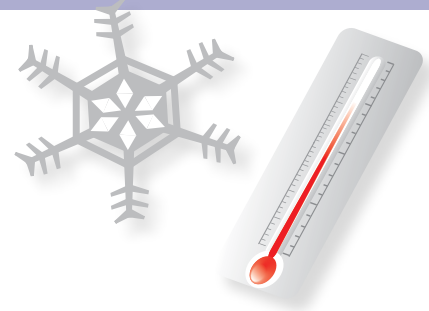


TEMPERATURE EXTREMES

In Florida, it can be hot, hot, hot, but also chilly.



BY MELISSA GRIFFIN

Weather Report Staff Writer

It's not the heat; it's the humidity.

Though Florida is known as the Sunshine State, the southwestern part of the country is really the sunniest place in the continental United States. But if you've ever spent a summer in Florida, you know it also could qualify as the "Hot State." Each summer, numerous tourists come from all over the world to enjoy the warm weather and sunny beaches, but most are unaware of just how hot it can get in Florida. Surrounded by the Atlantic Ocean and the Gulf of Mexico, the state is always influenced by tropical moisture, especially in the summer. The humidity is a measure of how much water vapor is present in the air, and these percentages can be very high during the summer months.

In order for our bodies to keep cool, we sweat to get rid of excess body heat. As the sweat evaporates or runs off our bodies, it pulls the heat from our bodies and cools us. However, when high humidity values are combined with high temperatures, it makes our bodies think it's hotter than it actually is. This is called the heat index. The increased moisture in the air limits our bodies' ability to cool off by not allowing the sweat to evaporate. When the heat index reaches more than 105 degrees Fahrenheit, conditions become dangerous for the general population. A person can experience sunstroke, heat cramps, heat exhaustion and even a possible heatstroke if exposed to these conditions for a period of time.

The National Weather Service will issue heat advisories and warnings when the combination of heat and humidity causes the heat index to reach the extreme caution level.

In addition to the heat, people forget the dangers of ultraviolet (UV) radiation and often get sunburn. Sunburn can occur within 15 minutes of exposure, depending on the level of UV radiation and skin type. Even on cloudy days, the sun's UV radiation can do damage to skin. Over time, with prolonged exposure, this UV radiation can cause cancer and blindness.

Play it safe: hot temperatures

- Make sure to wear lightweight and light-colored clothing. Lighter colors help reflect heat and sunlight; while the loose, lightweight clothing will help your body maintain its normal temperature.
- Slow down and limit your outdoor activities. Try to avoid doing or scheduling outdoor events during the

heat of the day (usually 10 a.m. until 4 p.m.). Remain in air-conditioned places to reduce your exposure to the heat.

- Drink plenty of water or other non-alcoholic beverages. Your body needs water to keep cool. And drink water even if you don't feel thirsty; most people can dehydrate without realizing it.
- Check on the elderly, young children and animals during periods of prolonged heat.
- Apply sunscreen before exposure to the sun. Reapply sunscreen if you are taking part in activities that could wash off the product. Make sure to use a sunscreen with a sun protection factor of at least 15. Also, wear sunglasses and a hat or carry an umbrella to further protect yourself.

Interesting heat facts

- The hottest temperature ever recorded in Florida was 109 degrees Fahrenheit on June 29, 1931, in Monticello.
- Miami has never recorded a high temperature of 100 degrees Fahrenheit.
- The hottest temperature recorded in the continental United States was 134 degrees Fahrenheit on July 10, 1913, in Greenland Ranch, located in California's Death Valley
- The hottest temperature recorded on Earth was 136 degrees Fahrenheit at Al' Aziziyah, Libya, on Sept. 13, 1922.

Baby, it's cold outside

Though many people head south to escape the cold temperatures in the winter, it isn't always warmer in Florida. During the past 150 years, there have been numerous severe cold outbreaks that have affected the state with below freezing temperatures and strong winds that produce bitterly cold wind chills. Increased wind speeds at cold

temperatures accelerate the heat loss from exposed skin, and the wind chill is a measure of this effect. Basically, these conditions make a person or animal feel colder than the actual temperature. The National Weather Service will issue wind chill advisories/warnings, along with freeze advisories/warnings, when cold weather will threaten the area.



The season's first accumulative snow counted for several accidents throughout the Milwaukee area.

Associated Press

		Temperature (°F)															
		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
Relative Humidity (%)	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
	55	81	84	86	89	93	97	101	106	112	117	124	130	137			
	60	82	84	88	91	95	100	105	110	116	123	129	137				
	65	82	85	89	93	98	103	108	114	121	128	136					
	70	83	86	90	95	100	105	112	119	126	134						
	75	84	88	92	97	103	109	116	124	132							
	80	84	89	94	100	106	113	121	129								
	85	85	90	96	102	110	117	126	135								
	90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127											
100	87	95	103	112	121	132											

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity
 ■ Caution ■ Extreme Caution ■ Danger ■ Extreme Danger

Weather plotting

Weather temperatures are very important to people and animals. Look for the weather map in the newspaper or on the Internet to monitor the temperature in Florida for a two-week period. Chart the temperatures on a bar graph. Using the information about extreme temperatures, chart on a separate bar graph the prime times to avoid outdoor activities.

Sunshine State Standards: MA.D.2.3; LA.A.2.3; SC.G.1.3

Play it safe: cold temperatures

- Stay indoors and use a safe heating source. Do not use fuel-burning devices indoors. They release carbon monoxide, which is a deadly gas. Also, make sure to use space heaters according to their instructions, and be attentive to open flames.
- Don't overexert yourself when outdoors. Your heart is already working overtime to keep you warm.
- If you must go outside, dress in layers and wear a hat and gloves. Try to stay dry and out of the wind.

Interesting cold facts

- The coldest temperature recorded in Florida was minus 2 degrees Fahrenheit in Tallahassee on Feb.13, 1899. At the same time, snow up to 3 inches deep was reported by several cities in the Panhandle.
- Snow has been reported numerous times throughout the state. On Jan.19, 1977, snow fell on Miami and was seen in Homestead, which is 22 miles south of Miami. Unfortunately for snow lovers, it melted when it hit the ground!
- The deepest snowfall ever measured in Florida, 4 inches, occurred in Milton on March 6, 1954.
- The coldest temperature recorded in the lower 48 states was minus 70 degrees Fahrenheit at Roger's Pass, Mont., on Jan. 20, 1954.
- The coldest temperature recorded on Earth was minus 129 degrees Fahrenheit at Vostock II, Antarctica, on July 21, 1983.

MASTERS OF DISASTER

A disaster safety curriculum related to all weather experiences is available from the Red Cross for use by teachers of grades K-2, 3-5 and 6-8. Teachers, refer to the lesson plans and activities in your school's Masters of Disaster curriculum kit. If your school does not have the kit, check out www.redcross.org/disaster/masters.

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