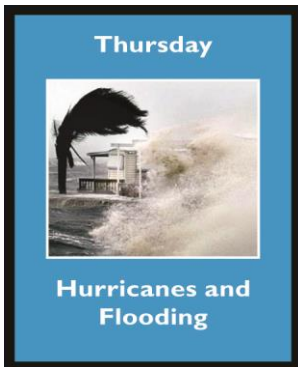




Florida's Severe Weather Awareness Week takes place from January 23-27, 2017. Severe Weather Awareness Week is an opportunity for Floridians to learn about the various weather hazards that frequently impact the state and how families and businesses can prepare for these natural events.



Each day focuses on a specific weather event. **Thursday's focus is on hurricanes and flooding.**

The most feared weather phenomenon throughout Florida during the summer and early fall is the tropical cyclone. Close to the tropics and surrounded on three sides by warm water, the unique location of Florida makes it particularly vulnerable to these systems as they develop across the Atlantic Ocean, Gulf of Mexico and Caribbean Sea, and the relatively flat terrain can also make it susceptible to flooding.

Florida has a long history of hurricanes. Records indicate that approximately 110 hurricanes and almost 200 tropical storms have impacted the state since 1851 with many more cited in history books before records were kept.

DID YOU KNOW??? No other state in the country has more hurricane landfalls per year on average than does Florida. Nearly 40% of all hurricanes that strike the United States make landfall in Florida.

DID YOU KNOW??? In the last 150 years, all of Florida's counties have been impacted by at least one hurricane.



The North Atlantic Ocean hurricane season officially begins on June 1st and continues through November 30th. However, tropical systems can still form outside of hurricane season as early as May and as late as December. Although the number of tropical storms and hurricanes typically peaks during August and September, it is important to remember that Florida can be impacted by tropical weather systems any time during the season. Residents and visitors need to plan ahead and remain ready for possible hurricane impacts.

The 2016 hurricane season had above-average activity and was the most active season since 2012, with 15 total named storms, of which 7 were hurricanes. 3 of the 7 hurricanes (Gaston, Matthew and Nicole) became Major Hurricanes (Category 3 or higher). The season started very early when Hurricane Alex developed in January, becoming the second strongest January hurricane ever and the first January hurricane since Alice in 1955. The next tropical cyclone, Bonnie, developed in late May, the first occurrence of two pre-season Atlantic storms since 2012 and the third occurrence since 1951. As Bonnie dissipated on June 5, Tropical Storm Colin formed, becoming the earliest occurrence of a season's third named storm since reliable records began. On June 20, Danielle became the earliest fourth named storm. No storms formed in July, an occurrence not seen since 2012, but activity

increased dramatically in August. Gaston became the first major hurricane of the season on August 28. On September 2, Hurricane Hermine broke the 11 year record since Hurricane Wilma that a hurricane struck Florida. Tropical Storm Julia became the first tropical system to form over land in Florida on September 14. Hurricane Matthew became the first Category 5 Atlantic hurricane since 2007, and simultaneously became the southernmost storm of that intensity, beating the record set by Hurricane Ivan. Matthew resulted in more than 590 deaths during its long passage, and was almost the first major hurricane to strike Florida in 11 years, but its eye remained several miles offshore (closest eye distance about 12 miles east of Melbourne, Florida, on October 6 with winds of 130 mph). However, early on October 8, the eye of Category 1 Matthew made landfall in South Carolina. In the same month, Hurricane Nicole became a major hurricane, making 2016 the first season since 2011 with more than two major hurricanes. The rest of October and most of November was quiet, until late in the month, when Hurricane Otto became the latest-forming hurricane of at least Category 2 intensity on record, as well as the first to survive the crossover to the Eastern Pacific since Hurricane Cesar–Douglas in 1996.



The last major hurricane to make U.S. landfall was Wilma (2005), so the U.S. has now gone 11 years without a major hurricane landfall. Since 1878, when relatively reliable landfall data became available, the U.S. has never had a ten-year period without a major hurricane landfall.

However, Florida was impacted by 4 storms in 2016 (Colin, Hermine, Julia and Matthew). Given the swath of trees damage and storm surge up to 6 feet along the Gulf Coast, Hermine proved that a hurricane does not have to be a Category 3 to produce major damage. Also, Hurricane Matthew

showed that a storm doesn't even have to make landfall to produce major damage.

When a tropical system approaches the state, The National Hurricane Center will issue watches and warnings. **Do you know the difference between a watch and warning?** Watches are issued 48 hours in advance of the time dangerous winds are *possible* within the specified area. Warnings are issued 36 hours prior to the time when damaging winds are *expected*. A watch should trigger your family's disaster plan, and protective measures should be initiated. Once a warning has been issued, your family should be in the process of completing protective actions and deciding the safest location to be during the storm.

Your main protection against hurricanes is to be prepared and have a plan. Hurricane force winds can easily destroy poorly constructed buildings and mobile homes. A hurricane plan doesn't have to be anything extremely complicated, but should at least consist of the following two things. First, determine whether you live in an evacuation zone. This information can be obtained from your local emergency management office. If you live in an evacuation zone, know when and where you will be going to pass the storm. Second, have a disaster supply kit ready with non-perishable food, batteries for electronic devices such as your NOAA Weather Radio, and enough supplies to last 3 to 5 days. Assess your property to ensure that landscaping and trees do not become a wind hazard.

Know Your Zone



While hurricanes are known and feared for their ferocious winds, historically it is the water that causes most of the deaths in hurricanes. About 90% of all hurricane fatalities occur from drowning in either storm surge or freshwater flooding. The widespread flooding caused by Tropical Storm Fay in 2008 serves as a reminder that tropical storms can cause as much or greater devastation than hurricanes with freshwater flooding.

Even outside of tropical systems, flooding is a serious concern in Florida since it can happen anywhere and at any time. Effects from flooding can be localized, impacting just a few streets in a neighborhood or community, or very large, affecting multiple cities, counties and even whole states. Flooding is caused by the amount of rainfall and what happens to the rain after it hits the ground.

As our state's population increases, buildings and pavement replace the natural land. This creates more water runoff and can increase flood problems. Most deaths due to flooding in the United States are due to people driving their cars into flooded areas. Once a vehicle begins to float, the situation becomes dangerous and often deadly.



Residents should be aware of their location with respect to flood-prone areas and know evacuation routes. People are also urged to be extremely cautious when driving in heavy rains, especially when water covers the road. Because it is difficult to determine the depth of water or the condition of the road under the water, if you come to a flooded road, remember the phrase "Turn Around, Don't Drown".



Meteorologists at the Southeast River Forecast Center and local National Weather Service offices all watch the weather to try to warn people well in advance of the flooding so they can save lives and property. Flood Watches and Warnings, along with Flash Flood Watches and Warnings, are issued for a specific area when flooding conditions are likely or are already occurring.

The National Hurricane Center will also issue [Storm Surge Watches and Warnings](#) for areas of the U.S. that have the potential for damaging storm surge from a tropical cyclone.

National Flood Safety Awareness Week is March 12-18, 2017. National Hurricane Preparedness Week is May 14-20, 2017. More information about hurricanes and flooding and what you can do to protect yourself and others can be found at www.nhc.noaa.gov/prepare, www.floodsafety.noaa.gov or www.FloridaDisaster.org.

Friday's tropic will be on temperature extremes and wildfires.