

Vacation in Tornado Alley?

By Matt Ziebell

Most people would never even dream of taking a vacation in the Great Plains of the United States any time of the year, let alone during the springtime when some of the most intense thunderstorms typically occur. Well as Hollywood has pointed out in both film and on TV, there are indeed a select number of individuals who pursue these dangerous storms every year with the hopes of seeing Mother Nature at her worst. Some people may call storm chasers adrenaline junkies who are obsessed with seeing destruction from hail, tornadoes and flash flooding; though as a storm chaser myself I approach this hobby with a sincere fascination for the atmosphere and respect for its power, however unfortunate at times. With an added goal of providing better severe weather warnings and information to the public, various storm chasers will notify local National Weather Service offices with valuable ground truth information similar to that reported by storm spotters. In spite of driving several hundred miles on average every day just to target an area where storms are expected to develop, the vast majority of storm chasers are not paid for their efforts. Even with gas prices exceeding \$4 per gallon this past spring, several storm chasers still hit the road determined to see unique thunderstorms that thrive in tornado alley.

This past May and June, I went on a 13 day storm chase vacation in the central Great Plains. Despite the unlucky number of days, I just happened to be witness to a very active severe weather pattern that persisted from Nebraska south to Oklahoma. Even though the odds of seeing a supercell thunderstorm or even a tornado on any given day are quite slim, several storm chasers (including myself) were fortunate to have chased over a dozen of each. Thankfully most of the tornadoes remained over unpopulated areas causing very little if any damage.

Although supercell thunderstorms do occur in northeast Montana, their ability to produce tornadoes is usually limited thanks to lesser amounts of low level moisture. In general this results in the storm's base being much higher above the ground than would typically be found in locations such as Kansas and Oklahoma.

Instead of writing an account of every storm I chased, I decided to include a small selection of storm photos from my vacation on the following page. I also included two photos of a supercell that I chased near Brockway, Montana on June 22 of this year as proof that Montana does indeed experience these types of thunderstorms!



A rotating wall cloud in northwest Kansas.



A wedge tornado later developed from the wall cloud.



The same storm that produced the wedge tornado quickly produced this tornado on the opposite end of the storm.



A tornado in Kansas begins wrapping in heavy rain shortly after sunset.



A rotating wall cloud in northwest Kansas that later produced a brief tornado.



The south side of a supercell in western Nebraska. Earlier this same storm produced 3" diameter hail!



A classic supercell in north central Kansas with a cloud-to-ground lightning strike. The updraft of this storm was rotating throughout a depth of over four miles!



This same supercell later produced a strong tornado that is barely visible near the bottom center of this photo.



A slowly rotating wall cloud located south of Brockway, MT on June 22, 2008. Golf ball size hail was reported with this storm shortly before this photo.



A later view of the supercell thunderstorm now southeast of Brockway, MT.