MAFES Dawg Tracks

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MISSISSIPPI STATE UNIVERSITY MS AGRICULTURAL AND FORESTRY EXPERIMENT STATION Safety Tips: Thunder & Lightning

Weather problems always exist in our great old state of Mississippi. There is an old saying here that says if you don't like the weather, just hang around and it'll change in a few hours.

Times have changed in Mississippi and our neighboring states as well. In the past, we could look for the torrential rains and windstorms in the spring and summer, but now we may see them at just about any time of the year.

Thunderstorms affect relatively small areas when compared to hurricanes and winter storms.

- A typical thunderstorm is about 15 miles wide and will last about 30 minutes.
- Approximately 1800 thunderstorms are occurring around the world at any time, totally 16 million per year.
- Every thunderstorm produces lightning which kills more people each year than tornadoes.
- An estimate of 100,000 thunderstorms occur each year in the USA, but only about 10% are severe.
- The National Weather Service considers a thunderstorm severe if it produces ³/₄ inch diameter hail, 58 mph winds or higher, and tornadoes.

Every thunderstorm needs:

Moisture – To form clouds and rain

Unstable Air – Relatively warm air that can rise rapidly

- **Lift** Fronts, sea breezes, and mountains are capable of lifting air to help form thunderstorms.
- ✓ Thunderstorms are most likely to occur in the spring and summer months and in the afternoon and evening hours, but can happen year-round and at any hour.
- ✓ On the Gulf Coast and across the southeastern and western states they usually occur in the afternoon.
- \checkmark In the Plains states they occur in the late afternoon.
- ✓ Thunder and lightning occasionally accompany snow and freezing rain.
- ✓ Flash floods and floods are the number one thunderstorm killer in the USA with nearly 140 deaths each year.

STRAIGHT-LINE WINDS -

- \checkmark These winds are responsible for most thunderstorm wind damage.
- \checkmark Winds can exceed 100 mph.
- ✓ A straight-line wind, knowns as a downburst, can cause damage equivalent to a tornado and is extremely dangerous for aircraft.
- ✓ During summer months out west, thunderstorms often produce little rain, but very strong wind gusts and dust storms.

**<u>IN CASE OF AN EMERGENCY</u> – HELP A VICTIM, IF <u>NEEDED</u> – ADMINISTER CPR, FIRST AID, OR DO WHAT IS NEEDED.

Ted Gordon – Risk. Mgmt. /Loss Control Mgr. MAFES / MSU-ES (662) 566-2201 Excerpts: <u>www.redcross.com</u> 2/5/2016

What is Lightning?

- Lightning results from the buildup and discharge of electrical energy between positive and negatively charged areas.
- The action of positive and negative air within a thunderstorm separates positive and negative charges. Water and ice particles also affect the distribution of electrical charge.
- The average lightning flash could power a 100-watt light bulb for 3 months.
- Your chances of being struck by lightning are estimated at 1 in 600,000 but could be reduced by following the safety rules.
- Most lightning casualties occur in the summer months during the afternoon and early evening most occur outdoors.
- Many fires in the western USA and Alaska are started by lightning. In the past decade, over 15,000 lightning-induced fires nationwide have resulted in costs of several hundred million dollars a year and the loss of two million acres of forest.

BE PREPARED –

- **Develop an Emergency Preparedness Plan**-The next issue will detail items included in a Home Emergency plan.
- Watch for developing thunderstorms-Keep your radio and TV tuned to the local stations to stay abreast of the weather conditions.
- Lightning can strike as far as 10 miles from the area where it is raining. You can hear thunder from that distance. <u>Remember: If you can hear thunder, you are in</u> <u>striking distance seek shelter immediately!</u> A safe shelter is any enclosed building with plumbing and electrical that will directly charge the ground. A totally enclosed vehicle is also a safe haven. Avoid tall trees, open structures, and open water.
- Use the 30-30 Rule When you see lightning, count the seconds until you hear thunder. If the time is 30 seconds or less, the storm is within 6 miles of you. Immediately take shelter! Wait at least 30 minutes before you leave the shelter.
- **Outdoors** When you hear the first roar of thunder, stop all activities, work, or sports to give the folks time to get to a safe haven.

Indoors – Refrain from using any electrical equipment. Unplug all sensitive equipment and stay away from plumbing fixtures and running water. A good investment is to replace your outlets with ground Fault Circuit Interrupters.

THERE HE LIES SOME 6 FEET UNDER HE DIDNT HEAR THE <u>ROARING THUNDER!!</u> DONT LEARN SAFETY BY ACCIDENT!