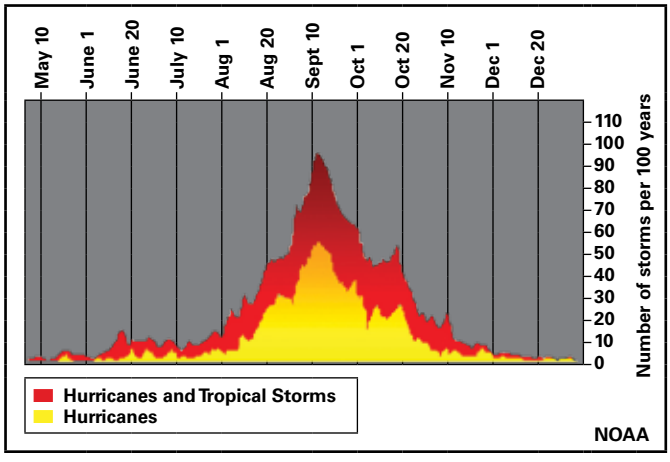
It's summer, and hurricane season is here! Hurricanes, otherwise known as tropical cyclones, are powerful storms that twist and spin. They can become very large, some covering an area hundreds of miles wide. These storms are feared because their strong winds, high tides, and heavy rains **threaten** life and **property**.

threaten
to be a possible source of danger or discomfort

property
land or objects owned by someone

Hurricane season begins on June 1st and runs through November 30th. Warm, tropical water is necessary for hurricane development. The surface temperature of an ocean must be at least 80 degrees Fahrenheit, or 26 degrees Centigrade. However, hurricanes need more than warm water to develop. Low air pressure, moist ocean air, tropical winds, and warm air temperatures must come together to set the stage for hurricane development.

Number of Tropical Cyclones per 100 Years



The official hurricane season for the Atlantic Basin (the Atlantic Ocean, the Caribbean Sea, and the Gulf of Mexico) is from June 1st to November 30th.

Hurricane Katrina, a Category 5 hurricane, was one of the worst hurricanes in American history because of the destruction and loss of life it caused in Louisiana and Mississippi.

Bands of low pressure and warm water temperatures fuel thunderstorms. Warm, wet air rises from the water's surface, condenses, and turns into clouds. The heat and moisture come together, and several strong thunderstorms form and combine. Then, tropical winds join the organized system of thunderstorms and begin to spin. The storm now has a **definite** and recognizable shape. When winds reach a **sustained** speed of 38 miles per hour, the storm becomes a tropical depression. If winds increase to speeds of 39 to 73 miles per hour, a tropical storm is born and given a name.

Some tropical storms continue to build strength by feeding on warm, moist air. For a tropical storm to become a hurricane, its winds must strengthen to 74 miles per hour. These winds must be sustained, or steady, rather than gusty, or intermittent.

Hurricanes are not like **ordinary** storms. As the winds continue to strengthen, they spin and create an "eye." The eye can range from 5 miles to 120 miles in diameter! Although the very center of the eye is calm, the strongest winds are found in the eye wall. The towering clouds around the eye form a wind wall. This wall contains the strongest winds and the heaviest rains. The strong winds spin like a top around the eye. Their speeds are **intense**, sometimes approaching 200 miles per hour. If the hurricane hits land, flooding and destruction will follow.

Eventually, a hurricane enters cold, unfriendly **surroundings** and begins to die. When it hits an area of cool land or water, it loses its supply of warm, moist air and there is nothing to feed it. Its winds begin to weaken, the eye disintegrates, and the storm finally dies.

definite
firm and clear; exact

sustained
kept going for a period of time

ordinary
not special or different in any way

intense
very great or strong

surroundings
the things or conditions around a person or place

Did you know?

Spanish explorers encountered storms of incredible violence. Called *huracán*, or "evil wind," by the local people, these storms are now known as hurricanes.

How Are Hurricanes Categorized?

The hurricane **scale** is numbered one to five. Its categories are based on wind strength. These categories are described in the chart below.

scale
a numbered system or device used to measure something

Hurricane Intensity

Category	Wind Speed (mph)	Description of Damage
1	74–95	No real damage to buildings. Damage to mobile homes. Some damage to poorly built signs. Also, some coastal flooding. Minor pier damage.
2	96–110	Some damage to building roofs, doors, and windows. Considerable damage to mobile homes. Flooding damages piers. Small craft in unprotected moorings may break their moorings. Some trees blown down.
3	111–130	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 small structures. Large structures damaged by floating debris. Land may flood far inland.
4	131–155	More extensive wall failure. Some complete roof structure failure on small homes. Major erosion of beach areas. Land may flood very far inland.
5	156 and up	Many complete roof failures. Some complete buildings fail. Small utility buildings blown over or away. Major flood damage to lower floors. All structures near shoreline affected. Massive evacuation of residential areas.

Source: the Saffir-Simpson Hurricane Scale, www.nhc.noaa.gov/HAW2/english/basics/saffir_simpson.shtml

Did you know?

The National Hurricane Center began naming tropical storms in 1953. Because scientists were often tracking more than one storm, names made it easier to provide updated information regarding a specific storm. Tropical storms were once given only women's names. Today, storms are alternately given men's and women's names.

Did you know?

The rotation of Earth affects the direction in which a hurricane's winds spin. North of the equator, the winds spin to the right, but south of the equator, they spin to the left. This is called the *Coriolis effect*.