

Outside, a long siren sounds. On the radio, an announcer says: "The National Weather Service reports a tornado moving east of Johnstown at 40 mph."

If we heard a warning like this, most of us would do what we're supposed to do. We would head for shelter indoors. We would retreat to the basement, or to an interior hallway or room such as a closet, staying away from windows. We would use blankets or pillows to cover our bodies and wait for the storm to pass.

But a small group of scientists and researchers would head in the opposite direction—right toward the storm. These people, known as *storm chasers*, pursue tornadoes in specially equipped cars, vans, and trucks. They hope to arrive in time for the worst of the weather, so that they can collect as much information about the storm as possible.



Other storm trackers stay closer to home. These trained volunteers, known as *storm spotters*, keep a close watch on the weather in their own community. They pass along storm information to local weather agencies. Sometimes even sophisticated radar devices don't pick up storms, and the trained eye of the storm spotters can help to save lives. Listen closely to weather reports on your local TV stations and you may hear the forecasters talk about reports they receive from storm spotters.

Tornadoes can strike at any time of year in the United States, but they are generally most common from late winter through mid-summer.

> Tornadoes, like this one near Gruver, Texas, usually form in a large area of the U.S. called Tornado Alley, located between the Rocky Mountains and the Appalachian Mountains.

Sec. A

APR-1



A hurricane seen from space.

A Hercules weather airplane gets ready. 🕨

Both the U.S. Air Force and the National Oceanic and Atmospheric Administration (NOAA) fly missions into storms over the ocean waters.



Hurricane Hunters

Storm chasers don't just follow tornadoes. *Hurricane hunters* take special training to fly planes right into the center of hurricanes and other severe tropical storms.

Outside, heavy rain and high winds batter the aircraft. Inside, the noise is deafening. Despite the roar and the roller coaster ride, the crew carefully collects information on temperature, air pressure, wind speed, and wind direction. This information will be used to help predict the size, strength, and path of the storm.

After flying through the solid ring of thunderstorms that make up the wall of the hurricane, the plane enters a place of near-silence the eye of the hurricane. Sometimes in this calm center, the hurricane hunters see blue sky, sun, and even stars. But the plane still has to go back through the menacing storm before returning home. In fact, most hurricane hunters make at least four trips through the storm before returning to land!

The hurricane season runs from about June through November in the Pacific and Atlantic oceans.



Pioneers of Storm Chasing

Roger Jensen, a North Dakotan, is believed to have been the first storm chaser. "I was born loving storms," he once said. Jensen began chasing storms in 1953 and continued to do so for the next forty years. During his lifetime he took thousands of pictures of storms.

A scientist named Howard Bluestein had an early introduction to storms. In 1954, when Bluestein was five, a hurricane blew the shingles off the roof of his family's house. When he grew up he decided to make storm study his life's work. Today, Bluestein studies storms as a researcher and professor of meteorology at the University of Oklahoma. The movie *Twister* was inspired in part by Bluestein's work.

Hurricane hunting began in World War II, when a U.S. Air Force training aircraft flew into the eye of a hurricane on a dare. To prove his plane's strength, American pilot Colonel Joseph Duckworth told the British that he could fly into the eye of a hurricane. After doing so, Duckworth pioneered the science of hurricane hunting.

Storm Chasers in Kansas



Hail, Lightning, Winds, and . . . Traffic Accidents?

Being in a severe storm is dangerous. Storm chasers can be struck by flying debris or by baseball-sized hail. They can be trapped by flash floods or downed power lines. Fortunately, most professional storm chasers keep a safe distance from the deadly storm center—usually one to two miles. They respect the power of the storm.

Lightning is also a great risk to storm chasers. Lightning strikes injure scores of people each year. The risk rises for storm chasers, who spend more time than the average person in the most extreme weather that Mother Nature serves up.

But the riskiest part of storm chasing is actually driving to the storm. Crashes happen because drivers are hurrying to reach the heart of the storm and are looking at the sky instead of the road ahead of them. Blowing dust, heavy rain and fog, hail, skidding on wet pavement, running out of gas, and getting stuck in mud can also make the chase difficult and dangerous. Hurricane hunters face a different set of risks because they are flying an airplane through the most powerful part of a storm. Violent winds can shake the plane severely, making it difficult to fly. Equipment inside the plane can get tossed around, causing possible injury. The wind can also damage the aircraft, and a sudden blast can send a plane plunging into the ocean.

Storm spotting and storm chasing should never be done without proper training, experience, and equipment. Hurricane hunting is an activity for experts. For most of us, the best way to experience storm chasing is by watching a TV documentary or movie! As long as there are storm chasers filming the most dramatic weather events, we can sit in the safety of our homes and movie theaters and comfortably experience nature at its wildest.

A Slow Start

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On March 10, the weather up and down the East Coast was clear and unseasonably warm. It was so pleasant that people headed outdoors to enjoy the warm temperatures. Some families even went picnicking. But while spring appeared to be knocking on the door, winter wasn't over.

The blizzard that was later nicknamed "The Great White Hurricane" began as a drizzle on March 11. The rain grew heavier overnight and quickly changed to snow as temperatures fell below zero. A ferocious wind developed.

People in small towns and big cities from Maryland to Maine woke up the next morning to heavy snowfall. Surely they were surprised by the sudden change in the weather, but many went about their lives as usual.

Farmers braved howling winds to tend to their animals. Children trudged to school. Workers sloshed their way to their jobs. Among those who braved the blizzard in New York City was future president Theodore Roosevelt. He slogged through the snow to keep an appointment with a librarian, only to find she had stayed home.



A New York City street during the Blizzard of 1888. Many power lines were brought down by the snow and high winds.





A grocery awning has collapsed under the weight of the snow. Drifts up to fifty feet deep were reported.

Buried Under Snow

By noon on March 12, many areas in the Northeast were already buried under a blanket of snow. In some places, huge snowdrifts covered trees and the tops of houses. Families were trapped in their homes without food or fuel, hungry and cold. Trains were stopped in their tracks. Fire stations couldn't mobilize to fight fires. Communication became impossible when telegraph and telephone lines snapped under the weight of the snow. High winds helped to ground or wreck more than two hundred ships.

But the blizzard wasn't finished. For thirty-six hours, snow continued to fall. When it finally did stop, the blizzard had dumped between forty and fifty inches of snow in Connecticut, Maine, Massachusetts, New York, and New Jersey. It took weeks for people to completely dig out. In all, hundreds died from the storm and the cold. The Great Blizzard of 1888 has taken its place in history as America's most famous snowstorm.





Weather

Whether the weather be fine, Or whether the weather be not, Whether the weather be cold, Or whether the weather be hot, We'll weather the weather Whatever the weather Whether we like it or not.

Anonymous

In the Night

In the night The rain comes down. Yonder at the edge of the earth There is a sound of cracking, There is a sound of falling. Down yonder it goes on slowly rumbling, It goes on shaking.

from Papago Indians

Snow

The word begins to melt inside my pocket. SNOW. I fling its lacy coldness in the air, then watch it floating there.

Nikki Grimes

The Wind

The morning after the night before, The wind came in when I opened the door. It blew the "Welcome" off the mat. It blew the fur right off my cat. It blew my shirttail out of my pants. It grabbed the curtains and started to dance Around and around and around about Till I opened a window and kicked it out.

John Ciardi





Blizzard Blaster

Create your own blizzard!



Need a day off from school? Is summer making you sweat? Open the box!

Winter, spring, summer, or fall—let it snow!

magine that you work for a company that makes weather you can carry in a box. Create a poster advertising your product. You can choose any kind of weatherblizzard, fog, rain, sunshine, even a tornado.

Include artwork and give your product a catchy name and slogan. Your poster should include the following information:

 Who the target audience is
Why people should buy this product
How people can use it

Capture It with a Baption

Suppose you are a writer and photographer for a newspaper. Your job is to take pictures and to write captions for them—short descriptions that tell about the pictures in one or two sentences.

Study the pictures on this page and read the information about them. Then write captions that capture, or vividly describe, what each picture is about.

· What: Dust Storm

- Where: Stratford, Texas
- When: April 18, 1935





- What: Lightning
- Where: Nanjing, China
- When: August 1, 2006



s you read in "Storm Chasers," some people chase tornadoes or fly into hurricanes on purpose. Most of us, though, experience a storm by accident. Do you remember a time when you were caught in a big storm? Or can you imagine what it might be like?

Write a page in your journal that describes a storm vividly, either from memory or from your imagination. Picture a rainstorm, blizzard, tornado, hurricane, hailstorm, windstorm, or ice storm!

Start your journal entry by setting the stage. Where were you? What kind of day was it? When the storm hit, what did you see, hear, and feel? Storms are dramatic, so try to show and not tell. Include sensory details that stand out, like wind rattling the windows, snow swirling, or thunder booming.

Make your readers feel that they're caught in a storm, too!

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