

SEVERE WEATHER AWARENESS

-CALVERT CONTINUED FROM PAGE A1

Tornadoes are among the most fascinating storms and to listen to Calvert talk about them, you'd understand the type of destruction they do and sometimes don't leave behind.

As an example, for the Amos, Ky., tornado, "There was a Ford dealer truck that had an aluminum trailer behind it. Of course the aluminum trailer is pretty light but it was a cattle truck. The guy told me it was hooked to the truck, he unhooked it and left the lightweight trailer on top of a hill. (The tornado) picked up the big truck and threw it in the holler but left the trailer."

It's part of what makes tornadoes so unpredictable.

Calvert is an encyclopedia of weather knowledge and he's put his experience to good use.

"I took a lot of the weather classes in school and done several things with the National Weather Service in Nashville. I've launched weather balloons in Louisville and coordinated several times with them on a lot of stuff," said Calvert. After 10 years he became a certified observer and has become one of the most reliable in the region.

Among the things that has caught Calvert's attention as an observer is "in the last few years you've had more 100 year, 500 year records set. In the past say, 30 years, we've got more flooding now than we used to. We'd usually get a three or four-inch rain out of a storm, now it's greater and it's becoming more frequent."

With our recent bout of wild weather, Winter Storm Fern, Calvert was asked what he observed with that and what made it so bad.

"When they first started doing the forecast, they thought it was going to be a large snow. They thought we were going to have, maybe, 18 inches of snow. But a warm layer of air got up over the top of that and that layer of warm air is what caused the ice. It came down as snow, it went through that layer of warm air and it melted. When it got to the surface you had the warm and the cold surface. It hits the surface and becomes ice."

Calvert went on to say that it's not very unusual for meteorologists and other weather observers to predict one thing but then have something that they didn't expect happen. However, the information that Calvert was able to

get to Gary Petty, the Emergency Management Coordinator for Allen County, was enough to the point where it didn't take them completely by surprise and they were able to adjust their approach in dealing with the storm.

While observing the weather and the change in models is an important element of preparing for wild weather, it's also a matter of being able to interpret all that information.

Calvert said that most meteorologists rely on what is known as "The North American Model" and "The European Model."

"The European Model has been better at forecasting our weather. The North American Model a lot less so," stated Calvert. He explained, "They (the European Model) input more data into their model, into their forecasts, than North America does" and how the data is treated is different.

Calvert stated that information comes in not just from Doppler radar but also from weather balloons, satellites, commercial jet aircraft "because they're flying at a cruising altitude of 35,000 feet over a couple thousand miles" and even ships on the ocean.

While the European Model tends to be more accurate overall, Calvert likened the difference between them and the North American Model as two baseball teams where one team consistently hits doubles and triples (European Model) whereas the other will wow you with home runs every once in awhile (North American Model).

While advances in technology such as newer types of radar which give a 180 degree view in one second rather than sweeping 360 degrees over several seconds make forecasting the weather a bit easier, Calvert did give credit to your grandfather's trick knee acting up when a storm was coming in.

"When you start aching you think of one of two things: The flu or you've got a storm. Barometric correction. The lower the barometric pressure, the more your body contracts." Changes in barometric pressure, especially ones drastic enough for your grandparents to complain about, are initial indicators of storm activity.

This is the time of the year for severe storms. Getting back tornadoes, there are some tips you should be aware of.

Try to take shelter in your home, though trailers and mobile homes aren't very likely to provide protection. In such cases look for more structured shelter. Avoid windows at all possible

Try to secure loose items from around your home such as furniture, grills/ barbecues, dog houses and other items that can be turned into projectiles.

If you're driving, keep both hands on the wheel and slow down. Or stop along the shoulder and try to stay away from trees or other tall objects.

If you observe downed power lines, do not touch them. Additionally, if a power line is downed and falls across your car, do not touch any metal portion of your car.

The increase in severe weather, Calvert believes, does have something to do with climate change though he says there are multiple things which can bring it about. Essentially, anything that puts more moisture in the air contributes to the problem in his view.

Key Historical Tornadoes in Allen County:

March 18, 1925 (F4): Part of a larger outbreak, this intense tornado killed 39 people across Allen, Barren, Monroe, and Metcalfe counties. It struck the Holland community, killing four people, after moving from Tennessee, with 150 homes destroyed throughout the region.

February 5-6, 2008 (EF3): A violent tornado with 175 mph winds killed four people in Allen County, destroying multiple homes and heavily damaging rural areas. The tornado struck near Hayesville, injuring four, and leaving a nine-mile path of destruction.

March 27, 1890 (F3): A tornado moved northeast from five miles south of Scottsville toward Tracy, resulting in four to 17 deaths, destroying at least three homes.

March 3, 2020 (EF2): An early morning tornado traveled from Warren County into far northwest Allen County, destroying multiple barns, snapping over 500 trees, and damaging homes near W.G. Talley Road.

June 21, 2019 (EF1): A weaker tornado struck south of Scottsville, damaging the Highland General Baptist Church and knocking down trees and power lines.

Source: National Weather Service (.gov)

TORNADO WATCH

A Tornado Watch is issued when **a tornado is possible.**

Know your safe place (storm shelter, basement, interior hall away from windows). Be ready to act quickly if a Warning is issued.

Be Prepared.

TORNADO WARNING

A Tornado Warning is issued when **a tornado is happening or about to happen.**

Immediately seek shelter in your safe place!

Take Action!

weather.gov

Tornado Sheltering Guidelines

Seek the best available refuge area **immediately** when a Tornado Warning is issued. Your chance of surviving a tornado is excellent if you follow these guidelines.

WORST OPTIONS	BAD OPTIONS	GOOD OPTIONS	BEST OPTIONS
Mobile homes Vehicles Underneath a highway overpass	Large open rooms like gymnasiums Manufactured housing	Interior room of a well-constructed home or building Basement	Above or below ground Tornado Storm Shelter (NNSA/ICC 500 compliant)* Specifically-designed FEMA Safe Room*

Find another option → **Stay in place until all clear**

*Recommended by FEMA

PREPARE FOR FLOODS BEFORE THEY HAPPEN

Flooding can occur any time of year. Are you prepared?

Find out if you're in a floodplain. Visit floodsmart.gov to learn more.

Determine the roads likely to flood so that you can plan alternate routes.

Identify the fastest way to higher ground.

weather.gov

3 SIMPLE STEPS FOR FLASH FLOOD SAFETY

During a flood, water levels and the rate at which the water is flowing can quickly change. Remain aware and monitor local radio and television.

weather.gov/flood

- 1 GET TO HIGHER GROUND**
Get out of the areas subject to flooding
- 2 DO NOT DRIVE INTO WATER**
Do NOT drive or walk into flooded areas. It only takes 6" of water to knock you off your feet.
- 3 STAY INFORMED**
Monitor local radar, television, weather radio, internet or social media for updates.

Be Prepared for Nighttime Tornadoes

Safe Place
Have a safe place prepared if you know storms are coming.

NOAA Weather Radio
Test regularly and make sure it's tuned to your local station.

Flashlight & Shoes
Keep flashlight and sturdy shoes handy.

Cell phone
Turned on, charged and Wireless Emergency Alerts enabled.

weather.gov

SEVERE WEATHER AWARENESS

Plan. Prepare. Protect.

