

Are we going to hell, or is it time to disagree?

by Christopher Sann

The fragrance of freshly-cut grass, blooming daffodils, and hyacinths fills the warm air. My eyes are pleased by the sight of blossoming dogwoods, cherry trees, and crabapples. Yet my ears are subjected to the haranguing of "environmental chicken littles," who, despite significant evidence to the contrary, repeatedly insist that no environmental progress has been made and that civilization is doomed to perish in a sterile hell of its own making. Opportunistic politicians, riding on a temporary wave of anti-governmental sentiment, say that government is wholly incompetent and incapable of successfully completing any activity it undertakes.

With both of these shrilly and emotionally avowed points of view, I loudly but politely disagree.

A substantial body of evidence that the environment is getting better is chronicled in a new book, *"A Moment on Earth: The Coming Age of Environmental Optimism,"* by Gregg Easterbrook (Viking Press). The book shows that these early efforts to stop poisoning ourselves and our planet have borne considerable fruit. The facts are as follows:

- Since 1975, airborne lead levels have been reduced by 96%.
- From 1988 to 1992, the number of people living in U.S. counties that failed federal air pollution standards fell from 100 million to 54 million.
- From 1988 to 1993, smog warnings in East coast cities fell by 64%.
- By the year 2000, the amount of sulfur dioxide emitted by U.S. electrical generating facilities and manufacturing plants will have been reduced from 28 million tons to 9 million tons, or by 68%, even though the number of coal-fired electrical generating facilities has doubled since 1970.
- The total forest acreage in the industrialized portion of the world has actually increased in the past 50 years, with a 30% increase in Western Europe in 57 years, and a 69% increase in the New England states of Vermont, Massachusetts, and Connecticut since the mid-19th century, and
- A ten year government study completed in 1991 found that there was no evidence of general decline in U.S. or Canadian forests due to acid



rain, and that, despite estimates of high acidity in 50% of lakes, in fact only 4% of the lakes were found to have become acidified.

If there is evidence that the environment is getting better, then why all the noise?

Why do the hard-core doom sayers continue to discount reports of environmental progress? Most certainly some of the noise coming from environmentalists comes from a genuine sense of concern. But not all.

The rhetoric that served us all so well, to get our attention about the larger dangers of self-poisoning, now seems strangely discordant and out of proportion to the increasingly less infamous examples of self-destructive behavior that still remain. Unfortunately, their continued strident pronouncements about the end of the world are no longer being met with bemusement, befuddlement or tolerance — they are beginning to evoke a rather hostile retort from a sizable portion of the population that appears to be more concerned about individual rights than the collective good.

There have been excesses in the government's zeal to correct past practices that led to such infamous places as the Love Canal and the use of Agent Orange. But even these concerns about the excessive use of government regulation do not fully explain the level and the volume of vitriolic dialog that has taken center stage over the last 12 months.

What does all this have to do with turf?

Like it or not, all turfgrass managers have to abide by some level of government regulations, be they federal, state, or local. As flawed as many of these regulations are, they are designed to protect workers, users and the environment. Turfgrass managers have accepted the fact that regulation is part of the business "landscape," and up until the last 12 months have had some idea where these regulations were heading.

Historically, as new regulations have been implemented, turfgrass managers have ultimately relied on the regulators for information and guidance. If federal funding is slashed, then the money needed to field implement these new regulations and fund extension agents and turfgrass research specialists to develop new strategies in turf management will diminish. The safety net of government support will weaken. Consequently, turfgrass managers will be left to their own devices. Successfully navigating the ever changing regulatory and political shoals will become a major challenge,

requiring untold dollars and man hours to comply. As bad as it may currently be, the future holds the possibility that it will get a whole lot worse.

What can the turfgrass industry do?

More now than ever before we in the turfgrass management industry must not only find our collective voice, we must loudly but politely disagree.

The 1990 U.S. census shows that the turfgrass management industry consists of 735,556 men and women. We are a strong force. We can no longer allow our industry's fate to be buffeted by outside forces, be they over zealous environmentalists, uninformed regulators, opportunistic politicians, bottom-line oriented manufacturers and suppliers, or a biased media.

We must find our collective voice and tell the consumers/users that we are as concerned about the environment as they are. We must show them that we are actively looking at and implementing new management strategies that will reduce the amount of pesticides that we use.

We must, loudly but politely, tell everyone involved in our field that we will no longer take a back seat to the agricultural industry. We must let them know that we will no longer just blindly use the manufacturers' products and not ask questions. They must understand that if they continue to take us for granted and continue to ignore our needs, we will buy our "tools of the trade" from manufacturers who value our work and recognize us as partners in the industry.

We must, loudly but politely, tell our local, state, and federal legislators, that we must participate in formulating regulations affecting our industry. We must insist that legislatures and regulators clearly define goals for

the future use of pesticides, that we expect legislators to keep the industry well-informed about these goals, and that they must properly disseminate information relevant to our industry.

We must let the media — television, magazines, and newspapers — know that we, loudly but politely, object to their common practice of building readership and ratings with sensational stories about how turfgrass managers are poisoning the world. Let them know that we expect balanced coverage of our industry and that "pesticide horror stories" must be counterbalanced by reports of our advanced environmental work, such as Integrated Pest Management. The media need to understand that we will monitor their stories, and if they do not comply with our request for fair reporting of our work, we will contact their advertisers and let them know that we will boycott products advertised in media that report unfairly about our industry.

We must loudly, but politely, make our voice heard.

We must, loudly but politely, object to environmental doom sayers, government groups, and local media who have made it a practice to pit one side against the other in order to advance their own causes. We must demand to have a place in the decision-making process that charts our future course, and that all involved in regulating our industry provide us with accurate information so that we, as well as our customers, can make informed and sound environmental business decisions. The turfgrass industry of about three quarters of a million individuals must politely demand full and proper consideration and representation. ■

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cide applications. As a general rule, however, these types of pesticides do not commonly act directly through the soil microbial community (with the exception of insecticides). Furthermore, there are many negative nontarget effects of fungicide applications on other components of the soil biota. For example, fungicides such as anilazene, benomyl, chlorothalonil, and mancozeb can be toxic to earthworms. Other fungicides may be equally harmful to beneficial micro- and macroarthropods.

Conclusions

The specific types of nontarget fungicide effects may be difficult to predict since the effects depend on a variety of soil and application factors such as soil pH, texture, moisture content, and organic matter content, as well as on the application rate and frequency of the fungicide. Even the history of pesticides used on the

particular site will determine the nature and magnitude of the nontarget effects.

It is important to understand, however, that the application of fungicides may lead to unpredictable and peculiar effects on turfgrass diseases and general turfgrass health. These peculiar effects are likely to be more common in those sites receiving continuous applications of the same broad-spectrum fungicides. It is important, therefore, that particular attention be paid to the specifics of each application (e.g., chemical class, application rate, etc.) as well as to the intended target pathogens and the observed outcomes of the applications. This will allow one to assess each fungicide used on each particular site for any potential nontarget effects. This, coupled with equally meticulous cultural records, all of which are central to a solid integrated pest management program, will provide a means of more effectively selecting disease control strategies with a minimum of harmful side-effects. ■