



SCARED!

By Monroe S. Miller

It was about 5:00 a.m. on a hot July summer Sunday morning. The golf course was in need of rain.

Chad and I were standing in the shop doorway, watching the faintly visible flashes of lightning in the sky to our north. We had both, at our separate houses, been watching the same scene since 8:30 p.m. the evening before. Neither of us could believe the weather front hadn't moved all night. We needed a shower for the course badly and we were so hoping this would maybe be it.

Since it was totally dark on the golf course, I went into my office to clear my desk. Chad stayed in the big doorway, watching.

Suddenly, I heard a blood curdling yell, accompanied instantaneously with a deafening "crack"! I bounded from my chair and out the office door, fully expecting to see a charred Chad.

Instead, I found a scared assistant, not quite hanging from the ceiling, but almost. He was pale as a ghost.

An enormous lightning strike had hit a tree along the 7th fairway, just across the railroad tracks, not a hundred yards from the shop. So powerful was it that the microsecond of light it brought flooded the electric eyes on our shopyard lights and turned them off.

A lightning strike like that strikes the worst kind of fear into a golf course superintendent. That fork of electricity hit a tree which will now have to be removed. It damaged the irrigation system satellite controller that was literally five yards away.

But no one was hurt. Lightning really used to scare me in the days of a manual irrigation system. The mix of steel pipe buried at a shallow depth and full of water, brass quick coupler valves, brass and aluminum sprinklers, a Cushman truckster, a young night waterman and a lightning storm caused me more sleepless nights in years past than I care to remember. Thinking about them makes me tired. Fortunately, I'll never know how close we might have been to a tragedy.

Never before has the public been more aware of how dangerous lightning can be on a golf course. Death from a brief yet violent storm will forever shroud this year's U.S. Open. Honestly, I cannot tell you who won the tournament. But I can tell you I won't forget that during the first round of the Open at Hazeltine a 27 year old spectator was killed by lightning. Five other fans were hospitalized with injuries from the same bolt near the 11th tee.

It was simply "the nightmare you hope you'll never have", said UGSA executive director David Fay.

I was first sensitized to the seriousness of lightning on a golf course back in 1979. The athletic director at Madison's Memorial High School and his wife were killed while playing golf on a Lake Delton golf course. They made it to a wooden shelter when the storm began. But officials said lightning struck the ground near the shelter and carried an electrical charge through water rushing over the ground to the golf club Mr. Olson was holding. He was electrocuted. His wife had her arm around his shoulders and was also killed.

Immediately afterwards, we installed new lightning rods in our shelter houses on the golf course, addressing finally a problem we had been ignoring. Ever since that time, when we see lightning in the sky, all of us—employees and myself—seek the safety of our shop.

Statistics from the National Oceanic and Atmospheric Administration show about 100 Americans are killed each year from lightning. Another 250 are injured in lightning related accidents.

A NOAA report—"National Summary of Lightning, 1987"—looked at lightning deaths and injuries on a state basis for the years 1959-1987. It detailed places of occurrence of those deaths and injuries.

For that period, Wisconsin ranked 29th in fatalities and 22nd in terms of injuries. Florida has the dubious distinction of being the most dangerous lightning state.

Golf courses ranked third in fatality sites. That data should be enough to

scare players and golf course superintendents, if they aren't already.

If old Ben Franklin had had my attitude and courage and curiosity about lightning, the lightning rod would never have been invented. My curiosity about lightning is greatly tempered by a fear of electrocution; fortunately, his wasn't.

And it is not just electrocution from lightning that brings forth so many fears. Our golf course has suffered more lightning damage this year than in any of the previous 19 years that I have personal knowledge about.

The damage is almost exclusively manifest in our trees. This year alone I can count five trees that have suffered electrical strikes from the sky. Golfers may get the greatest publicity from lightning; golf course trees are the most common targets, by far.

We've noticed most damage has occurred to poplar and to silver maple. That has begged the question "why?"

Trees usually get struck by lightning on the way to the ground because they contain water and water is a better conductor than air. Poplar and silver maple may have more water concentrated near the cambium, just under the bark, than other trees. That is just an unscientific theory, however.

I do know that whatever water is there must boil explosively; we find bark blown from the tree 30 yards away from the tree.

It's not an earth shattering question, though. It has been asked many times before, and yet no definitive statistics as to species susceptibility to lightning damage has been done that I could find.

But every golf course superintendent knows this: lightning tends to strike the tallest trees and isolated trees. That we have seen and can offer personal testimony about.

This fact comes into consideration quite heavily for those golf course superintendents who have started a program to protect the most valuable golf course trees they have.

Since you cannot protect them all, how do you choose which are the lucky ones to receive a lightning rod?

In addition to height and location, significance as a feature for a golf hole has to count heavily. I particularly noticed protected trees at the Augusta National Golf Club when I was at the Masters Tournament this spring. One tree, in particular, on the 13th hole caught my eye.

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Each lightning rod in a tree provides a "cone of protection" around it, an area extended from the base a distance about equal to the height of the lightning rod itself. Within this cone, lightning bolts will be drawn to the rod and won't damage other trees.

And yet, while lightning has scorched trees and damaged golf courses and occasionally taken life, we have to realize that it also has an important role to play.

Nitrogen makes up about 80% of our atmosphere and yet only a few plants can use this most important plant nutrient. To be useful, nitrogen has to combine with or be "fixed" with another element.

Lightning is a benefactor in this process. Each time lightning flashes an electrical charge, it combines nitrogen and oxygen. Rain carries the fixed nitrogen to the ground where it can be used by plants.

In Wisconsin, we can be thankful that lightning doesn't start the forest fires it does out west. Here, thunderstorms accompanied by lightning are also most often accompanied by rain, rain which quenches fires that might break out.

Lightning deserves a lot of fear and a lot of respect. Although it is dangerous in a lot of ways to golfers, golf courses and golf course superintendents, it is also important to the plant life on our golf courses.

Lightning may be the ultimate fear of Mother Nature we have to deal with; it might also be one of nature's finest acts. There is no arguing it is one of the most spectacular.

HELP WANTED

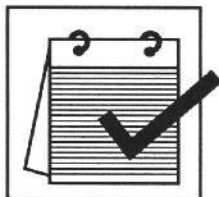
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The Wisconsin Golf Course Survey



Clothing The Crew, Looking The Part

By Monroe S. Miller

One summer, after I was out of Uncle Sam's Army and not taking any summer school classes at the UW, I worked at one of the state's finest golf courses. The assistant there went on to become one of the best golf course superintendents around. It was a good experience, full of both fun and valuable lessons.

Only one lesson was a negative. The crew was required to wear a uniform. It was an olive drab slacks, a matching olive drab shirt and a complementary green t-shirt. I thought I was back in the Army again.

I vowed, as a result of that experience over twenty years ago, that I would never do that to my crew. And I haven't.

I do believe that the staff working on a golf course needs to look clean and neat and tidy. But they don't have to all look alike. Frankly, I like the variety and individuality of each employee's wardrobe.

When a new person is hired, I spell out the limits of what I'll tolerate, explain what will happen if one comes to work in a "party 'til you puke" t-shirt that is popular on the college campus in this town, and detail the prohibitions. The prohibitions include tennis shoes and shorts.

My own work wardrobe is designed for comfort and common sense. I like to participate in everything that goes on around the course; wearing \$70 slacks and a \$40 Cross Creek golf shirt would surely inhibit that. So, as you might guess, I pretty much dress like the guys I work with.

In fact, a few years ago a person stopped by who was selling some mor-

phidite product for an unheard of company. He asked me if the boss was around. I quickly replied with a "he's never here and I have no idea where he goes", making sure I'd never be bothered again.

The point is that I didn't "look" like the boss should have, in his mind, and he went away.

With that lengthy preface, you can almost guess this issue's SURVEY questions. Here they are, along with the results.

1. Do you provide your golf course staff with uniforms?

YES: 6 NO: 15 Shirts only: 5

2. Do you have a dress code?

YES: 19 NO: 7

3. What do you wear to work?

Jeans, "work" clothes: 24 Golf attire: 2

4. Do you allow your employees to wear shorts? YES: 20 NO: 6

Tennis shoes? YES: 18 NO: 8

I was a little surprised, to be honest, with some of the answers. I was pretty much right on with guessing how many provided uniforms and how many didn't, and with the dress code questions and with what we wear to work ourselves.

But I was a mile wide of the mark with shorts and tennis shoes. I prohibit both and will probably have to hide this issue from my own guys: they may not want to hear "it's for your own good" anymore!

When it comes to work attire, it appears most of us prefer employees "clothed with integrity" rather than Polo slacks and Hogan golf shirts.

That is how it ought to be.

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