

# Springboard<sup>into</sup> Comprehension 5

Main Idea  
Plagues  
Coral Reefs

Compare and Contrast  
Air, Land, and Water Transport – Then and Now  
Olympic Game Technology

Fact and Opinion  
The Cackleberry Creek Foghorn  
Defying Gravity

**Cause and Effect**  
**Severe Weather**

Animal Adaptations

Bias and Prejudice  
Prejudice on the Goldfields  
Houdini – Man of Magic or Deceit?

Figurative Language  
The Big Campaign  
The Loaded Dog

RA 11.5–12.5



Recount

# SEVERE WEATHER



WRITTEN BY MO JOHNSON



# SEVERE WEATHER

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# The Daily Globe

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## Satellite News

Dear Readers

Welcome to *The Daily Globe's* newspaper supplement Satellite News. Every month, we gather a collection of past newspaper feature articles on a topic. This month, we are looking at severe weather.

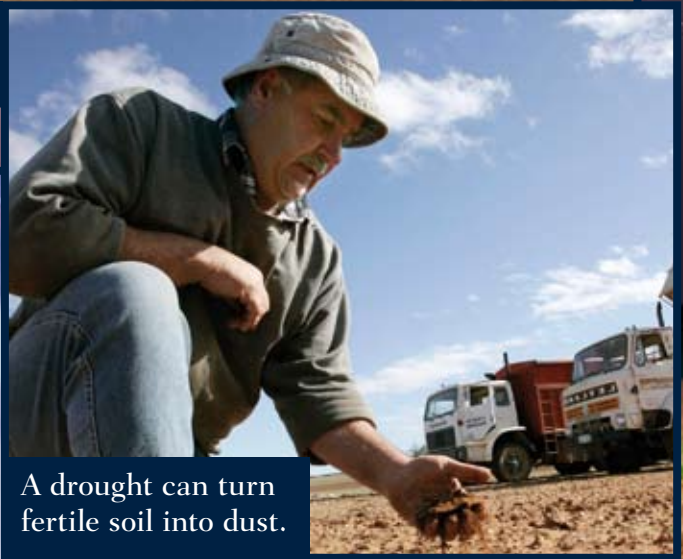
Weather has a huge impact on people's lives. Good weather can lift people's moods. It can also make them want to spend more time outside. Bad weather can have the opposite effect. However, really bad weather can endanger people's lives and property. Severe weather can have a devastating effect on a town, region, or even an entire country. It can give rise to huge problems for a country's system of business activity, the economy. Everyday life may come to a standstill as schools, offices, and shops have to close. Travel and transportation of goods can become impossible. This in turn affects businesses and services.

Read on to find out more about different kinds of severe weather. Discover which parts of the world are most affected by severe weather events. Learn more about some of the most devastating severe weather of recent years and how people dealt with the consequences of these events.

Bob Kinnear  
Editor



People watching a thunderstorm over Kansas, in the United States



A drought can turn fertile soil into dust.



People must wear protective clothing to keep warm and dry during severe winds and snow.

# Severe Weather Warnings at Your Fingertips

Severe weather is a term used to describe any kind of weather that puts lives and properties in danger. Storms, tropical cyclones, and tornadoes are all severe weather events. They often bring with them extreme amounts of water that fall to Earth in the form of rain, snow, or hail. This **precipitation** can cause direct damage or in turn cause floods or other kinds of natural disasters. The high wind speeds that often come with severe weather can also be dangerous and damaging.

All around the world, there are special facilities that track the weather. These facilities are called weather stations. At these weather stations, special instruments measure weather data such as rainfall, temperature, and wind speed. Scientists who study the weather, **meteorologists**, gather these measurements. They use them to analyze and predict the weather. Many meteorologists work for national weather services. These provide forecasts and severe weather warnings for a country. Most countries have large weather services to predict and monitor weather.

Tropical storm Dennis seen from space  
(with the outlines of landmasses added)



There is also an international weather service associated with the United Nations, the **World Meteorological Organization (WMO)**. The WMO gathers information about global weather. It has a special department called the Severe Weather Information Centre. Its website outlines the latest information on severe weather from around the world.

The WMO now has 19 member countries. The members include Australia, New Zealand, China, Japan, Indonesia, and the United States. They all provide information on this website. The website has links to its members' websites. With the help of the various links, people can monitor the weather in each country.

At the moment, the WMO tracks the progress of tropical cyclones in the world's oceans and seas. It also tracks heavy rain, snow, and thunderstorms over land. As a result, information can be passed on that allows people to prepare for severe weather.



A radar in the dome on top of this weather station uses radio waves to track precipitation.

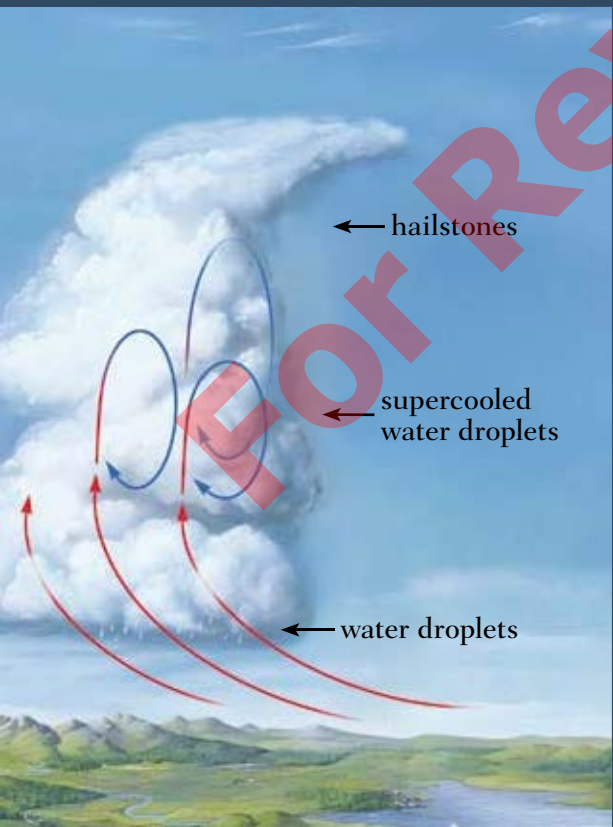
## Locations of WMO Severe Weather Stations





Hail shattered the glass roof of this greenhouse in Switzerland.

## Hailstorm Cloud



# Severe Hail

Hail is a form of precipitation made up of small balls of ice called hailstones. When the width of the hailstones, the **diameter**, is more than 2 cm, hail is classified as severe. Severe hail can result in damage to crops and property and it can also harm people.

Hail forms inside tall, heavy towers of storm clouds when the water cools rapidly. Sometimes, the water gets as cold as -40 degrees Celsius. When this cold water reacts with particles in the air, such as dust, it forms hailstones. The hailstones can get even bigger if they come into contact with more frozen water.

Hailstorms occur in many parts of the world. They can quickly cover large patches of land in small balls of ice. Hailstorms often occur as part of large storms such as thunderstorms or tornadoes.



Pea-sized hailstones

# Stone Cold

Hailstorms occur in New Zealand for nine days in a year at an average. Some parts of the country can have up to 20 days of hail every year. As people in the South Island of New Zealand were turning their thoughts to summer last November, they were shocked by a severe weather attack. It brought weather from all four seasons in one day. Clashes of warm and cool air caused thunder, lightning, and hailstones as big as 1 cm in diameter.

Fortunately, it was not as bad as the costliest hailstorm in New Zealand, which occurred in March 1994. Ice balls larger than NZ \$2 coins hurtled down from the sky. According to insurance companies, the cost of the damage at that time was about \$10 million.



## A New Zealand \$2 coin

The largest hailstone ever recorded in New Zealand fell in 1934. It was said to have been 8 cm in diameter, or about 1.5 cm bigger than a tennis ball.



These giant hailstones are about the size of tennis balls.