

= = Meteorological history = =

The origins of Gordon were from a tropical wave in the southwestern Caribbean Sea , which developed a circulation north of Panama early on November 6 . It gradually organized , becoming Tropical Depression Twelve on November 8 offshore eastern Nicaragua . Proximity to land prevented strengthening , and early on November 10 it made landfall near Puerto Cabezas , Nicaragua . Shortly thereafter , an upper @-@ level trough turned the depression to the northeast , and late on November 10 it intensified into Tropical Storm Gordon after reaching open waters . The circulation of the cyclone was initially very broad , covering much of the western Caribbean Sea , and wind shear prevented significant strengthening . Early on November 13 , Gordon struck Jamaica near Kingston as a minimal tropical storm , and later that day made landfall near Guantánamo Bay , Cuba . Around the time of Gordon crossing Jamaica , an upper @-@ level trough spawned a low @-@ level disturbance over the central Bahamas . From surface synoptic reports , the National Hurricane Center estimates Tropical Storm Gordon rapidly crossed Cuba and became the dominant system between Cuba and the Bahamas , but other meteorologists believe Gordon dissipated and that a second cyclone became the dominant system . The resultant storm north of Cuba became much larger , spreading rain across much of Florida .

A ridge to the north turned Gordon to the west @-@ northwest , and by November 14 the cloud pattern resembled that of a subtropical cyclone , with little convection near and the strongest winds well @-@ removed from the center . The storm paralleled the northern coast of Cuba and gradually developed convection near the center . On November 15 , the broad center crossed the Florida Keys near Key West . An approaching trough turned Gordon to the northeast , bringing it ashore near Fort Myers , Florida on November 16 with winds of 50 mph ( 85 km / h ) . Tropical Storm Gordon crossed the Florida peninsula in about nine hours , emerging into the Atlantic Ocean near Vero Beach . As it reached the Gulf Stream , a small but intense area of convection developed over the center , and after the Hurricane Hunters reported flight @-@ level winds in excess of 90 mph ( 145 km / h ) , Gordon attained hurricane status late on November 17 about 245 miles ( 345 km ) southeast of Cape Fear , North Carolina . Shortly thereafter , it reached peak winds of 85 mph ( 140 km / h ) , and the trough that had turned the hurricane to the north was replaced by a ridge . Gordon turned abruptly northwestward , and was briefly expected to cross the Outer Banks as a minimal hurricane . The hurricane turned to the south and south @-@ southeast , weakening into a tropical storm due to stronger shear and drier air . On November 19 , the storm turned to the southwest and later to the west . Gordon weakened into a tropical depression before striking Florida again near Cape Canaveral on November 20 . It later turned to the north and dissipated over South Carolina on November 21 .

= = Preparations = =

When Gordon was approaching Jamaica on November 12 , a tropical storm watch , and later warning , was issued for the island . The same day , a tropical storm warning was issued for southeastern Cuba from Camagüey to Guantanamo . On November 13 , a tropical storm warning was issued for the southwest peninsula of Haiti , and later that day the same warning was issued for the Bahamas . Due to the storm , 65 @,@ 000 people evacuated to safer locations in Cuba . Schools were closed in New Providence and Grand Bahama due to the storm , and Nassau International Airport was briefly shut down . A flight between Havana and Miami was canceled . In Cuba , officials forced 36 @,@ 518 people to evacuate their homes , and workers also moved 68 @,@ 780 livestock .

After Gordon emerged into the Atlantic north of Cuba , the National Hurricane Center issued a tropical storm warning for southern Florida from Jupiter to the Dry Tortugas , and later extended it to Boca Grande up along the west coast ; this was extended to Bayport on the west coast and to Titusville on the east coast while the storm was approaching the Florida Keys . When Gordon attained hurricane status and turned suddenly to the northwest , a hurricane warning was issued from Bogue Banks to the North Carolina / Virginia border . Florida governor Lawton Chiles activated the state 's Emergency Operations Center . In the Florida Keys , state parks were closed , which forced some campers to leave , and all schools were closed . On the mainland , University of Miami and Miami Dade College were also closed . Space Shuttle Atlantis was forced to land at Edwards Air Force Base in California instead of Kennedy Space Center . The storm caused flights to be canceled or delayed at Miami International Airport , and nearly all flights were canceled to and from the Florida Keys . Hundreds of people evacuated to shelters in five counties in east @-@ central Florida . In North Carolina , officials suggested people in low @-@ lying areas to go to higher ground , but they did not issue evacuation orders .

= = Impact = =

Although Gordon was a tropical storm for most of its existence , it caused enormous damage and loss of life . The United Nations estimated death toll in Haiti was 1 @,@ 122 . Six deaths were reported in Costa Rica , five in the Dominican Republic , two in Jamaica , two in Cuba , and eight in Florida . Property damage to the United States was estimated at \$ 400 million ( 1994 USD , \$ 639 million 2016 USD ) . Property damage statistics for the other affected areas are not available , but were reportedly severe in both Haiti and Cuba . The high death toll from Gordon made it the

deadliest Atlantic hurricane since Hurricane David in 1979 , which killed thousands in the Dominican Republic .

= = = Central America = = =

The first location affected by Gordon was Central America , when it briefly moved over northeastern Nicaragua as a tropical depression . Severe localized flooding occurred in Nicaragua , Panama , and most significantly Costa Rica . There , several days of heavy rainfall damaged about 180 mi ( 300 km ) of roads and bridges , mostly in rural areas . In Upala in the northern portion of the country , the rains damaged beans and rice crops . More than 700 homes were destroyed , leaving about 4 @, @ 000 people homeless . Nationwide , the system killed six people and caused \$ 30 million in damage . In Panama , the floods killed two people .

= = = Jamaica = = =

While passing south of Jamaica , Gordon dropped heavy rainfall , which caused flooding in six parishes , mostly in Clarendon and Saint Catherine . The rains caused flooding and mudslides that blocked roads . Gordon left \$ 11 @. @ 8 million in damage , mostly in Clarendon . About half of the overall damage was related to roads , and an additional quarter was due to crop damage . There were four deaths and two injuries in the country . Two of the deaths were drownings .

= = = Hispaniola = = =

The broad circulation of Gordon produced a persistent southerly flow across Hispaniola , causing orographic lift in mountainous regions . This caused a prolonged period of heavy rainfall , reaching 14 in ( 360 mm ) in Les Cayes in a 24 ? hour period , and over 9 in ( 230 mm ) in the same duration in the capital city , Port @- @ au @- @ Prince . In Jacmel , Gordon dropped 13 in ( 330 mm ) in about 12 hours . The rains resulted in flooding and landslides across the country . There was knee @- @ deep flooding in the shantytown of Cité Soleil , and in Jacmel , the rains increased levels along three rivers . There , the storm washed out the road connecting with Port @- @ au @- @ Prince , and three bridges were destroyed . In Jacmel , 725 houses were destroyed , forcing 1 @, @ 500 people to stay at shelters . Gordon left portions of southeastern Haiti without water access . About 10 @, @ 800 houses were damaged to some degree , and an additional 3 @, @ 500 homes were destroyed . About 1 @. @ 5 million people were directly affected in the country , mostly near Port @- @ au @- @ Prince and in the southern portion , and more than 89 @, @ 000 people were left homeless . In Port @- @ au @- @ Prince , about 20 @, @ 000 homes were flooded , and the bridge connecting the city with northern Haiti was also flooded . Overall damage in the country was estimated at \$ 50 million .

The floods and mudslides killed many people in Haiti , although the exact total will likely never be known . On November 19 , officials reported 531 deaths , and by two days later the total was potentially as high as 2 @, @ 000 . On November 24 , the death toll reached 824 , and the United Nations Office for the Coordination of Humanitarian Affairs reported on December 21 that Gordon killed 1 @, @ 122 people in the country . Most of the deaths occurred in Port @- @ au @- @ Prince , Jacmel , and Léogâne . Damage was heavier in Haiti than elsewhere along Gordon 's track due to poor infrastructure consisting of shacks on flood @- @ prone denuded hills . The country suffers large death tolls from many hurricanes , caused in part by human activity . Large @- @ scale deforestation left Haiti with about 1 @. @ 4 % of its forests as of 2004 , leaving denuded mountain slopes that allows rainwater to wash down unimpeded . The lack of tree cover contributed to the devastating floods that caused most of Gordon 's deaths .

In neighboring Dominican Republic , Gordon caused flooding and landslides that disrupted travel and communications to the interior portions of the country . Several slums around Santo Domingo flooded . The storm killed five people in the country .

== = Cuba and Bahamas == =

Shortly after moving over Jamaica , Gordon crossed over eastern Cuba . At Guantanamo Bay Naval Base , a station recorded 69 mph ( 111 km / h ) sustained winds , with gusts to 120 mph ( 190 km / h ) during a microburst . The winds were not representative of the storm , and Gordon 's landfall intensity was estimated at around 46 mph ( 74 km / h ) . The storm caused widespread power outages and forced several roads to close . Damage was heaviest in Guantánamo Province , where 9 mi ( 17 km ) of seawalls and two aqueducts were destroyed . The storm damaged or destroyed 43 bridges , damaged 1 @, @ 106 mi ( 1 @, @ 779 km ) of roads , and wrecked 16 @. @ 5 mi ( 26 @. @ 5 km ) of rail lines . About 3 mi ( 5 km ) of underground electrical cables were damaged . There was heavy agricultural damage in southeastern Cuba , estimated at about \$ 45 million . Gordon damaged 7 @, @ 482 acres ( 3 @, @ 028 hectares ) of sugar cane fields and damaged or destroyed about 5 @. @ 5 million banana trees . About 100 @, @ 000 sacks of coffee were wrecked , amounting to \$ 3 @. @ 5 million in damage , and 50 @, @ 000 litres of milk were ruined . While Gordon was paralleling northern Cuba , it produced high seas that caused flooding , including in Havana . Nationwide , the storm damaged 5 @, @ 750 houses and destroyed 156 others . The cost of damage and reconstruction of homes and roads was \$ 47 @. @ 4 million , and there was an additional \$ 9 @. @ 5 million in damage to public buildings . Gordon killed two people in the country , which was kept to a minimum due to evacuations , and damage totaled \$ 102 million . Two people were injured at Guantanamo Bay Naval Base . The flooding from Gordon followed two other similarly damaging events in the preceding year .

Gordon also affected the nearby Bahamas , producing 46 mph ( 74 km / h ) sustained winds at Kemps Bay , Andros .

== = Florida == =

In the Florida Keys , wind gusts up to 49 mph ( 79 km / h ) caused minor damage to trees and motor homes . Intense rainbands caused flooding in low @- @ lying and poorly @- @ draining areas , mostly in the upper Florida Keys . High tides closed portions of U.S. 1 . In the Tampa Bay area , outer rainbands downed power lines and trees , one of which fell onto a car .

While Gordon was moving across southern Florida , Virginia Key reported sustained winds of 53 mph ( 85 km / h ) , which was the highest in the state . Gusts reached 83 mph ( 134 km / h ) at a location in southern Dade County . Similar to the Caribbean , the storm dropped heavy rainfall in southern Florida , with widespread areas reporting over 6 in ( 150 mm ) in the eastern portion of the state . Rainfall peaked at 16 @. @ 1 in ( 410 mm ) in Coopertown . High waves from Gordon severely eroded beaches along the state 's eastern coastline , and damaged coral and artificial reef systems . Waves flooded coastal roads up to 2 ft ( 0 @. @ 61 m ) deep in Miami Beach , and also damaged seawalls . Near Fort Lauderdale , the storm washed a 508 ft ( 154 m ) cargo ship aground less than 150 ft ( 45 m ) from the beach . Several other boats sank or were beached , which prompted 37 rescues . One woman was rescued after being swept 3 @, @ 000 ft ( 910 m ) off a fishing pier in Boynton Beach . Gordon spawned six tornadoes in the state , of which two did no damage and two caused minor damage . A tornado in Lake Worth damaged 39 homes and two businesses . The most damaging tornado was an F2 in southern Brevard County , which originated as a waterspout and moved onshore near Barefoot Bay . It moved through a mobile home community , destroying 62 homes and damaging 227 others to some extent ; damage from the tornado was estimated at \$ 10 million . The same tornado injured 40 people , causing six to be hospitalized , and killed an elderly man who died due to head trauma .

Across Florida , Gordon 's winds damaged power lines and knocked down trees and traffic signals ; about 425 @, @ 000 people lost power due to the storm . The rains caused flooding in Dade and Collier counties , which damaged \$ 275 million worth of crops , mostly to vegetables and sugar cane . In some locations , the crop damage was worse than during Hurricane Andrew in 1992 , due to fewer crops being planted when Andrew struck the state . Along Elliott Key , Gordon damaged the coral reef system to a greater extent than Andrew . Inland flooding damaged buildings due to fast

@-@ rising water and roof collapses . In Volusia County , floods entered 1 @,@ 236 buildings , causing \$ 26 million in damage . Flooding caused dozens of roads to close , some of which were washed out . In the Everglades , flooding killed several deer . Statewide , two people drowned in separate instances after driving into flooded areas . Three people drowned along beaches , including one man who died in a rip current while attempting to rescue his son . In Hillsboro Inlet , two people drowned after their boat was overturned by high waves . Throughout Florida , Gordon directly killed eight people , and injured 43 people . There were also three indirect deaths ; two were from traffic accidents , and one was related to a heart attack after a person pushed a stalled car in a flooded road . Statewide damage was estimated at \$ 400 million ( 1994 USD , \$ 639 million 2016 USD ) .

= = = Remainder of United States = = =

After affecting Florida , Gordon produced rainfall along much of the eastern United States , extending as far north as New Jersey . In North Carolina , rainfall peaked at 4 @.@ 96 in ( 126 mm ) in New Holland , and in Virginia the highest rainfall total was 5 @.@ 25 in ( 133 mm ) near Norfolk . Sustained winds in the Hatteras , North Carolina area peaked at 50 mph ( 80 km / h ) in Buxton . Just offshore at Diamond Shoal Light , a station reported 10 @-@ minute sustained winds of 71 mph ( 114 km / h ) . The hurricane produced tides of 2 @.@ 7 ft ( 0 @.@ 82 m ) above normal in Frisco .

High waves and tides resulted in significant beach erosion along the Outer Banks . The waves closed several portions of North Carolina Highway 12 for up to four days , and also closed a portion of U.S. Route 70 in eastern Carteret County . Heavy dune damage occurred on Ocracoke Island . North of Hatteras Village , the high waves washed out 225 ft ( 69 m ) of dunes , and portions of the Outer Banks between Hatteras and Frisco were flooded up to 2 @.@ 5 ft ( 0 @.@ 76 m ) deep . The effects were similar to that of the 1991 Perfect Storm , although damage was lighter during Gordon . The hurricane destroyed five homes in Kitty Hawk , which were condemned after being previously damaged by Hurricane Emily in 1993 . Also in Kitty Hawk , the storm damaged 52 houses and 2 businesses . In Rodanthe , two homes sustained water damage . The cost of the storm in the state was estimated at \$ 314 @,@ 000 . Effects further south in North Carolina were lesser , although serious beach erosion was reported .

Offshore , a family of four required rescue from the Coast Guard after their boat began filling with water in the midst of 17 ft ( 5 @.@ 2 m ) surf . A 49 ft ( 15 m ) sailboat was disabled about 115 mi ( 185 km ) offshore Norfolk , Virginia , and the crew of three were also rescued by the Coast Guard . The sailboat was sailing from Bermuda to Oxford , Maryland , but was halted after the engine failed , the anchor was ripped off , and the mainstay was torn . The interaction between Gordon and a ridge over New England produced coastal flooding in eastern Virginia . Tides reached 4 ft ( 1 @.@ 2 m ) above normal in Virginia Beach , which washed away 100 ft ( 30 m ) of a fishing pier . The high tides caused road damage and minor housing damage .

= = = Aftermath and lack of retirement = = =

In Costa Rica , President José María Figueres declared a state of emergency due to flooding in that country . He sought \$ 15 million in aid from the Inter @-@ American Development Bank . The country 's government handled relief efforts through its Red Cross and federal and non @-@ governmental organizations . The government of Cuba issued an appeal to the United Nations Office for the Coordination of Humanitarian Affairs for financial assistance ; as a result , the agency provided \$ 30 @,@ 000 , and the United Nations Development Programme provided \$ 50 @,@ 000 . The government of Luxembourg sent \$ 37 @,@ 000 worth of construction materials , and the European Union sent \$ 443 @,@ 000 to the country .

On November 16 , the government of Haiti issued an appeal to the international community for assistance . In response , agencies through the United Nations donated \$ 735 @,@ 000 , including 20 @,@ 000 water units and 3 @,@ 000 blankets . The United Nations Office for the Coordination

of Humanitarian Affairs flew 30 tons of supplies , financed by Italy and Luxembourg . The European Union donated about \$ 3 @. @ 8 million to the country , and various countries sent about \$ 1 @. @ 8 million in cash or the equivalent thereof in relief items . The Canadian government donated \$ 485 @, @ 000 , and the government of Japan sent \$ 400 @, @ 000 in aid . The government of France provided blankets , clothing , and tarpaulins , and the United States sent 5 @, @ 000 blankets . In the days after the storm , the Haitian Army and international workers made emergency repairs to the road between Jacmel and Port @- @ au @- @ Prince , which was permanently reopened on November 25 . The Haitian government provided \$ 3 @. @ 2 million to repair damage and assist those affected by the storm . The government sent about \$ 112 @, @ 000 to cities to provide for clearing roads , housing repairs , and for the funerals of storm victims . Workers from the United Nations set up relief work in Port @- @ au @- @ Prince . Assistance quickly reached the ravaged town of Jacmel , including 116 tons of food , 9 tons of medicine , and clothing . Six soldiers from the United States Special Forces rescued 35 Haitians using an inflatable boat . About 100 soldiers from the 10th Mountain Division assisted in relief operations in Jacmel , rescuing hundreds of people . About 12 @, @ 000 United States troops were already in the country when Gordon struck to restore democracy under ousted president Jean @- @ Bertrand Aristide .

Due to the crop damage in Florida , the price of vegetables across the United States rose . There were about 25 @, @ 000 insurance claims following the storm 's passage .

Despite the devastation in Haiti and the extensive damage in Cuba and Florida , Gordon was not retired by the World Meteorological Organization in Spring of 1995 . Member nations of the World Meteorological Organization must send a delegate to the annual meeting to formally submit a request for tropical cyclone name retirement ; for unknown reasons , Haiti did not send a delegate to the Spring 1995 meeting . The World Meteorological Organization issued an official statement crediting Jamaica and Cuba 's warning infrastructure for the low loss of life there from Gordon , and blaming Haiti 's lack of such a system for the large number of deaths there .