



## WITCH HUNT

I, along with most superintendents, have read several horror stories recently concerning so-called "killer courses" in which superintendents are no better off than the witches of Salem several hundred years ago.

My first reaction to these stories was anger. I still don't understand how such completely erroneous statements could be put in print, not by a scandal sheet, but by a respected golf magazine.

Then, after I had a chance to cool down, it scared me to think of the tremendous up-hill battle we superintendents have facing us. With the ever-increasing emphasis being placed on environmental issues, the public questions everything; and rightfully so. Because our profession deals with chemicals which, if misused, have the potential to do harm to the environment, we can expect to draw a great deal of attention.

It is important, therefore, to get the message across to the public that golf course superintendents are interested in protecting the environment, too. We have to be; we live with the environment on a daily basis. Without good soil, water, air, and beneficial insects, fungi and bacteria, we would be unable to keep our courses beautiful.

Chemicals are a necessary economic tool for the superintendent. Their use is regulated by governmental standards which are set by the Environmental Protection Agency and by the Department of Environmental Regulation. Superintendents must be licensed in the use of chemicals, a written test which requires knowledge of the safe use of chemicals.

Since the superintendent will be held liable for any damage that might occur to the environment as a result of chemical use, it is only natural that he uses his knowledge to prevent accidents. Spray equipment is treated in the same preventative manner that is used to take care of mowing units.

Preventative maintenance is used on hoses, nozzles, and valves. The life of spray nozzles is extended through the use of stainless steel tips. Graphs, made available by the manufacturer, are used which give accurate wear curves at different pressures and hours of use.

Pesticides are used to manage harmful pests. The key word is manage. We don't eliminate the pest, we just reduce the populations to acceptable levels. An often overlooked chemical that is used more frequently than any other is fertilizer. As much care is taken when measuring and calibrating for fertilizer applications as is taken when measuring and calibrating for pesticide applications. Too much of one nutrient can cause soils to become so imbalanced that beneficial organisms will not survive.

Or consider, for example, a pond that is constantly getting the excess nitrogen of a fairway that is overfertilized. The nutrients in the pond will become so high that the aging process becomes accelerated. Soon the pond will become uninhabitable for anything.

Superintendents are aware of the precious balance that nature has created. In the golf course maintenance business, too much of a good thing, i.e. fertilizer, insecticide, fungicide, herbicide, can do more harm than good.

Due to the high cost of chemicals today, many problems on a golf course are treated on a curative basis as opposed to a preventative basis. This has had considerable effect on the amount of chemicals used. Not only do superintendents use fewer chemicals today than 10 or 20 years ago, the products on the market now have lower residuals so the effects are much shorter in duration.

Golf courses are also providing communities with an alternative to dumping treated waste water in rivers and bays. Many courses now use waste water for irrigation, and many more courses will use it in the future.

Superintendent associations around the country create funds for researching safe solutions to problems. Dr. Milch of Igene Biotechnology Inc. in Columbia, Maryland is experimenting with an enzyme from crab shells that he hopes will eventually be used as a biological control for nematodes. There are studies being made with certain harmless bacteria to biologically control the mole cricket. And, of course, the search is ongoing for heartier strains of grasses that are more capable of resisting pests and disease than those grasses being used today.

The Golf Course Superintendents Association of America is on the right road with its new public relations campaign. Hopefully they will be able to alleviate some of the public's fears and concerns about the use of chemicals on golf courses.

Just because superintendents have to use chemicals to maintain healthy turf doesn't mean we are the enemy. It's time the witch hunt ended.