

3. No New Uses—Refraining from adding any additional risk keeps the risk cup from increasing.

Many active ingredients used for lawn care, agriculture or other uses are also used in other formulations for structural pest control. Ultimately, manufacturers have to decide whether they want to support a particular chemical or not. The question becomes, Is it cost-effective for them to support the use of an active ingredient in a small market like pest control, or continue its use in a bigger market like agriculture?

One of the main problems for lawn care operators (LCOs) and golf course superintendents is the execution of the FQPA,

and how the EPA is going about doing it. The agency may feel pressured to make fast decisions to meet various deadlines. The fear is that it will move forward without using any hard data on which to base its decisions. Instead, the EPA would use worst-case scenarios as a starting point to doing risk assessments.

In order to make sound decisions regarding the FQPA, the EPA needs to do risk assessments. To do risk assessments, it needs good data. If there isn't any good data, and instead it has to use worst-case scenarios, then it will get an unrealistic picture of what the risks truly are.

The Green Industry must demand that hard data and

## Legislative time line

- 1938 Federal Food, Drug and Cosmetic Act (FFDCA)
- 1947 Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
- 1958 Delaney Clause Amendment to FFDCA
- 1996 Food Quality Protection Act (FQPA)
- 1998 Gore Memo, April 8, 1998  
EPA Response Memo, April 10, 1998
- 1999 First Deadline, Organophosphates, Carbamates, B<sub>2</sub> Carcinogens (August)
- 2002 Second Deadline, Pyrethroids
- 2006 Final Deadlines= Remaining Less Toxic Pesticides

sound science are obtained by the EPA as part of its assessment process. As a result of previous lobbying efforts by various industries affected by the FQPA including agriculture and pest control, Vice President Al Gore issued a memo to

the EPA ordering the agency to revamp its review policy.

*Lisa Shaheen is senior managing editor of Pest Control magazine.*

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# Pesticides and our image

*Turfgrass managers now have more options to enhance the environmental friendliness of the Green Industry.*

R.L. BRANDENBURG  
North Carolina State  
University



Much has been written in recent years

about the public's concern over pesticide use especially in urban environments.

This concern has focused not only on public health concerns, but also on potential disruptive environmental effects including fish and birds. One could go on for pages writing about this on-going debate that has been a part of lawn and landscape management.

Unfortunately it has, at times, become part of a rather ugly and unproductive argument over pesticide use based on fact, fiction, and emotion. No one really benefits from such an adversarial approach. Fortunately, the landscape industry's ability to speak responsibly on this issue has improved. Many groups such as the PLCAA and the GCSAA have taken steps to increase the education of turfgrass managers on this issue and to address the questions presented by a concerned portion of the public.

**End to confrontation**

One of the biggest gains we have made in recent years is that we have dropped the confrontational approach. For many years, the most common approach to public education was simply to compare pesticides to all the other risks in one's life and thus attempt to



The landscape management industry should use FQPA as another image-enhancing change.

minimize concern over these chemicals. After all, if the public could be convinced that numerous other risks would probably kill them long before pesticides would, then they would focus their attention elsewhere. Those of us who are not experts in such communication (and I include myself in that group) learned that you cannot diminish the concern over one topic by increas-

ing anxiety on another one. We slowly and painfully learned that no one wins with this approach.

**Educational approach better**

Our more recent efforts on educating the public about pesticide use in the landscape have focused on a clearer, more straightforward approach concerning pesticide use, IPM, and product safety. Fortunately, we have abandoned the

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"silent" approach which gave the appearance we had something to hide, the bash the environmentalist approach which severely crippled our own credibility, and the previously mentioned "scare tactics" approach that told the public the world was filled with substances more deadly than pesticides.

I hope this industry continues to pursue this aggressive course of actions that presents the facts and provides the public with a realistic picture of the direction our industry is headed.

## Research brings better products

We are not using the same pesticides that we used 20 years ago and we are using more compatible ones in a more efficient way. And even more impressive, is that we've probably only begun to reap the benefits of university and industry research that will further enhance our ability to manage turfgrass in a cost-effective manner that is in harmony with everyone's desire to minimize any negative environmental consequences. The future looks very bright for an ever increasing array of options and programs for turfgrass management. Research into landscape pest management has never been as active as it is at this time. Just as we have seen significant benefits over the past decade, we will reap additional benefits over the next few years as this research provides new products and information. I foresee continued development of pesticides with reduced toxicities to man-

and animals. We will undoubtedly see more biological products developed and our improved understanding of pest biology help us use these more effectively.

Just as the products Merit and Mach 2 were well received by the turf industry because of their "reduced risk" fit, other new products will also find their niche. Even though we have seen some biological materials enter the marketplace and disappear due to poor performance or lack of fit in the turfgrass industry, we now have a better understanding of how to make similar products work.

I also see continued success in better forecasting ability for a variety of pest problems.

Our image is dependent upon the public being aware of the fact that we remain on the cutting edge of science (and there is a lot of science underway in landscape management) and new research is often focusing on addressing consumer concerns. New equipment to improve pesticide application efficiency and reduce drift has been available for several years. Several major manufacturers are getting involved in the development and marketing of such equipment so the future for such equipment appears bright. The biological products may receive the greatest benefit from the use of injection equipment.

## FQPA questions, industry answers

A final area that will have an impact, not only on how we conduct our business, but also

*Let's tell the public about our advances and help guide and accept new regulations for greater public confidence.*

on our image is the implementation of the Food Quality Protection Act (FQPA) of 1996. One might ask how a law that we have no control over could impact our image and it is a reasonable question. We can have an impact on the implementation and secondly, its final deployment will affect what products we can and cannot use in the landscape. Hopefully this will give the public more confidence. However, while one would assume that any new law regulating pesticides would instill greater public confidence, we must remember two things.

The FQPA will have some teeth to it and will have an impact on what products are available to use. The EPA has begun the formidable task of reviewing one third of all pesticides including the organophosphates and carbamates by August 1999 and all pesticides within 10 years. Many did not realize that under the FQPA all pesticides of similar modes of action (like the organophosphate insecticides) would be grouped together to determine residue exposures and risks. All uses, not just food residues, but turf, landscape, and household uses would also be lumped together to determine exposure and risk. Furthermore, children's exposure is given a 10x safety factor. Each group of pesticides then

has a risk cup, or an amount of allowable exposure. Under the new system it appeared that many pesticides far exceeded this allowable risk cup and many uses would be lost. This could be especially true for compounds that had many registered use sites including agriculture, turf, ornamental, household (eg. chlorpyrifos).

Once the FQPA is fully implemented, the landscape maintenance industry should use it as another image enhancing change. It will change how we do business and undoubtedly some products will be lost to the landscape industry. However, this should be another step in upgrading public confidence in our use of pesticides in the urban environment. Let's tell the public about our advances, adopt new technologies, and help guide and accept new regulations developed to create even greater public confidence in pesticide use laws.

We all stand to benefit.  
*R. L. Brandenburg is a professor of entomology at North Carolina State University.*

# Green Industry can bring balanced view

*RISE is striving to keep the EPA fully informed. Green Industry professionals can help by telling representatives why pesticides are necessary for the public's protection.*

By LISA SHAHEEN

**A**s questions fly around the Environmental Protection

Agency (EPA) about weighing the risks associated with pesticide use, Responsible Industry for a Sound Environment (RISE) is working diligently to keep the answers in balanced perspective. The message from RISE: pesticides are not the problem—pests are.

Elizabeth Lawder, program manager for Washington, D.C.-based RISE, has closely followed the Food Quality Protection Act (FQPA) since the law has become an issue for the Green Industry. The FQPA has

the potential to eliminate pesticides, beginning with the organophosphates and carbamates, as soon as August 1999. Lawder is responsible for all communication activities for the organization, and her primary focus is on specialty pesticides. She suggests that lawn care operators (LCOs) shift the focus from the idea that pesticides are the problem, and put more emphasis on pests as the problem.

When the FQPA was first passed, RISE representatives were very supportive of its intentions. The industry has been trying to reform the Delaney Clause for years, and the FQPA eliminated that problem. The Delaney Clause was an amendment to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) that called for zero tolerance of any cancer-causing food additive. When the clause was adopted it was reasonable, but as technology improved, detection methods became so tightly honed that it became impossible to adhere to the provisions of the Delaney Clause.

"When we first heard that this bill was going to move, we were pleased, because it does



reform the Delaney Clause," Lawder reports.

The problems began as the EPA began planning implementation of the FQPA.

"We support the goals of the FQPA, but what we're seeing now is that the EPA is using default assumptions in implementation, based on unrealistic assumptions," she says.

RISE wants to cooperate as much as possible with the EPA and assist the agency in obtaining information necessary for proper implementation of the FQPA. However, RISE has faced some resistance.

"We're trying to tell the EPA that the industry is willing to provide the data that you need, but give us guidance on what you're looking for so that we can provide it," she indicates.

It sounds cut and dry, but so

far, it hasn't been that easy. The EPA hasn't requested any data.

"Some high-ranking officials at the EPA say that they have all the data that they need in order to make the decisions that they need to make," she admonishes. "Our argument is that they are using theoretical models and not real-world data."

Lawder wants the EPA to have a balanced viewpoint as it reviews pesticide risks, and points out the important, although often overlooked, fact that pests endanger public health, damage structures and cause disease. Pesticides, on the other hand, are one of the tools and part of the solution to pest problems.

Lawder's main message to PCOs is that these relevant tools could be lost.

"We don't want to wait until it's too late to draw attention to the importance of specialty pesticides," Lawder asserts.

RISE wants to educate the EPA and the public on not only the value, the safety and how important pesticides are to lawn care businesses, but also how important they are to managing damaging pests.

Of course, everybody wants a safe food supply, legislators included, and public health is something that consumers can really latch onto. These are the areas that the EPA needs to be reminded about.

"What we're trying to do is let people know that pesticides are a really important part of managing public health pests,"

she stresses.

#### LCO role

From experience, LCOs understand why pesticides are a necessity when it comes to lawn care. However, it's not always as clear to legislators and the public. Lawder says it's vital that LCOs know the importance of their individual comments to their representatives.

"The more letters a Congressperson gets from a constituent, the better. It's very important that members of Congress hear from the people back home because they do listen," she states.

Lawder says that every Congressional office tracks letters received, so they know what is coming in and where it

is coming from. This brings attention to a specific problem and encourages the representative to make it a priority.

"The more people who write, the higher up on the priority list the issue goes," she adds.

Lawder offers recommendations when communicating with legislators. She says LCOs should be specific and get personal. Lawn care operators should tell their representatives about their business, noting items such as number of employees and years in business. An LCO can establish an air of professionalism by describing what kind of professional training they have and stating that their technicians are trained.

"Explain exactly what you

do. For example, an LCO might say, 'I control harmful turf insects, and I service 3,000 homeowners in your district,'" Lawder suggests.

Since organophosphates are at the top of the EPA's list, identify the specific organophosphate products that are used in lawn care or on golf courses. Tell the representative how important it is to have a particular product as a tool, not only to conduct business, but also to control pests.

Finally, drive home the fact that pest control protects the public.

*Lisa Shaheen is senior managing editor of Pest Control magazine.*

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## PLCAA Day on Hill a success



**T**he Professional Lawn Care Association of America's Legislative Day on the Hill was held on July 20-21 in Washington, D.C., with more than 70 lawn and landscape management professionals lending a hand to beautify the grounds of Arlington National Cemetery.

### Browner thanks LCOs

Carol Browner, Environmental Protection Agency administrator, commended PLCAA for working closely with EPA on projects such as environmental stewardship, and spoke of a time of continued cooperation between government and private industry.

"The work you are performing today, and the work groundskeepers perform every day here at Arlington National Cemetery, is an honor to this national shrine; to these American men and women who gave their lives

for our country," Browner said.

Arlington Superintendent Jack Metzler; PLCAA President Bob Ottley, One Step Tree & Lawncare, N. Chili, NY; and event coordinator Phil Fogarty, Scotts Lawn Service, Euclid, Ohio, made remarks during the dedication ceremony complete with a presentation of the Joint Color Guard.



**Carol Browner:** PLCAA members do important work.

"I think PLCAA improved the image of the turf industry by helping a national shrine look better to the average citizen," said Brad Williams of Williams Landscape Services, Inc., Chapel Hill, NC.

"Being a veteran myself, it is a great honor to participate at Arlington," said Gene Pool of Emerald Green/Bolton & Pool Lawn Care, Van Wert, Ohio.

"I feel Arlington is the most sacred ground I'll ever stand on, second to Calvary."



▲ PLCAA members and their families gather at the foot of the Unknown Soldier memorial for a photo before work begins.

◀ Members of Pena Landscaping, Scotts Lawn Care and All Green Corporation at Arlington.

On the day following the Arlington project, lawn care operators met with legislators or legislative aides to discuss crucial issues affecting business operations, most importantly the FQPA.

"Not only have we made progress on issues, but more importantly, we have built a relationship with our representatives; they now address me on a first name basis," said Pool.

Other issues discussed on the Hill were compensatory time vs. overtime pay; contin-

ued funding for the National Turfgrass Evaluation Program; and comprehensive OSHA reform.

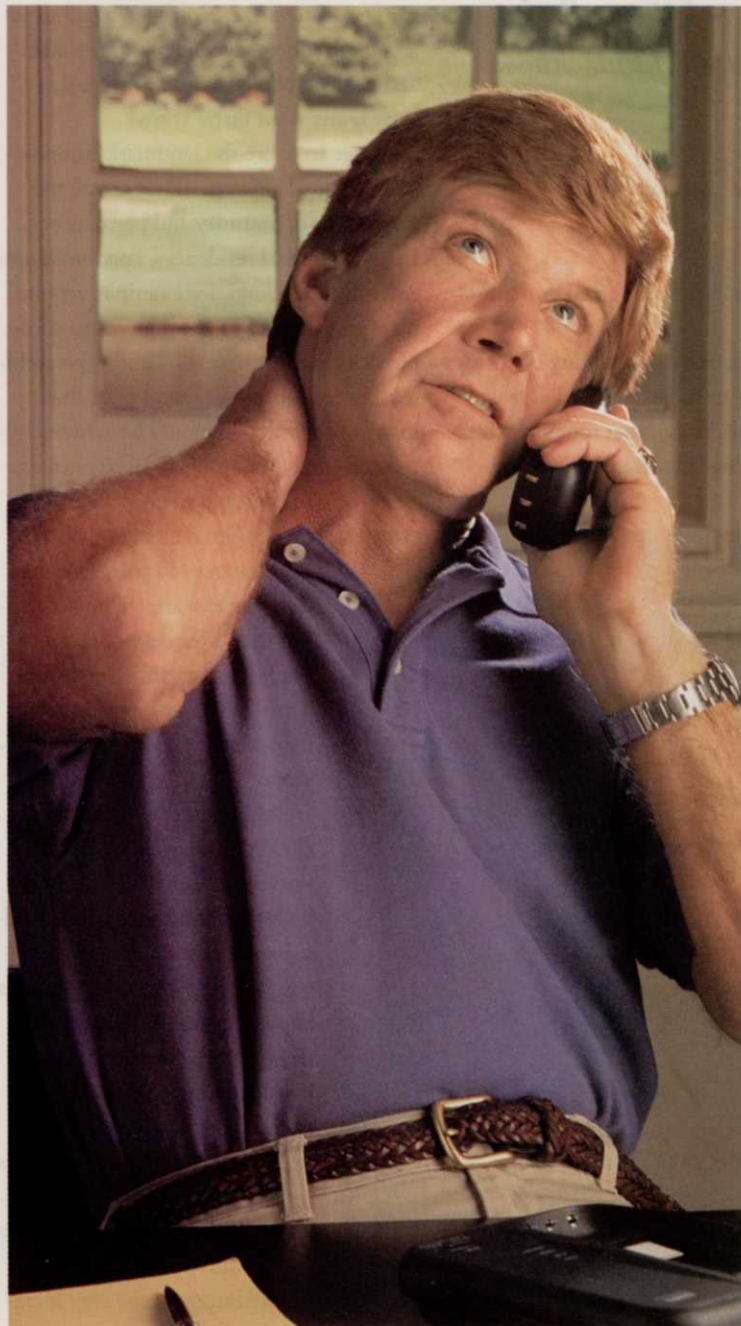


**Pool:** discussed the issues with Ohio lawmakers.

The following companies made financial or in-kind contributions to the Arlington Cemetery project: American Cyanamid; The Andersons; Bayer; Chantilly Turf Farms; Dow AgroSciences; FMC; Georgia Marble, Co.; Jacklin Seed; Lesco; Medalist America; Novartis; PBI Gordon; Riverdale; The Scotts Company; Zeneca Professional Products. **LM**



*"Today, I need to be an agronomist, a negotiator, a mechanic and an accountant."*



"I flat out don't have time to waste on someone who just wants to sell me a product and then walk away. I expect a lot more than that from the people I do business with. What I expect - and need - is someone who will work with me to figure out what needs to be done and the best way to do it. Someone with the energy, know-how and backing to help me get the most out of the products I buy. That's Terra. They've got the products I need, when I need them. Pesticides. Fertilizers. Seed. Adjuvants. All of the major brands, including their own line of Terra Professional Products. And they back every one of them with the kind of product information, agronomic advice and technical support that I can really use. They even offer soil and tissue testing services. One call and I know I'll have the product I want and the answer I need. In the long run, I know that working with Terra saves me time and makes my life easier. And that's exactly what I expect."



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# Large tree transplanting

*What any landscape contractor should know before offering this lucrative service to clients wanting 'instant' landscapes.*

by TERRY A. TATTAR, Ph.D., Shade Tree Laboratory  
University of Massachusetts

Technological developments in tree transplanting now make it possible, with the necessary equipment and expertise, to transplant trees of virtually any size. It is common to read about historic trees being moved to allow road and building construction to be performed on their growing sites.

Indeed, large tree moving specialists using the latest in tree moving technology, including spades, cranes and digging equipment report high degrees of success in routinely moving these very large trees.

The interest of most landscapers in large trees, however, is to provide their clients with the option of utilizing unique nursery stock to create distinctive landscape designs. This article, therefore, will focus on strategies for the selection and successful establishment of large nursery-grown trees in the landscape.

Large tree transplanting is both an opportunity and a serious challenge for the landscaper. Recently, I wrote an article entitled "Increase the Odds of Tree Survival" that was published in the May 1998 issue of *LANDSCAPE MANAGEMENT*. In addition to reviewing recommended tree planting techniques, the risks of transplanting large trees were also presented. Readers not fa-

miliar with that article may find it of interest.

Research on tree transplanting of both large and small trees has revealed at least one general conclusion, that root growth is the key to success after transplanting, re-

gardless of tree size. However, small trees are much more forgiving of our mistakes and neglect, while large trees are not.

## Why transplant large trees?

Large trees are the landmark components of any landscape. They create the impression of maturity and permanence. Large individual residences, condominiums and office buildings, for example, require plant materials of substantial size to complement these structures. Landscape architects have realized for many years that many of their designs could be achieved almost instantly with the use of large trees.

In addition, many property owners are no longer willing to wait for trees to grow into mature size and are willing to commit the resources necessary to establish a "mature" landscape. The result is an increasing demand for large trees in the landscape.

Although the cost to the client of transplanting large nursery trees is high there is a high profit potential to the landscape contractor. A landscape contract that involves numerous large trees will be substantially larger than a contract with only small root stock. Despite the extra labor required, the much higher cost of large nursery trees usually makes it worthwhile financially. If performed correctly with positive results, large tree transplanting can be very lucrative for the landscaper.

Recent advances in root growth technology have increased survival rates and shortened establishment times of transplanted trees. For example, the use of root growth stimu-



A hand-dug copper beech being wrapped and strung for shipping