Thunderstorms

WE'RE ENTERING the spring season—a time known for powerful thunderstorms and, at times, tornadoes.

Thunderstorms are among the most intense weather events in nature. They can even spawn tornadoes, which produce the highest wind speeds recorded anywhere on Earth.

The United States—and North America in general—experiences more tornadoes than any other region in the world. This is largely because of our unique geography. To the north, cold, dry air sweeps down from Canada while, to the south, the Gulf of Mexico sends warm, humid air northward. As we move into spring and summer, these two air masses frequently collide over the United States and particularly the Midwest. Because cold air is denser than warm air, the warm, moist air is forced upward when the fronts meet. As it rises into the atmosphere, it cools and can no longer hold its moisture, which leads to rain. In fact, those cumulonimbus clouds from a big thunderstorm can soar seven, eight, or even nine miles into the sky!

As the storm develops further, the falling rain creates downdrafts. These downdrafts can create powerful straight-line winds that can damage homes and uproot trees. The falling rain and fast-moving downdrafts can also create rotation in the storm itself. This rotation can lift raindrops miles into the atmosphere, where they freeze into hail. The stronger the rotation, the larger the hail becomes. Each time it rotates it adds a layer of rain to the hailstone. That same rotation is what gives rise to tornadoes. Often forming on the edge of a thunderstorm, tornadoes can drop to the ground with the most violent winds on the planet.

While these storms can certainly be destructive, this very cycle is also what gives North America such incredible agricultural potential. Spring rains arrive consistently and generously, creating ideal conditions for growth. Lightning, too, plays an important role by helping add usable nitrogen to the soil. Temperatures inside a lightning bolt can be hotter than the surface of the sun, and a single bolt carries enough energy to power more than 50 homes for a day.

So even though thunderstorms can bring destruction, they also provide what makes our land so fertile and productive. This often reminds me of the trials we face in life. In the middle of the storm it can be hard to recognize any good, and it certainly can be frightening. But often, when we look back, we can see the blessings that came out of the struggle. God is in control.

Of course, sometimes bad things happen and we never receive an explanation. Yet even then we can trust that God has a plan—just as he governs the storms—whether or not we can see what he is doing. Sometimes storms can be loud and scary, but we always know that God has control of them, just like he has control of our lives (Psalm 107:29-30).

So the next time you see a storm, take a minute to be amazed at the power of God in creation, and remember that even the storm can bring good!

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Illustration for *The Banner* by Anita Barghigian