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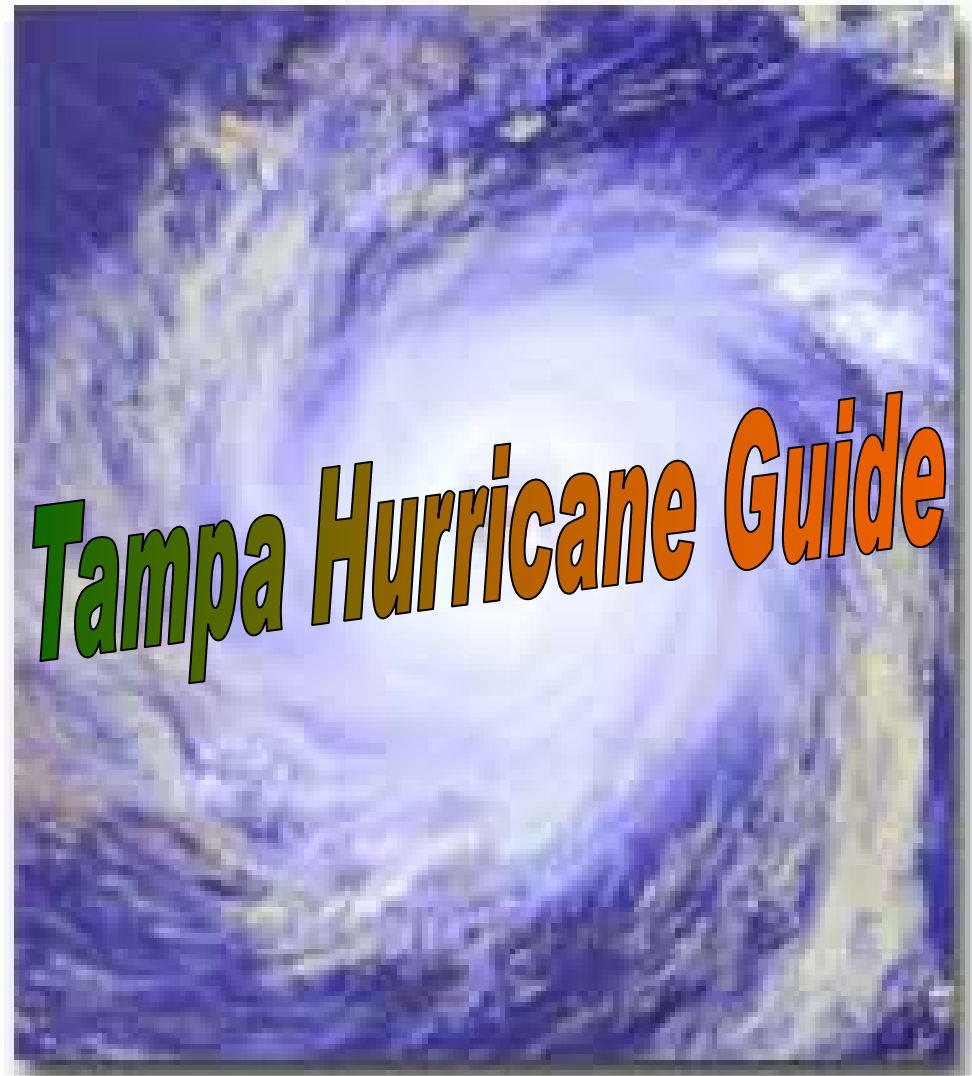
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U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Environmental Satellite, Data, and Information Service
National Climatic Data Center
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Hurricane History

Over the 133 year period 1871 through 2004 a total of 899 tropical cyclones (tropical storms and hurricanes) have been recorded over the North Atlantic area. Of these, 26 have been recorded within a 50 mile radius of Tampa, Florida, but in few cases more distant storms have caused significant damage.

In 1824, the U. S. Army built Fort Brooke on Tampa Bay. This site was chosen because it included a harbor where troops and supplies could be landed. Settlers soon estimated a village nearby and named it for the bay which had been designated as Tampa two centuries earlier by Spanish mapmakers.

The sparsity of settlements prior to the 19th century provided little information on early tropical storms in the West Florida region. In 1528, the Narvaez Expedition of Spain explored the West Florida coast and was devastated by a tropical storm. Only 10 of the 400 crew members survived.

In October 1835 a severe hurricane drove many ships ashore and caused damage estimated at 200 thousand dollars. Loss of life was reported to have been high. One of the most intense hurricanes in the early history of Tampa occurred in late September 1848. During this storm, the barometer fell to 28.18 inches and the tide reached 15 feet low water. All buildings near the bay were destroyed, but no lives were lost.

1910, October 18 - Northeast winds up to 70 m.p.h. carried water out of Tampa Bay and the Hillsboro River. Tides were a record 8 feet below mean low water. Forty ships were grounded and 10 percent of the area's citrus crop was destroyed. No deaths were reported.

1921, October 25 - This storm, with coastal winds of 100 m.p.h., was one of the most intense to strike the Tampa area. Storm tides of 10.5 feet were the highest since 1848. Six deaths and nearly 1 million dollars in crop losses were attributed to the storm.

1935, September 3 - Barometric pressure fell to 28.94 inches and winds were estimated at 85 m.p.h. as this severe storm passed west of Tampa. Three persons were killed and property and shipping damage were reported as moderate. It was named **Labor Day Hurricane** which was most powerful and a Category 5. 408 people were killed in Florida.

1944, October 19 - Over 60 million dollars in crop and property damage occurred as this large and dangerous storm crossed the coastline near Sarasota and tracked just east of Tampa. Eighteen deaths and 24 injuries were reported. Northeast wind gusts to 100 m.p.h., barometric pressure of 28.55 and 7 inches of rain accompanied this storm.

1946, October 7 - This storm came ashore at Tampa Bay with peak winds estimated at 80 m.p.h. Minor damage from coastal flooding was reported. Crop losses totaled 5 million dollars, but no lives were lost.

1950, September 4 thru 6 - Much of the West Florida coastline suffered extensive damage from high winds and water as this slow-moving storm tracked northwest of the Tampa area. Two persons died and 27 were injured. Although winds reached only 60 m.p.h. at Tampa, tide in Tampa Bay rose 6.5 feet above normal, the highest since 1921.

1960, September 10 - Tampa escaped the brunt of this severe hurricane as it traversed northward through Central Florida. Northerly wind gusts of 90-100 m.p.h. were reported in the Tampa area, with moderate damage to property and crops.

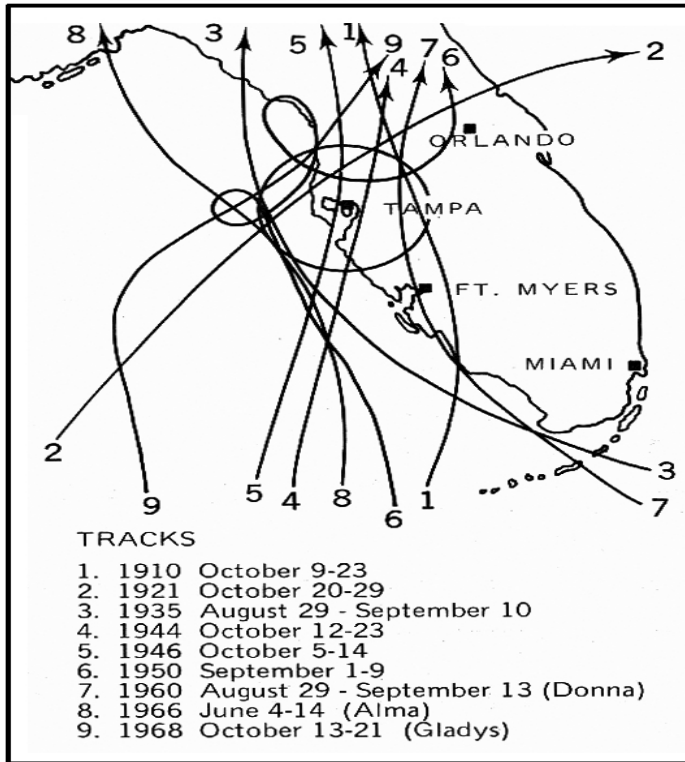
1966, June 8 - Sustained winds exceeded 75 m.p.h. at exposed coastal locations as this strong early season hurricane passed west of Tampa. Two deaths were attributed to the storm in the Tampa area. Damage was light, mainly in the form of salt-water flooding and beach erosion.

1968, October 18 - This storm came ashore north of Tampa with 85 m.p.h. winds and tides 5 feet above normal. Mobile homes were rolled over, boat houses destroyed, and trees uprooted. "**Gladys**" caused 6.7 million dollars in property and crop damage, but no fatalities and few injuries.

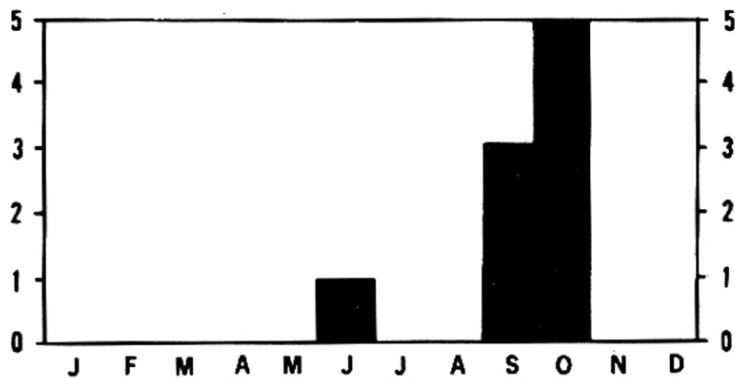
"**Gladys**" was the last significant hurricane to hit within 50 miles of Tampa. In 1926 one of the most severe storms to affect the state passed south of Tampa after crossing the Florida peninsula. Two hundred and forty lives were lost and property and crop damage exceeded 70 million dollars throughout the state.

Another intense hurricane in 1947 followed nearly the same track as the 1926 storm. Heavy damage occurred in West Coast communities south of Sarasota with 17 deaths and 30 million dollars in damage reported in Southern Florida.

The following map shows tracks of the nine hurricanes that came within 50 miles of Tampa between 1910 and 1968.



TOTAL NUMBER OF HURRICANES OCCURRING IN EACH MONTH WITHIN A 50 MILE RADIUS OF TAMPA, FLORIDA 1910 - 1968



DEFINITIONS TO KNOW

Tropical Disturbance: Rotary circulation slight or absent at surface but sometimes better developed aloft; no closed isobars (lines of equal atmospheric pressure) and no strong winds; a common phenomenon in the tropics.

Tropical Depression: One or more closed isobars and some rotary circulation at surface; highest wind speed less than 38 m.p.h. (33 knots).

Tropical Storm: Closed isobars, distinct rotary circulation, highest wind speed 39-73 m.p.h. (34-63 knots).

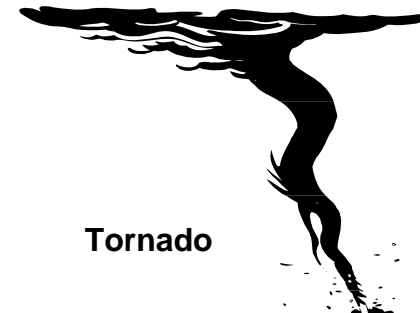
Hurricane: Closed isobars, strong and very pronounced rotary circulation; wind speed of 74 m.p.h. (64 knots) or more.

Storm Surge: An abnormal rise in water level caused by a storm. Coastal areas and estuaries are affected.

Hurricane Watch: Hurricane conditions are a real possibility and may threaten the area within 24 hours; it does not mean they are imminent. Everyone in the area covered by the watch should keep abreast of the latest advisories and bulletins. Be prepared to take quick action if a hurricane warning is issued.

Hurricane Warning: Hurricane conditions are expected within 24 hours or less. Coastal areas are identified where sustained winds of 74 m.p.h. (64 knots) are expected to occur. The hurricane warning may also describe areas where dangerously high water, flooding or exceptionally high waves are forecast, even though winds may be less than hurricane force.

Hurricanes also spawn tornadoes, so as a hurricane approaches one should listen for tornado watches and warnings and be ready to take immediate shelter.



Tornado

BE PREPARED

1. Know the elevation of your property above mean sea level so you can relate high water forecasts to your area. Learn the water (storm surge) history for your area.
2. Have a safe evacuation route planned.
3. Keep flashlights, portable radio, emergency cooking facilities and extra medical supplies stocked.
4. Have plans for securing valuables, livestock, and pets.
5. Know how to reach emergency services (e.g., Red Cross).
6. Keep your car fueled.

IN CASE OF A HURRICANE WARNING

1. Leave low-lying areas.
2. Moor small boats securely, then evacuate them.
3. Board, shutter or tape windows; brace doors.
4. Secure objects that may fly about in the wind.
5. Leave mobile homes for more substantial shelter.
6. Stay indoors away from doors and windows, unless asked to evacuate.
7. Listen for Bulletins. If asked to evacuate, GO! It means your life is in danger.

The United States Navy currently recommends evasion at sea when Tampa is threatened by a severe hurricane. Tampa Bay is susceptible to a strong storm surge and lacks suitable terrain features and anchorage required for vessel safety. This recommendation applies to hurricanes approaching from the south and west over the Gulf of Mexico and from the southeast over peninsular Florida.

Extensive flooding on the barrier islands (keys) is probable during passage of any significant hurricane. These should be evacuated whenever a storm surge threatens.

Saffir - Simpson Hurricane Scale

- **Tropical Storm - Winds 39 - 73 mph**
- **Category 1 - Winds 74 - 95 mph (64 - 82 kt)**
No real damage to buildings. Damage to unanchored mobile homes. Some damage to poorly constructed signs. Some coastal flooding and minor pier damage, also.
- **Category 2 - Winds 96 - 110 mph (83 - 95kt)**
Some damage to building roofs, doors and windows. Considerable damage to mobile homes. Flooding damages piers and small craft in unprotected moorings may break their moorings. Some trees blown down.
- **Category 3 - Winds 111 - 130 mph (96 - 113 kt)**
Some structural damage to small residences and utility buildings. Large trees blown down. Mobile homes and poorly built signs destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris. Terrain may be flooded well inland.
- **Category 4 - Winds 131 - 155 mph (114 - 135 kt)**
More extensive curtainwall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Terrain may be flooded well inland.
- **Category 5 - Winds 156 and more than 200 mph (135 + kt)**
Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Flooding causes major damage to lower floors of all structures near the shoreline. Massive evacuation of residential areas may be required.