

Stormy Weather

By David & Brian Chapman

Brian and David Chapman are a father-and-son professional storm-chasing team with more than 17 years of experience.

“We caught our first tornado in 2001 near Campbellville,” says David. “Since then it has been lots of powerful lightning storms, storm fronts, with a few tornadoes in between.” David shares some of their weather images from along the Niagara Escarpment in the following pages.



▲ In August 2016 a storm rolled through the Grimsby area. From the top of the Niagara Escarpment at Beamer Memorial Conservation Area I saw the strikes light up the front of the storm over Lake Ontario while the lights of Grimsby were shining below. When it comes to enjoying storms, the Escarpment offers a great view. I have utilized this kind of view several times, from Niagara Region to south of Collingwood and even the Bruce Peninsula where not many storm chasers go.





Left, top: The aurora borealis can be seen from both ends of the Niagara Escarpment. They run on an 11-year solar cycle and there should be good viewing periods between 2022 and 2027. This photo from Markdale in April 2006 shows streaks which happen when the northern lights burst into a “sub storm.”

◀ On Aug. 7, 2013, Ontario saw four tornadoes and one tornadic waterspout in the late afternoon. A tornadic waterspout is caused by a supercell thunderstorm over water. This tornado formed over an open field east of Arthur. The photo shows it near its maximum strength. The tornado lifted really close to the town of Grand Valley. We chased this supercell towards Caledon. The hills and trees along the Escarpment made it difficult but as we got closer to the edge of the Escarpment we found open areas and watched a nice funnel cloud develop before the whole storm started to collapse.

▲ Lightning is the reason I got into storm photography. My Dad bought me my first camera in 2001, a Canon 35 mm. In 2004 on top of the Niagara Escarpment west of Collingwood I got a shot I had been hoping for, where I captured lightning hitting a tree in the distance. I did see the flash but it happened so fast that I couldn't see exactly what it had hit.



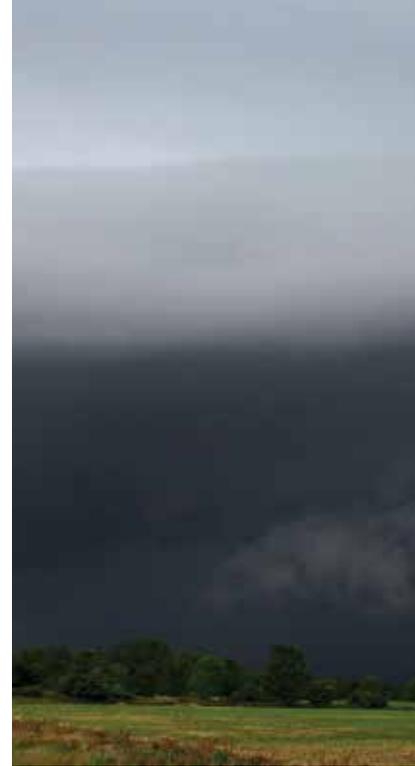
▲ Photographed by Brian, this shelf cloud entered Beamsville at 3 a.m. He had no radar operator, no technology on him; he just moved to different positions using the lightning to illuminate where the storm was located. This was his first position, overlooking the town from halfway up the Escarpment. This was the storm when it first approached the Lake Ontario shoreline and Escarpment. As long as the storm looks good, we don't need to see damage, we just have to capture the true beauty of mother nature.

► This shows Old Baldy in Beaver Valley on the day of the ice storm in 2013. It had turned bitterly cold afterwards. A lot of frost was in the air. Ice was still on the trees at the top but not in the middle and lower areas. This is not uncommon in valleys. The higher you get, the colder the air is. Freezing rain is the only form of rain that falls without any dust or other particles in it. It is crystal clear, which is why it has such an amazing transparency to it.





► We have experienced a lot of different types of weather in the Beaver Valley. The northern lights can be seen quite easily but we have also seen rotating wall clouds, shelf clouds and roll clouds. The Valley is also great when it fogs in right at the bottom but remains clear on top of the Escarpment. It makes you feel as if you are above the clouds without even having to leave the ground. Brian and I have experienced that in both the northern part of the Escarpment as well as in the Niagara area.



▼ This 2014 photo is of a shelf cloud, or face of the storm. The clouds underneath represent the gust front of the storm, usually followed quickly with heavy rains and sometimes hail if the storm is large enough. This particular storm went from being very small to very intense within 15 minutes, right over the Escarpment between Stoney Creek and Grimsby.







▲ In Niagara Region we are used to strong winds between fall and spring as they accelerate southwesterly across Lake Erie. We also get cold northwesterly flows right across Lake Ontario. On this day in January 2014 the windchill was pushing minus 30 Celsius with west winds. Wind is hard to photograph and show just how fast it is moving. In this field, there is actually a lot of snow blowing across the ice. Winds that day were between 50 to 80 kms an hour. From the edge of the Escarpment I went about a km south of Beamsville where I got this photo.

► Niagara Region snow squalls tend to be isolated and look like summertime thunderstorms. When a snowstorm hit in March 2011 I went to Rockway Falls. There are actually three falls in the area and I felt the lower falls had the most beauty because it shows the layering of the Escarpment in the background. This photo of me is taken using a 10-second timer and quickly getting into position.





My father and I sell our work as art and will be producing a book in the future. There will also be a documentary featuring highlights of our work. We do all of our own high-quality printing up to 44" x 90". We use fine art papers as well as fine art canvas. Our work has been featured on CTV, CBC, Global, The Weather Network and others in the U.S. I am also available for professional speaking engagements. We can be reached and samples of our work can be viewed at naturebirdsandweather.com.

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