

= 1949 Florida hurricane =

The 1949 Florida hurricane was the second recorded storm and the strongest and most intense tropical cyclone of the 1949 Atlantic hurricane season . It was the most intense tropical cyclone to affect the United States during the season , with a minimum central pressure of 954 mbar (28 @. @ 18 inHg) at landfall . The cyclone originated from an easterly wave near the Leeward Islands , and it rapidly intensified to a hurricane near the Bahamas . It strengthened to a major hurricane northwest of Nassau , Bahamas , and it struck West Palm Beach , Florida as a Category 4 hurricane with maximum sustained winds near 130 mph (210 km / h) and peak gusts near 160 mph (260 km / h) above the surface . It turned north over the Florida peninsula , and it transitioned to an extratropical low pressure area over New England . The tropical cyclone inflicted \$ 52 @, @ 000 @, @ 000 (1949 USD) in damage , most of which was incurred in the state of Florida . It was the costliest storm of the season .

= = Meteorological history = =

On August 23 , a moderate tropical storm developed 200 miles (323 km) east of Sint Maarten . Operationally , the system was treated as an easterly wave until it moved through the Bahamas . It is believed that the system originated near the Cape Verde islands . On August 24 , the tropical storm passed north of the Leeward Islands and San Juan , Puerto Rico , and then strengthened to a minimal hurricane with 75 mph (120 km / h) winds on August 25 . Subsequently , it strengthened rapidly , and the cyclone was noted as " well developed " when it passed near Nassau with 115 mph (185 km / h) winds on the morning of August 26 . At the time , it was the equivalent of a Category 3 hurricane on the Saffir @-@ Simpson Hurricane Scale . The storm strengthened further over the Gulf Stream , and it moved ashore over the city of West Palm Beach as a strong Category 4 hurricane around 7 : 20 p.m. EDT . The city 's airport reported calm conditions from 7 : 20 ? 7 : 40 p.m. , and the minimum central pressure of 954 mbar (28 @. @ 18 inHg) was measured at the site . Peak gusts were recorded at 125 mph (205 km / h) before the anemometer blew away . A maximum sustained wind of 153 mph (246 km / h) was reported from the Jupiter Inlet Light station prior to the loss of the anemometer ; although conditions were slightly more severe after the reading , reliable estimates are unavailable . The Atlantic hurricane database lists the cyclone as a strong Category 4 hurricane at landfall . The wind reading is the basis for the Category 4 designation in the Atlantic hurricane database , although a reduction from the anemometer 's elevated location lends credence to the concept of a weaker system . Originally , the system was designated as a Category 3 hurricane in the state of Florida , based on the minimum central pressure reading of 954 mbar (28 @. @ 18 inHg) ; this pressure corresponds to the original classification of a Category 3 hurricane on the Saffir @-@ Simpson Hurricane Scale . However , modern analysis applies Saffir @-@ Simpson rankings based on maximum sustained wind speeds . The 1949 Florida hurricane will be eventually reanalyzed by the Atlantic hurricane reanalysis project , which may find a weaker hurricane in Florida . The central pressure of 954 mbar (28 @. @ 18 inHg) is unusually high for a strong Category 4 hurricane ; the reanalysis project has discovered that hurricanes erroneously featured stronger winds than the typical pressure / wind relationship in the 1940s ? 1960s , unlike subsequent hurricanes in the 1970s ? 1980s . The evidence suggests wind speeds may have been overestimated for hurricanes in the 1940s ? 1960s .

Inland , the hurricane moved over the northern portion of Lake Okeechobee , following a similar path as the 1928 Okeechobee hurricane . On August 27 , the hurricane recurved over the Florida peninsula , and then weakened to a Category 1 hurricane northeast of Tampa . The system diminished to a tropical storm near Cedar Key , and it entered southern Georgia during the morning of August 28 . The system passed over the Carolinas as a weak tropical storm , and it was operationally noted as a " weak disturbance " at the time . The cyclone passed through the Mid @-@ Atlantic states and New England on August 29 ; it became extratropical over New Hampshire . On August 31 , the extratropical low was last detected over the western North Atlantic Ocean .

= = Preparations = =

On August 25 , the northern Bahamas were advised to initiate hurricane precautions , and a hurricane warning was issued for the islands . South Floridians were encouraged to closely monitor the progress of the storm . On August 26 , hurricane warnings were released from Miami to Vero Beach ; officials decided to cancel proposed evacuations of the Lake Okeechobee region , as the presence of the Herbert Hoover Dike was expected to prevent flooding .

= = Impact = =

In the Bahamas , the cyclone produced 120 mph (195 km / h) wind gusts on Bimini . Damages in the Bahamas are unknown .

In Florida , the hurricane produced hurricane @-@ force gusts from Miami Beach to Saint Augustine . The majority of the state experienced sustained winds of at least 50 mph (85 km / h) . The strongest winds of 100 @-@ 126 mph (161 @-@ 203 km / h) were observed in the Lake Okeechobee region , while unofficial wind gusts reached 160 mph (260 km / h) at Stuart . Additionally , Vero Beach reported sustained winds of 97 mph (156 km / h) and peak gusts of 110 mph (177 km / h) . The minimum central pressure near Lake Okeechobee was 956 mbar (28 @.@ 24 inHg) at Canal Point . Palm Beach , Jupiter , and Stuart experienced the most severe damage from the storm in south Florida ; hundreds of homes , apartment buildings , stores , and warehouse buildings lost roofs and windows . Interior furnishings were blown through broken glass into the streets . Overall , the storm caused two deaths and \$ 52 million in damage , mostly in Florida .

Trees and power lines were knocked down in Miami . Five homes were destroyed in Delray Beach . The " negro section " of Boynton Beach suffered \$ 10 @.@ 000 in damage . Tides lashed the coast , with the worst impact between Lake Worth and Palm Beach . Much of the island of Palm Beach was covered with power lines , trees , broken glass , sand , and other debris . Between Joseph E. Widener 's mansion in Palm Beach and the Lake Worth casino , several washouts were reported . Along State Road 704 (Royal Palm Way) , many royal palm trees were toppled . At the Society of the Four Arts , several trees were uprooted and the library garden was ruined . The radio antenna at the town hall collapsed , damaging the roof , police and firefighters barracks , the door to the fire station , and a car . Palm Beach suffered approximately \$ 2 @.@ 6 million in damage . In Lake Worth , a total of about 400 people stayed at six shelters in the area during the storm . Between 300 and 400 homes were impacted by the storm , with most of the effects limited to broken roofs , shattered windows , and water damage . One home was completely demolished . This does not include the number of homes deroofed in the " negro quarters " . Additionally , a trailer was overturned and " rolled over and over like a rubber ball " . Many plate @-@ glass windows broke in the business district , while a filling station on State Road 802 was destroyed .

In West Palm Beach , cars were overturned in the interior of a dealership as winds shattered windows .

Tides reached 12 feet (144 in) above normal at Belle Glade and Clewiston , but the Herbert Hoover Dike remained intact , protecting the area from severe flooding . Minimal erosion occurred in some locales .

Water entered many homes in Palm Beach and Martin counties . Snakes and mosquitoes infested many residences . Precipitation totals of 8 @.@ 18 , 7 @.@ 10 , and 9 @.@ 51 inches (242 mm) were measured at Belle Glade , Okeechobee , and St. Lucie Lock , respectively . Radio towers were toppled in Lake Worth and Belle Glade .

Severe damage was received by 40 percent of Stuart 's residences and commercial structures , and 90 percent required repairs . A church , baseball park , and ice company was destroyed in the area 's black neighborhoods . Many flimsy buildings were destroyed in the neighborhoods . Three portions of the Jensen causeway near Sewall 's Point were ripped away . A hangar and beacon was destroyed at the local airport in Martin County . 500 people were homeless in Stuart . A water mark of 8 @.@ 5 feet (102 in) was recorded on the St. Lucie River near Stuart .

The cyclone inflicted heavy citrus losses , and one @-@ third of the trees were uprooted in many

groves . Agricultural losses reached \$ 20 million (1949 USD) , including 14 million boxes of fruit . Wind gusts of 75 mph (120 km / h) affected Clermont , and numerous central Florida communities reported severe damage from the winds . The observation station at Archbold Biological Station reported peak wind gusts of 110 mph (175 km / h) ; the town of Sebring reported 125 mph (205 km / h) gusts , which caused damage to trees and severe structural damage to buildings . Estimations of property damage reached \$ 100 @, @ 000 (1949 USD) in the town , and local citrus groves estimated losses near \$ 2 @, @ 000 @, @ 000 (1949 USD) . Buildings received considerable damage in the Lake Placid area , and telegraph , telephone , rail , and bus services were disrupted . Flooding affected Georgia and the Carolinas , although the rains alleviated drought conditions in Maryland , Pennsylvania , New York , and New England . Charleston , South Carolina reported a wind gust of 80 mph (129 km / h) , and power lines were damaged . In Maryland , damage was minimal , although trees were prostrated and electrical services were down . Two people were killed in Florida , but advance warnings prevented a higher death toll .