



Ozone Action

The other day, my clock radio ushered me into the morning with the weather report. I don't remember what the temperature was, or was supposed to be that day. I don't even remember whether or not it was going to rain. But the commentator caught my attention when she said that it would be an ozone action day.

The term, ozone, isn't foreign to me. The hole in the ozone layer has been in the news since the '80s. I've heard and read plenty about the theory of global warming, who believes it, who doesn't, and what everyone has at stake. I'm even familiar with the term ozone action — these days you can't make it through a summer without hearing it.

It occurred to me, though, that I had no idea how to respond to the meteorologist's warning. I hit the Internet to find some answers, and ended up at the Environmental Protection Agency's Web site, www.epa.gov, and the United Nations Environmental Page, www.unep.org.

I found lots of great information, like the fact that there are two types of ozone that are cause for concern. The two are identical in composition, but their location separates them, and this makes all the difference in the world.

Approximately 90 percent of ozone (O₃) lies 10 to 50 kilometers above the Earth in the stratosphere. This is what we commonly call the ozone layer. The remaining 10 percent sits in the troposphere, which extends 10 kilometers from the planet's surface.

We rely on ozone in the stratosphere to protect us from the sun's ultraviolet radiation, but ozone in the troposphere is toxic to humans, plants, and animals. In fact, it's one of the major components of smog.

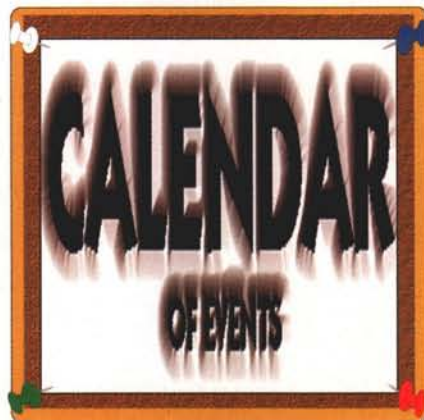
While ozone in the protective stratosphere continues to decrease, tropospheric ozone has been steadily rising. Scientists have yet to find a viable solution to either problem; unfortunately, there doesn't seem to be a way to export the damaging ground-level ozone into the stratosphere to plug the hole.

There are ways individuals can help reduce tropospheric ozone formation when meteorologists issue warnings. The Department of Environment and Natural Resources provides the following ozone action day tips:

- **Don't drive.** When possible, take the bus, car pool, walk, or ride your bike to your destinations. When you do drive your car, use cruise control whenever practical, and stay within the speed limit. Avoid sudden stops and starts, and avoid idling for long periods. Combine short trips whenever possible.
- **Avoid grass cutting.** This one is tough for sports turf managers, but there are steps you can take. Use hand-powered or electric equipment whenever possible. If you must use gas-powered equipment, wait until after 6 pm.
- **Tune equipment.** Keep vehicles and lawn equipment tuned up. Engines that are well maintained are more fuel efficient and they emit less air pollutants.
- **Refuel after dusk.** Postpone refueling vehicles and equipment until after 6 pm. This reduces emissions during peak daylight hours, when ozone formation is most likely. Don't top off the tank after the pump has automatically shut itself off. This will avoid gasoline spills and unnecessary emissions.
- **Avoid solvents.** Use water-based paints and cleaners instead of solvent-based products.
- **Conserve electricity.** Set your thermostat to the highest comfortable temperature (try 78 degrees). When away or asleep, set the thermostat at a warmer temperature. Use a ceiling fan to circulate cool air. Turn appliances off when not in use.

Don't wait for somebody else to take the lead. The environment is our business, so let's do our part to protect it.

Steve Berens, Editor
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July 27

Midwest Regional Turf Field Day, West Lafayette, IN. Contact Bev Bratton: (765) 494-8039.

August 16-20

Floyd Perry's Groundskeepers Management Academy, Bethel, CT. Other dates and locations: Aug. 23-27, Colonial Heights, VA; Aug. 30-Sept. 3, Orlando; Sept. 12-16, Dallas; Sept. 19-23, Denver; Oct. 10-14, Davis, CA. Contact Grounds Maintenance Services: (800) 227-9381.

August 17

Cornell Field Day, Cornell University, Ithaca, NY. Contact Joann Gruttadaurio: (607) 255-1792.

August 18

Michigan Turfgrass Field Day, Hancock Turfgrass Research Center, Michigan State University, East Lansing, MI. Contact Kay Patrick: (517) 321-1660.

August 18

Ohio State University (OSU) Turfgrass/Horticulture Research Field Day, OSU Turfgrass Research Facility, Columbus, OH. Contact Kevin Thompson: (888) 683-3445, ext. 3151.

August 31

Central NY Poa Annual Tournament, Rogues Roost Golf Club, Bridgeport, NY. Contact New York State Turfgrass Association (NYSTA): (800) 873-8873 or (518) 783-1229.

September 14-15

Turfgrass Research Conference and Field Day and Landscape Management Research Conference and Field Day. University of California, Riverside, CA. Contact Susana Aparicio: (909) 787-4430.