



Lightning a Potential Natural Disaster



From destruction of trees, irrigation control systems, and even death to maintenance facility workers to golfers, lightning is probably the most

prevalent weather risk facing sportsturf. Below are some facts regarding lightning and suggested precautions to take during a storm.

Lightning Facts

- The earth hosts over 16 million storms and 3 billion lightning strikes a year.
- Lightning can heat up to 33316 degrees Celsius (~ 5 times the temperature of the sun).
- Lightning carries 1 billion volts and 10,000 to 20,000 amperes of current.
- Lightning can travel 40 to 75 kilometers horizontally prior to turning downward to the ground.
- A flash can be six to eight miles long.
- The actual thickness of a lightning bolt is that of a quarter to a half dollar, though the surrounding light makes it seem much larger.
- The ground surface can be lethal up to a 18-meter radius at the time of the strike. If the strike occurs in water, that increases to 185 meter radius.

Estimating the Distance from a Thunderstorm

Because light travels much faster than sound, the lightning flash is observed before the thunder is heard. You can estimate the number of kilometres you are from a thunderstorm by counting the number of seconds between a flash of lightning and the next clap of thunder and then dividing by three. It should be noted that you are in danger from lightning if you can hear thunder. Knowing how far away a storm is does not mean that you're in danger only when the storm is overhead.

Precautions to Take When Outdoors

- Attempt to get into a building or car
- If no structure is available, get to an open space and squat low to the ground as quickly as possible. If in the woods, find an area protected by low clump of trees – never stand underneath a single large tree in the open.
- Crouch with hands on knees
- Don't stand in water
- Avoid tall structures such as towers, tall trees, fences, telephone lines, or power lines.

- Stay away from natural lightning rods such as golf clubs, car carts, or maintenance equipment
- Stay away from bodies of water.
- If you are isolated in a level field and you feel the hair stand on end (which indicates that lightning is about to strike), bend forward, putting your hands on your knees. A position with feet together and crouching while removing all metal objects is recommended. Do not lie flat on the ground.

source: FEMA, www.fema.gov/hazards/thunderstorms/thunderf.shtml, The Weather Channel, National Weather Service, and Automated Weather Service, Inc.



Questions?

If you have questions about the Syngenta TechNotes—SH contact Sam Hole at sam.hole@syngenta.com or visit www.greencast.com.au