

# On Research...

Blogging about research issues at Ohio State University



[Home](#) [About us](#) [Research Communications Staff](#)

## Of Toto, witches and whirlwinds . . .

Posted on April 28th, 2011 by earleholland

Tornadoes are the closest things to the supernatural most people will ever see.

Out of dark, ominous skies, a funnel forms, a massive vortex opens up, and suddenly the firmament of earth, rock and steel is snatched and thrown literally as dust in the wind.

The writhing, snakelike twister that initially terrified Dorothy, and us, in the movie *The Wizard of Oz* is almost comical compared to the real massive wall of destruction that tornadoes scrape across our world.



Hurricanes, earthquakes and tsunamis are so broad in their destruction that tornadoes might be seen as nuisances by comparison. But the sudden coming of a tornado, like the giant hand of an avenging god wiping clean the slates of our lives, is many times more terrifying.

Empirically, it's hard to fathom that such force can come simply from the meeting of masses of cold and warm air. As they rush to displace each other, they assume the distinctive funnel-shape, like water pouring down a bathtub drain. Simple physics. Fluid displacement. Not hardly!

One look at the **storms** that cut a swath across a half-dozen Southern states this week is convincing that there is nothing simple involved here. And all the current models suggest that weather events in the future will become more extreme as the climate changes.

In my early career as a reporter, in the 1960's, I covered the aftermath of many twisters, and saw others from distances that now I realize were not nearly safe enough. But we were young and adventurous then and rushed towards the fray more often than fleeing from it.

I had an ongoing contest with a reporter friend and colleague, Joe Aloia, who covered news for a local radio station. The game was who could arrive first? The winner gained street cred from the cops and firemen on the scene who back then would actually talk to reporters without the intercession of a departmental spokesman.

A twister was moving northeast through a Birmingham suburb and I raced along streets several blocks over but parallel to its path. Approaching a small shopping center covered with debris, in the parking lot

### NAVIGATION

- \* [Home](#)
- \* [About us](#)
- \* [Research Communications Staff](#)

### RECENT POSTS

- \* [A graphic misrepresentation . . .](#)
- \* [Of ghoulies and ghosties and long-legged beasts . . .](#)
- \* [A cascade of lemmings . . .](#)
- \* [Not what Ben meant . . .](#)
- \* [Of science, baseball, and cricket . . .](#)

### SOCIAL MEDIA

- \* [OSU Research News on the Web](#)
- \* [Research News on Facebook](#)
- \* [Research News on YouTube](#)
- \* [StumbleUpon](#)

### WHAT WE READ

- \* [Dot Earth — Andrew Revkin/New York Times](#)
- \* [Framing Science](#)
- \* [Health News Review](#)
- \* [Knight Science Journalism Tracker](#)
- \* [Real Climate](#)
- \* [Science News](#)
- \* [Speaking of Research](#)
- \* [The Great Beyond](#)
- \* [The Panda's Thumb](#)
- \* [The Plainspoken Scientist](#)
- \* [TierneyLab](#)
- \* [WiredScience](#)



### CATEGORIES

- \* [Climate change](#)
- \* [Environment](#)
- \* [Physics](#)
- \* [Researchers](#)
- \* [Science](#)
- \* [Communication](#)
- \* [Science policy](#)
- \* [Space](#)
- \* [Uncategorized](#)

### ARCHIVES

- \* [February 2012](#)
- \* [January 2012](#)
- \* [October 2011](#)
- \* [September 2011](#)
- \* [August 2011](#)
- \* [July 2011](#)
- \* [May 2011](#)
- \* [April 2011](#)
- \* [March 2011](#)
- \* [December 2010](#)
- \* [October 2010](#)
- \* [September 2010](#)
- \* [August 2010](#)
- \* [July 2010](#)
- \* [June 2010](#)
- \* [May 2010](#)
- \* [April 2010](#)
- \* [March 2010](#)
- \* [February 2010](#)
- \* [January 2010](#)
- \* [December 2009](#)
- \* [November 2009](#)
- \* [October 2009](#)
- \* [September 2009](#)
- \* [August 2009](#)
- \* [July 2009](#)
- \* [June 2009](#)
- \* [May 2009](#)



was Joe's news car, him standing beside it, shaken but unhurt. He'd won our contest that day but we both wondered about the wisdom of our "game."

Some years later, I worked with a young graduate student in civil engineering whose thesis research involved calculating wind speeds in tornadoes. A small National Science Foundation grant funded his efforts at setting up a network to quickly report tornado touchdowns across Alabama. He would go to places recently hit and look for evidence – straws and sticks hurled into telephone poles, metal debris twisted in odd shapes, other detritus of the day.

He would take these samples back to the lab and try to duplicate and calculate the forces required to render such damage. Today, we understand much better the science of tornadoes but back then, nearly a half-century ago, our knowledge was limited. Our ability to give an early warning to people in harm's way was scant at best.

After moving north to Ohio, but still in what's called "Tornado Alley," when skies would darken and green, I'd stand outside as the weather approached, searching the skies to the southwest for the telltale spikes in the clouds that sometimes are the first signs of twisters.



The exuberance of youth was gone, no excitement for the approaching storm.

Just the fear and respect of someone who'd seen the wrath that can come. *—Earle Holland*



Powered by [Bookmarkify™](#)

Tags: [Climate change](#). [Physics](#) //

[3 Comments](#) »

### 3 Responses to "Of Toto, witches and whirlwinds . . ."

[Classifieds](#) // May 10, 2011 at 1:31 am

Terrible destruction with the tornadoes that swept the south recently. Best of luck to the families trying to recover. thanks for the post.

- \* [April 2009](#)
- \* [March 2009](#)
- \* [February 2009](#)
- \* [January 2009](#)
- \* [December 2008](#)
- \* [November 2008](#)
- \* [October 2008](#)
- \* [September 2008](#)
- \* [August 2008](#)
- \* [July 2008](#)
- \* [June 2008](#)
- \* [May 2008](#)

#### META

- \* [Log in](#)
- \* [Entries RSS](#)
- \* [Comments RSS](#)
- \* [WordPress.org](#)

#### RESEARCH NEWS WEBSITE



[InfoThread](#) // Jul 28, 2011 at 10:29 am

Tornadoes definitely still hold a certain mystique for many people. The fact that it's so mind boggling to see something like a stick lodged in a telephone pole is part of what makes the study of tornadoes so intriguing.

[The Spots](#) // Aug 18, 2011 at 12:00 am

This year has been very disturbing to see all the tornadoes and acts of mother nature. We are praying for hearts and help for all those around the world who have been affected with such terrible sudden acts of nature.

### Discussion Area - Leave a Comment

Name (required)

Mail (will not be published) (required)

Website

« [Skating on . . . Who cares?](#) »

THE OHIO STATE UNIVERSITY ■ [WWW.OSU.EDU](http://WWW.OSU.EDU)

© 2006, The Ohio State University | Enarson Hall 154 W 12th Avenue | Columbus, Ohio 43210 | 614-292-OHIO

This page is maintained by: [University Relations](#). [About this site](#).

[Contact](#)

If you have trouble accessing this page and need to request an alternate format, contact [webmaster@osu.edu](mailto:webmaster@osu.edu).