

# PlantHealthCare.com

AUGUST/SEPTEMBER 2000

ONLINE MAGAZINE

## Bio Movement: Driven by Public Perception?

**NEW!**  
The Changing  
Landscape

Monrovia Nursery's  
National Outlook on  
Regional Plants

Coming September 11

Mycorrhizal  
Fungi  
The Fungus  
Among Us

Coming August 28

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# Bio Movement: Driven By Public Perception?

By Felicia Gillham, Managing Director

Would you use bio-based products if there was no concern about the environment, worker safety, rules and regulations?

Most of us would have to truthfully admit that no, we would not have changed from our old ways, methods and practices. Many of us would confess that we are looking to more natural approaches for a single primary reason—the public's negative perception of pesticides. In fact, the majority of us are making drastic changes to our businesses based on a fear that most experts contend is unfounded.

Perception is reality in the marketplace. When perceptions are negative, they can certainly hurt our businesses. But to survive and thrive, we must run our businesses and make major changes to them based solely on what we, as experts, know to be the most effective, economical and environmentally sound practices for plant health. Can biological products and natural approaches stand up to the challenge? They very well may. But our use of them, our adoption of new practices, must be based on science, not on perception. We must practice what we preach.

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## Perception is Reality CONTINUED

### Perception is Reality

Perception is real. If your perspective customer believes that pesticides cause her asthma, she won't hire you to treat her lawn unless you promise to use a flyswatter. Perception becomes reality at its worst when it lands us in lawsuits. Remember the Michigan mail carrier that was awarded \$1 million for health damage after he was accidentally sprayed by a lawn applicator? When your customer has a perception about your product or service and chooses not to buy it, the reality hits you in the wallet.

Perceptions are odd. Most of us are puzzled because so often public perception veers far from scientific facts. For example, the general public believes travel by air is more dangerous than driving a car. The public continues to believe this even after it is told that each year traffic fatalities almost equal the total casualty numbers incurred during all of the Vietnam war.

How are these beliefs formed? Why is it that a list of hazards or risks based on facts does not match up with the list of hazards that the public is most concerned about?

Dr. Peter Sandman, a professor of environmental journalism at Rutgers, has written that the experts, who make up lists of risks, judge hazards according to actual death rate. To an expert, flying is safer than driving your car based on actual deaths per thousand.

The public judges hazard differently. Hazards are viewed in terms of "outrage." The emotional public response of outrage (or fear) is more apparent after the loss of 113 people in the recent Concorde plane crash than the loss of a family of five in a car accident.

The judgement of risk, upon which the public's perception of pesticides is based, will virtually always differ between the experts and the public. According to Dr. Sandman, the public pays too little attention to hazard (or science), and we the experts pay too little attention to outrage. Is it really surprising that the public sees pesticide usage differently than we do? And doesn't it become clear that once people are outraged, education alone won't change their perception?

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## Perception is Reality CONTINUED

### Creating Outrage

There are a number of factors that create outrage, and they include voluntary choice, control and personal effect.

A voluntary risk is more acceptable to people than a forced risk. In its 1999 survey of 400 consumers, The Agriculture Institute of Florida, Inc. ([www.aiflorida.org](http://www.aiflorida.org)) found that approximately 50 percent were “very concerned” about possible environmental damage from pesticides used for residential purposes. Yet 241 of those 400 consumers said they used sprays for flying insects, 181 used sprays or baits for roaches and 211 of the consumers used pesticide products to control ants. If a person voluntarily chooses to use pesticides, there is no outrage.

Voluntary choice is a key factor in the current public outrage against foods made from genetically modified crops. A homeowner who chooses to douse her garden weeds with RoundUp® herbicide can become outraged when she realizes that pesticides or genetic material—not of her own choosing—are in the foodstuffs she’s seeking to buy at the grocery store.

Control is another outrage factor. Everyone feels safer when they are in control. That’s why most of us would prefer to be the driver instead of a passenger in a car. Control, or the lack thereof, can prompt outrage when a resident is told that his neighborhood will be aerially sprayed for “the good of the community.”

A third outrage factor, personal effect, determines the “level” of outrage a person feels. Personal effect is how a hazard or risk effects someone personally. If your community leaders planned to locate a landfill on your property border, your sense of outrage will surely outweigh that of your neighbor who is located a mile away. Once the public becomes personally affected, their sense of outrage alters.

Combine all factors and you find that the public can become outraged when they are not given a chance to voluntarily choose or participate in controlling a situation. And their level of concern escalates or lowers by how much they are personally affected by that situation.

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## Perception is Reality CONTINUED

Outrage over the genetically modified plant issue makes sense when seen in these terms. In all probability public outrage would be lower or non-existent if genetically engineered plants had been introduced widely to the landscape first instead of as crops for food—the personal effect is much stronger for what we eat over what we see.

### Dealing With Perceptions

For years we, as an industry, have attempted to reassure the public that the risks of pesticides are so small that we measure them in parts per quintillion. And then because the public can't relate to such a tiny measurement, we translate it—it's about a tablespoon of liquid in all the Great Lakes combined. As data or science, we may think this fact is convincing until we remember that the public did not ask for the risk, not even for a tablespoon of it.

Risk communications expert Dr. Roberta Cook of UC-Davis has researched what facts about pesticides are convincing to the public. She found that the public likes the fact that pesticides are extensively tested before they reach the marketplace and that the government tests food samples for residues. The public, in general, likes the fact that applicators and consultants (in California) must be licensed and trained, and it appreciates hearing that the industry is attempting to minimize its use of pesticides.

What Dr. Cook found is that the public is reassured by the process and the system. They feel more comfortable and more in control when they feel their tax dollars are at work ensuring their safety. And when we say that we are minimizing our pesticide use, it is an acknowledgment of the public's concerns.

If we put the counsel of Drs. Cook and Sandman to work, our best defense against the public's perception of pesticides would be to acknowledge and loudly promote that we are licensed and trained professionals who operate in a regulated industry that uses products registered by the government. We are experts in the judicious, proper and safe use of our tools, and we are reducing our reliance on pesticides that the public fears.

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## Perception is Reality CONTINUED

### The Bio Perception

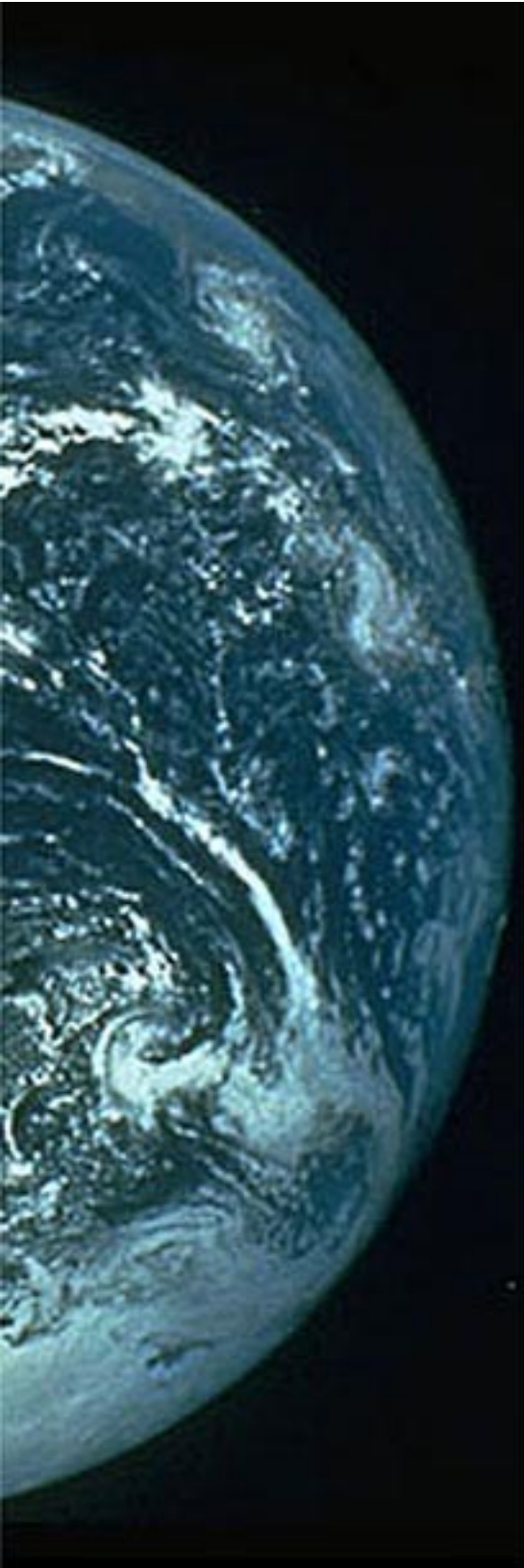
Proper use of pesticides and fertilizers, specifically synthetic chemical- and petroleum-based materials, is not a crime and it never has been. We all know the benefits that we and the public have derived from these valuable materials. Apologizing to the public for our use of chemicals is unnecessary. Where we have erred is in allowing the convenience of synthetics to remove us from the core of plant management. Through years of reliance on these products, we have generally neglected to learn more about what makes plants grow and grow well. Universities share the guilt, too. Instead of building our research banks on plant physiology, soil interactions and pest behavior—basic research that can be applied by all—vast data has been generated in testing the efficacy of one pesticide against another.

Our core expertise is based in agronomics—the propagation, growth and maintenance of turf and ornamentals. It is in agronomics that the future of our industry stands. And within that expertise in agronomics is our protection from the vagaries of public perception.

We can make the claim that we are changing our management practices to those that are good for plants, good for the environment, and good for people. But where is the backup and the support for those claims? Our common sense and our experience managing plants tells us this is true, but we need solid examples, plentiful resources and more research. We need to get to work.

- Hold manufacturers of biologically based products to their claims. Ineffective products have no place in our marketplace, and they hurt the good products.
- Give biological approaches a level playing field. These materials work in interaction with soil organisms, beneficial insects and the physical properties of plants, soil and water. Judge them fairly in conjunction with these processes.
- Demand more basic research from all avenues—universities, associations and manufacturers.

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## Perception is Reality CONTINUED

- Educate yourself and your employees intensively about plant management and biological approaches.
- Share information with your peers. Currently natural practices make up a small portion of research budgets. Carefully examine your results and spread what you learn.
- Don't fall prey to unsubstantiated beliefs. Biological products are not "good" just because they are natural-based. Neither are they ineffective, because they do not contain synthetic chemicals.

Bottom line, our use of any new method or practice must be based on actual science. Perceptions, our own as well as those of the public's, can point us in new directions. But looking beyond perceptions, getting to the science and applying it for the benefit of plant health care, is what will sustain our industry.



# The Changing Landscape

By Bruce Shank, Editor

**T**oo often we overlook our own livelihood when we think of the future. The landscape industry is changing rapidly. Maintaining the status quo can leave your company at the gate while others capture the potential of new technology. Before you make that mistake, take some moments to consider where you and your company are, where you are headed, and most important—where you should be headed.

The landscape industry needs a group of insightful prognosticators to help it plan for the future. We need to restore our fascination with what's possible, not just practical. Staying current or ahead of your competition is an intellectual challenge that extends far beyond merely acquiring the latest, greatest computer program.

## How Do You Measure the Landscape Industry?

Gauging change in the landscape industry isn't a science, an art, or a common phenomenon. Lacking recognized quantifiers for the industry, other than income and expenditures, only a handful of contractors have a clear picture of where they are now and where they are headed.

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## Prepare for the Future CONTINUED

We need to create an educated forecast of landscaping 5, 10, 20 or 50 years from now. Change is inevitable and its pace is likely to be rapid, considering immigration, oil prices, water shortages, advancements in plant genetics, and low unemployment. These factors will change the industry whether it is prepared or not.

We should place more faith in our powers of observation. We should pay more attention to the state-of-the-industry reports in our trade magazines. Experts need to take these observations a step further and forecast the future of the industry.

In all fairness, the Associated Landscape Contractors of America (ALCA) tries very hard to help its members abreast of market changes through its Crystal Ball Reports and the Gallup landscape industry survey it sponsors with a number of other major associations. Still, there needs to be a less formal, more imaginative look at what the future could bring. By opening up our thought to consider all possibilities, not just those tied to the past, we can inspire inventiveness, change, and interest in landscaping and ornamental horticulture.

Some look to landscape architects for forecasting future trends only to find the same reliance on the dependable. The very computer that freed landscape architects from the drawing board has placed them in a rut. They owe the client a landscape with a reasonable chance for survival in the face of uncertain maintenance levels. At the same time, they must work with a palette of plants that is both available and reasonably priced. The nurserymen needs years to build up inventory of new varieties.

The confusion and resistance experienced by the xeriscape movement in the Southwest is an excellent example of how we hold back on ingenuity. The landscape industry imploded on itself because segments of the business were concerned that xeriscape would result in reduced demand for turf. To fight back, the turf faction created its own definition of the term that connoted rocks, sand and cactus. Landscape architects stayed on the sidelines, reluctant to alter their relationships with clients, nurseries and contractors. Despite the setback, xeriscaping, properly defined, is entering its glory days because it fits the times in an area short of water and immersed in growth.

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## Prepare for the Future CONTINUED

### Seeds of Change

Smart architects and contractors have acquired a knack for selecting rock, just as they do plants. With some of the space once occupied by turf, they sculpt fountains and build decks surrounded by exotic Mediterranean and desert plants. Most importantly, turf is still a component of the landscape, a more featured one.

Like a specimen tree, turf is being given the respect it always deserved. Maintenance is paramount. Investment in irrigation, rootzone construction, and a healthy biological soil environment is being taken seriously. Adapted and maintenance-friendly varieties are being embraced. Turf is being recognized as a small luxury that clients want, just as they have wanted seasonal color, shade trees, and ornamental shrubs. If they want it badly enough, it will be there in the future. Xeriscaping has demonstrated how valuable turf is in the minds of customers.

The natural progression of a manmade landscape is to start simply and add more plants and features over time. This occurs everywhere. As trees and ornamentals mature, turf becomes less of a dominant factor.

All parts of the finished landscape have increased in value. Even the cookie-cutter landscapes of massive developments include something from each category of landscaping.

The old formula of turf and foundation shrubs is fading away. Landscaping can be dated by its components and that is propelling positive changes in the industry. The benefactors of the change include those who install irrigation, ponds and fountains, retaining walls, rock, and native and exotic plants. The palette of plants is expanding, not just with new and exotic varieties, but with a renewed interest in local native species. The number of new hardscape elements has also reached new heights. Contractors and architects who want to be successful in the future should be thinking about expanding their expertise.

Consequently, maintenance crews have it tougher. Mow, blow and go are in the past. Customers' landscapes are becoming more complex. Stop-watch routes won't be possible because turf is not the only object of concern.

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## Prepare for the Future CONTINUED

Better educated maintenance workers will be required, those who can deal with a wide variety of plant and hardscape needs. They will need to spend more time at each jobsite and they will deserve a higher hourly wage. Each site will be unique and require more detailed documentation of maintenance history. The successful contractor will need the technology to keep records efficiently.

The only way a contractor can guarantee his work is to have reasonable control over irrigation and maintenance. Total control of these items can backfire, since many property owners enjoy working in their yards. This potential problem is one of the least discussed in the business. Answers are needed.

Communication between the customer and the contractor will have to increase. Whether this consists of sensors feeding data to a remote computer at the contractor's office or e-mails, newsletters and phone calls, it must increase. The Internet provides new options. Everything will need to be more customized in the face of a growing volume of clients. That is a big challenge to the old-fashioned contractor.

### The Easy Landscapes Are Gone

As growth forces commuters to live further out into the suburbs, we are finding that many of the optimum building sites have been taken. The more difficult sites that remain involve slopes, extraordinary drainage needs, rocky or sandy soils, and more challenging maintenance.

The large yards of the 1970s and 1980s are shrinking to more manageable fractions of an acre. Homeowner associations and municipal landscape districts are competing with each other for residents' attention. At the same time, commercial landscapes are improving in design and content. Parks and golf courses are considered imperative to new communities, because they provide green space and wildlife habitat that modern residential properties don't.

In all cases, complexity and quality are rising because communities compete with each other for that "quality of life" gold ring. Bedroom communities are encouraging local clean industry to shorten or eliminate commutes. The landscape industry benefits from all of this.

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## Prepare for the Future CONTINUED

### How Much Time to Change?

How much time does the old-fashioned contractor have to adjust? While there will be stable pockets of suburban customers for the foreseeable future, the issues of water and a changing plant palette will necessitate major changes in the way contractors do business, certainly before 10 years have passed. Two years is more realistic. Have you begun to adapt to the changing business climate? It's time to start.

Protecting the status quo will leave you holding the bag. You must expand your expertise, adopt new techniques, improve customer communication, and be visible in your community. You need to exhibit a progressive outlook and a willingness to change to new customer needs. You need to continue to educate yourself, both in business, technology, and horticultural. Keep challenging your employees and yourself.

Listen to customers and employees. Encourage them to make suggestions and to continue their education. Stay involved in industry associations, even slightly related ones that might impact you at a future date, such as aquatic plant management and tree care.

People laughed at Aldous Huxley when his *Brave New World* was published in 1932. Those who laughed then know better than to laugh now about keeping an open mind about the future. Furthermore, the future we should be exploring is not just in outer space, it's right outside your front door.

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*The viewpoint voiced by Bruce Shank in this column reflects solely the viewpoint of the writer. It may or may not be representative of the beliefs of Plant Health Care, Inc., its employees, investors or others related to the company. This column is included in the PlantHealthCare.com Online Magazine to prompt discussion. Responses, which may be posted, are encouraged. See response options below.*

## About Planthealthcare.com Online Magazine

PlantHealthCare.com Online Magazine is posted at [www.planthealthcare.com](http://www.planthealthcare.com) for professionals who produce, design and maintain plant material in the arbor, landscape architecture/design, landscape maintenance, nursery/greenhouse, and parks and recreation industries. Published as an educational service by Plant Health Care, Inc., the PlantHealthCare.com Online Magazine is designed to engage, educate and inform professionals about new technologies that promote the health of plants, specifically those that create “sustainable” landscapes that cost less, provide more value and last longer. The magazine also seeks to open discussion about issues that impact the many businesses that serve the plant health industry.

## Meet Your Editors

### Bruce F. Shank Editor

Bruce Shank is owner of BioCOM, a horticultural communications company based in Palmdale, CA. He is the editor of *Irrigation Business & Technology*, managing editor of *TurfGrass Trends*, and former editor of *Landscape & Irrigation*, *Landscape Management* and *sportsTURF* magazines. He was graduated by the University of Missouri—Columbia with a degree in agricultural journalism in 1973. He is a past president of the American Society of Business Press Editors and a member of the Turf & Ornamental Communicators Association.

### Felicia L. Gillham Managing Editor

Felicia Gillham is owner of Gillham & Associates Marketing Communications, a San Diego, CA firm she established in 1989 to service the needs of turf and ornamental, agricultural and biotechnology companies. Articles written by Gillham on behalf of her clients have appeared in more than 100 Green Industry and farm trade publications. She is a 1980 graduate of the University of Missouri—Columbia with a degree in agricultural journalism. Gillham is a member of the Turf & Ornamental Communicators Association, American Agricultural Editor's Association and the National Association of Farm Broadcasters.

## Calendar of Industry Events

### August

4-6

Southern Nurseryman's Association Conference and Trade Show, Atlanta, GA.  
(770) 953-3311.

6-9

International Society of Arboriculture, Baltimore, MD.

8-9

Iowa and Nebraska Nursery & Landscape Association Joint Field Day,  
Shenandoah, IA. (816) 233-1481

9

New England Nursery Association Summer Meeting, Biddeford, ME. (508) 653-3112.

14-18

Florida Turfgrass Association Annual Conference, Gainesville, FL. (800) 882-6721.

15

Cornell University Field Day, Ithaca, NY. (607) 255-1792.

16-19

Golf Course Builders Association of America Summer Meeting, Louisville, KY.  
(919) 942-8922.

18-19

North Carolina Association of Nurserymen Show, Charlotte, SC. (919) 266-3322.

18-21

Texas Nursery/Landscape Expo, Houston, TX. (512) 280-5182.

23

Michigan Turfgrass Field Day, Lansing, MI. (517) 321-1660.

24-27

Ornamentals Northwest Seminars and 2000 Farwest Show, Portland, OR.  
(800) 342-6401.

## Calendar of Industry Events

CONTINUED

### September

7-8

Southwest Horticultural Trade Show, Phoenix, AZ. (480) 966-1610.

12-13

Turf and Landscape Research Conference and Field Days, UCR, Riverside, CA  
909-787-3575

13

Hampton Roads Agricultural Research and Extension Center Field Day,  
Virginia Beach, VA. (757) 363-3906.

15-16

Tennessee Nursery and Landscape Trade Show, Nashville 931-473-3951

19-21

Turf and Landscape Field Days, Blacksburg, VA. (540) 231-5897.

21-23

Florida Nursery and Allied Trade Show, Orlando 407-295-2994

26-27

National Building and Grounds Maintenance Expo, Las Vegas, NV 702-893-9090

### October

4-5

Turf and Landscape Equipment Expo, Costa Mesa, CA. Sponsored by the Southern  
California Turf Council. 800-500-7282

4-6

Southern Nurseryman's Association Convention, Atlanta, GA 770-953-3311

13-14

Plant Biology Workshop, Plant Health Care, Inc. Education Center, Frogmore, SC.

23-27

Mid-Pacific Horticultural Trade Show and Conference, Hilo, HI 808-969-2088

## Calendar of Industry Events

CONTINUED

October, continued

27-31

American Society of Landscape Architects Annual Meeting, St. Louis, MO  
202-898-2444

November

3-4

Plant Biology Workshop, Plant Health Care, Inc. Education Center, Frogmore, SC.

4-7

Green Industry Expo, Indianapolis, IN. (770) 973-2019.

12-14

International Irrigation Show, Phoenix, AZ. (703) 573-3551.