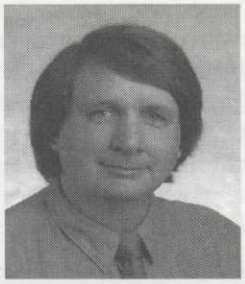
Wind, application drift and the applicator



by Christopher Sann

As people have become increasingly aware of pesticides and their potential for misuse, the number of complaints to companies and regulatory agencies about drift of applied materials has risen.

Whether the actual number of drift problems has increased, because more applications are being improperly made or because the public's willingness to voice its complaints about application drift has increased, is not known. Either way all applicators of either dry or liquid applications must make every effort to avoid drift of applied materials and thereby avoid the complications of having to deal with a complaint.

Think of an application drift problem as analogous to a pesticide spill. The best way to deal with a material or pesticide spill is not to have one.

Know what you are applying.

The first and most important principle in avoiding drift is to have thorough knowledge of the material that you will be applying.

Read the label. It should provide a list of the proper environmental conditions under which that product can be used.

Follow the directions exactly. It's the law. If the label is not specific about the conditions under which the product can be used and there is the slightest possibility that drift will occur, contact the manufacturer and discuss your intended use of that product.

If, after discussing things with the manufacturer, you are still uncertain, **do not make the application**. Wait until conditions are more suitable.

Know the equipment that you are using.

The second most important principle to avoid drift, is to know the equipment that you will be using to make the application. If you do not have enough experience with that particular piece of equipment, **do not make the application**. Find someone more experienced to operate the equipment or wait until you have had enough experience under non drift conditions to feel comfortable with the application. Equally important in knowing how to use the application equipment, is the question: is the proposed application equipment the appropriate equipment to use for the application of the material at the proposed site? And if it is the correct equipment, can it be operated in a manner that will preclude the possibility of drifting? If the answer to either one of these questions is "no", then **do not make the application**.

Know the application conditions

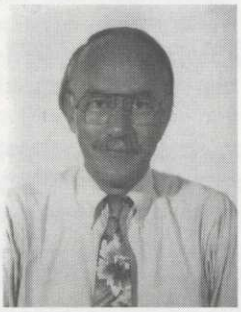
Finally, do the site conditions meet the minimum requirements needed to make the application? What are the wind speed, wind direction, and relative humidity at the site? Not only is this information that you are must record for regulatory requirements, but it is information that you, the applicator, need to make the decision of whether or not to make the application. If this information is not available, **do not make the application.** Low relative humidity is a concern on hot dry days. Liquid applications made under these conditions tend to evaporate much faster than in a cooler, wetter location, so knowing the volatility of the product is important under these circumstances. If the product has a low vapor pressure like a ester-based herbicide and the site is hot and dry, **do not make the application**.

If the wind direction could carry any of the applied material from the target area onto another person's property, near people, pets or other animals, into a building or into a body of water or a drainage system, **do not make the application**.

Finally, know what the wind speed at the site is. Most labels will state what the maximum wind speed may be for the proposed application site. There are at least five different commercial hand-held wind speed instruments available to measure wind speed. If the wind speed exceeds that recommendation, **do not make the application**. Knowing the wind speed at eye level is not going to stop drift, if you are going to be making an application 25 feet over your head. You need to know what the wind speed is at the height you will be making the application. This takes into account the fact that wind speed in miles per hour increases exponentially the higher you are above the ground. So if you measure the wind speed at six miles per hour at six feet off the ground, a speed that is within the application parameters, and you are going to be spraying an ornamental tree 25 feet off the ground then the wind speed at that height will

-continued on page 11

A welcome to our new subscribers



by Juergen Haber

Over the course of the last few months we at *Turf Grass Trends* have been working hard at broadening our subscriber base. And the results are gratifying.

In addition to the core group of readers that Chris Sann, field editor and former publisher, brought on board, we have brought into our circle of readers others who are interested our in-depth treatments of information for everyone in the industry — from lawn care operators to golf course superintendents to manufacturers.

Our veteran subscribers have seen several issues of the new *Turf Grass Trends*, but we'd like to tell those of you who are seeing the newsletter for the first or second time about the faces behind the news.

I've been editing and publishing newsletters and helping other publishers since 1977 when I took over *Housing and Urban Affairs Daily*. I took over the publishing functions here in November and the editing functions in February.

Field Editor Chris Sann is a successful lawn care operator with over 20 years experience where it counts — out in the field. He's been writing on turfgrass issues since 1990 and then founded *Turf Grass Trends*.

Science Advisor Eric Nelson is an associate professor of plant pathology at Cornell University. He is an internationally recognized academic researcher into the expansion of scientific understanding of progress in the turfgrass field.

Art Director Dan Robinson is also art director for the city newspaper for Takoma Park, MD, as well as designer and producer of publications for several other clients.

We and other contributors, like veteran business writer Jim Parks and Cornell University's Dr. Joseph Neal, will help you face a daunting combination of challenges through the pages of *Turf Grass Trends*:

- increasing environmental regulations changing the way every segment of the green industry does business,
- our economy is undergoing fundamental structural changes that are difficult to grasp — much less to manage,
- and the relief promised by the explosion of new knowledge and new tools is complicated by obstacles to gaining access to these new resources and putting them to use in the field.

But why do it in a newsletter instead of a trade magazine? First, I'd like to acknowledge the contributions of magazines like *Landscape Management* and *Pro*. The green industry needs their voices and the insights they provide to the general public. But we believe the industry needs an independent newsletter that takes an approach to the subject of turf that is lean and mean, no frills and no distractions, just solid information.

Beginning with the November issue, we increased the size of *Turf Grass Trends* from 12 to 16 pages. We've brought the production of the newsletter from Wilmington, Delaware, to Washington, DC, making the logistics and communications lines shorter and more efficient. In the coming months we'll be making other changes — the publication of new services for our readers. We'll be broadening our roster of regular contributors. And more changes are in the works for 1994 and beyond — all to make it easier for all of us in the green industry to cope with all of the challenges we face every day.

But we can't do our job here at *Turf Grass Trends* in a vacuum. We invite reaction and interaction from our readers. You've seen the Ask The Experts feature we publish when we have room. We invite questions from you. We will also publisher letters from readers. Don't forget that we have tried to make communicating with the *Turf Grass Trends* team easy: the box on the back cover lists our address, phone number, fax number and electronic mail address.

So, we hope our veteran readers and our new subscribers all will profit from what we bring you. ■

***Drift** continued from page 10*

probably exceed the maximum allowable limit. Conversely, an application that is to be made at twenty inches off the ground can probably still be made within the parameters even though the wind speed is 12 miles per hour at six feet off the ground.

Only you can stop drift

You, the applicator, are the person directly responsible for application drift and its consequences - not your supervisor, not the office manager, not the homeowner, not the manufacturer. You are the person who can stop application drift. And remember to best way to avoid application drift is **do not make the application** unless you are convinced that every effort has been made to avoid application drift . ■