

22. Patterson, J., J. Murray and J. Short. 1980. The impact of urban soils on vegetation. In: METRIA: 3, Proc. 3rd Conf. Metro. Tree Improve. Alliance pp. 33-56. Rutgers Univ. New Brunswick NJ. D. Karnosky, ed.
23. Peterson, A. and D. Eckstein. 1988. *Roadside trees in Hamburg—Their present situation of environmental stress and their future chance for recovery*. Arboric. J. 12:109-117.
24. Rakow, D. 1987. *Containerized trees in urban environments*. J. Arboric. 13:294-298.
25. Steiner, K. 1980. Developing tree varieties for urban soil stresses. In: METRIA: 3, Proc. 3rd. Conf. Metro. Tree Improve. Alliance. Rutgers Univ. New Brunswick NJ. pp. 57-69. D. Karnosky, ed.
26. Tattar, T. 1978. *Diseases of shade trees*. Academic Press. New York NY 361pp.
27. Ware, G. 1983. *Acer saccharum* subsp. *nigrum*: Meritorious midwestern maple. In: METRIA: 4, Proc. 4th Conf. Metro. Tree Improve. Alliance. pp. 1-6. New York Botanical Garden, New York NY. H. Gerhold, ed.
28. Whitlow, T. and N. Bassuk. 1987. *Trees in difficult sites*. J. Arboric. 13:10-17.
29. Whitlow, T. and N. Bassuk. 1988. *Ecophysiology of urban trees and their management—The North American experience*. HortScience 23:542-546.

Center for Urban Horticulture GF-15
University of Washington
Seattle WA 98195

CURRENT ISSUES/FUTURE PROJECTIONS¹

by Robert Felix

Abstract. In the United States there are significant regulatory and environmental issues confronting arboriculture. NAA is working to resolve the regulatory issue with OSHA. NAA and ISA are working together to resolve the environmental issue by developing a marketing and operational strategy for Integrated Pest Management. Other issues with world wide implications are the availability of field personnel, certification, urban forestry support and the tree care industry's professional image.

Résumé. Aux Etats-Unis, l'arboriculture fait face à des problèmes réglementaires et environnementaux. NAA travaille à résoudre les problèmes réglementaires avec OSHA. NAA et ISA travaillent ensemble pour résoudre les problèmes environnementaux en développant les stratégies de marketing et opérationnelles pour la gestion intégrée des pesticides. D'autres problèmes tels la disponibilité du personnel de terrain, la certification, le support en foresterie urbaine et l'image professionnelle de l'industrie d'entretien d'arbres sont d'ampleur mondiale.

For most people, current issues are today's problems and future projections are what we

daydream about. There is nothing wrong with that, as far as it goes, but one's own perspective limits the scope. For an industry, current issues and future projections are a prioritized list of everyone's current problems and day dreams. The tree care industry has its fair share of current issues that I am concerned about. Those issues have considerable impact on future projections. This is true of both the technical side of tree care and the operational or management side. I will leave the technical side of tree care to the scientists and speak to the issues that I see on the management side only.

The prioritizing of issues, for my purposes, needs to be even further refined as each of the disciplines in our industry, commercial, municipal and utility, has its own agenda. Sometimes these issues overlap as is the case with a major issue that is currently before us.

1. Presented at the annual conference of the International Society of Arboriculture in St. Charles, Illinois in August of 1989.

Legislation, Regulations

From my perspective the most significant issue confronting the tree care industry at this moment is OSHA's proposed vertical standard for the electric utility industry, OSHA's 1910.269. Should that standard be adopted in its present form it will impact every commercial, utility and municipal arborist in the United States. It is important to know the background of this standard.

The Occupational Safety and Health Administration came into being in the early 1970's. The electric utility industry soon recognized that it was being regulated by OSHA Standards developed for other industries such as the construction standard as well as the general industry standard. OSHA acknowledged this and agreed to entertain a separate or vertical standard for the electric utility industry. A vertical standard impacts only one industry. A horizontal standard is one which impacts every industry. Accordingly, under the auspices of its trade association, the Edison Electric Institute, EEI, and its unions, usually the International Brotherhood of Electrical Workers, IBEW, the electric utility industry set out to develop this standard for OSHA consideration. It was a long time in the making.

Since line clearance tree trimming is a significant item in the standard, a special EEI/IBEW task force was assigned the responsibility of developing a line clearance section. I don't know why that was necessary since the ANSI Z133 Standard was already in place but they did it anyway.

Although it is sometimes adversarial, the National Arborist Association maintains a very close relationship with OSHA. As a result, in early 1985, NAA received an ANPR from OSHA; an Advance Notice of Proposed Rule Making. This was a draft of the standard to be proposed. The section on line clearance tree trimming was extensive and, in our view, contained provisions that were unnecessary and/or unworkable. Our concerns were expressed to the EEI/IBEW task force as well as to OSHA. We were even participants in the economic analysis that is required of every proposed regulation by the Office of Management and Budget, OMB.

After receiving comments on the ANPR and the economic analysis, OSHA went back to the drawing board without further input. On January 31,

1989 OSHA published a proposed vertical standard for the electric utility industry in the Federal Register. Not only did OSHA ignore our comments but they apparently ignored many of EEI's comments as well. In fact they even added a few items.

There are 14 requirements in the standard that the National Arborist Association takes issue with. Of these, many were incorrectly drafted by OSHA as a result of their lack of understanding of the industry. We are confident that they will be appropriately modified without controversy as a result of information submitted in written comments as well as in testimony during the public hearings. Others will require a considerable effort to correct.

For example, one section of the standard prohibits tree care operations during storm emergencies. The implications of that are obvious and I expect that both the efforts of the National Arborist Association and the electric utility industry will convince OSHA to remedy that.

Another section would require all crews of two or more employees who work on a tree, any branch of which is within 10 feet of a power line, to have at least two crew members trained in CPR. While we all support the premise that treeworkers should be trained in first aid and CPR, there are no statistical data to support mandating such a stringent requirement. Considering the personnel turnover that we have in this industry, 1.8 hires annually for every production worker, and the geographic distribution of line clearing crews it would be impossible to comply with this requirement.

Still another section prohibits a non-line clearance tree person from working on a tree if any branch of that tree is within 10 feet of a power line. That requirement would probably reduce your residential/commercial work by 50%.

Between 1985 and 1989 there were several new developments. First we learned that OSHA's standards writers are convinced that the tree care industry, in general, is an unsafe industry. Further, they believe that the ANSI Z-133 Standard is inadequate. They told me that.

Also, OSHA has proposed a horizontal standard for all of industry, 1910.331 which impacts residential/commercial tree service firms in a man-

ner similar to the impact of the vertical standard for the electric utility industry. We submitted comments on that standard and presented testimony at the public hearing. During examination of OSHA at the hearing, NAA's attorney very cleverly got OSHA to clarify the issues we were concerned about. Those clarifications should serve to force OSHA to issue a final regulation that provides for worker safety in a practical way and is consistent with the Z-133 Standard.

When that public hearing was over one of the OSHA standards writers came out of the room and said to me, "You got us on this one but we will get you on the next one!"

The vertical standard is an issue of major concern for all of us. Comments are due on September 30, 1989 and public hearings will be held in Washington, DC beginning November 28 and again in California beginning December 12, 1989. NAA's comments will be submitted as required and we will give testimony at both hearings.

Thus far NAA has spent over \$50,000 on this issue and before we are finished we will probably spend another \$50,000.

My projection is that we will definitely force OSHA to adopt our position on 13 of the 14 items. The CPR issue may not go our way. OSHA says that the economic impact of CPR training on the tree care industry will be 2.4 million dollars. We say that the out of pocket cost will be 10 times that. Our figure does not consider revenues lost when crews are shut down for lack of a second CPR trained worker. There is also the potential for lost revenues to the utilities resulting from outages that occur because a full complement of line clearance tree trimmers couldn't be kept on line. The imposition of this requirement will have no impact on worker safety. We can prove that statistically with support from medical data.

In the Federal Register, in which this proposed standard was published, in the economic analysis section, OSHA said that increased costs are not a concern. Contractors will pass the costs on to the utilities and the utilities will pass the costs on to the rate payers.

Remember, the CPR requirement will apply to line clearance tree trimmers as well as to residential/commercial field personnel who work closer than 10 feet to an energized line, including house

drops!

Pesticide Use

Another current issue of concern to the tree care industry is the use of pesticides. In my opinion it is inevitable that pesticide use in the urban environment will continue to be scrutinized and restricted on an ever increasing basis at all levels of government.

While nothing earth shattering can be cited at this point in any one arena, the use of pesticides is gradually being chipped away at. Congress is upset about the registration process. Local and state governments are imposing pre- and post-application notice requirements. EPA is considering new certification and recertification requirements. The American people are concerned about environmental pollution, hazardous wastes, clean air, clean water and untainted vegetables. Organically grown vegetables can now be found in most supermarkets.

The only population base that doesn't seem to be concerned about environmental pollution is the insects themselves. They continue to proliferate. Unlike the OSHA situation where we can't change the fact that trees and wires will always conflict, unless of course, the utilities put all of their service below ground, we can meet the challenge of the pesticide issue.

There are techniques available that will allow us to reduce the use of hard pesticides. I speak specifically of Integrated Pest Management, IPM; the use of oils, soaps, biologicals, implants, injections, cultural practices and selective planting techniques that almost everybody is aware of and that most people are reluctant to use. People are reluctant because they don't know how to sell or to manage such a program. They are afraid that they will lose the most profitable part of their business, that people won't pay them for what arborists know rather than what they do.

There are firms out there that are implementing IPM programs on residential and commercial properties with great success.

For the tree care industry it's time to lead, follow or get out of the way in-so-far-as pesticides are concerned. We have an obligation to protect the trees and shrubs in the urban environment and at the same time do as much as we can to minimize

environmental impact.

NAA and ISA are leading the way on this issue. NAA's Foundation and ISA's Research Trust have put up the seed money and several vendors have pledged their support for a major study to be done on the marketing and implementation of IPM strategies for trees and shrubs in the urban environment. We expect to award a contract by September 1, 1989 to a research group to do this study for us. By early 1991 each NAA and each ISA member will have the product of that study. More on this item will be published as the project develops. My projection is that the tree care industry will lead the way for the entire green industry with Integrated Pest Management. IPM will be the way of the future.

Other Issues

There are other issues and projections that we must be aware of beyond those brought about by legislative and regulatory pressures.

Two years ago I spoke to this meeting about the impending decline in the available labor pool of persons in the 18 to 24 year old range. Neither the issue nor the projection have changed. We are now two years closer to a 30% reduction in the labor force available.

Urban tree awareness has increased with the proportionate increase in demand for professional tree care. Our industry's gross sales have increased 50% in the past 10 years to more than 3 billion dollars annually. There are almost 14,000 tree service firms currently listed in the yellow pages in the United States alone. The industry is growing in Canada, Europe, Australia and New Zealand. How will we staff enough crews to provide the quality service that will be required?

A recent NAA survey shows that we are paying higher wages which means that we are charging higher prices. It's the higher wages and benefit packages coupled with the use of the most modern energy saving equipment possible that will enable this industry to compete in an ever shrinking labor market.

Another phenomenon is taking place. Not only are consumers taking a greater interest in their gardens, trees and shrubs but they are also becoming more knowledgeable and more sophisticated. My projection is that this will work

to our benefit but your crews will have to be better trained, better supervised and more productive.

There are three other issues that are currently receiving considerable attention that I would like to comment on.

Certification, Public Tree Care and Our Image

Many are interested in arborist certification programs. I think that this is very positive and I would encourage the implementation of certification programs for arborists everywhere. However, some see certification as tantamount to licensing and, in my opinion, with a few possible exceptions I don't see that happening.

State legislatures tend to be reluctant to set up new bureaucracies because of the cost as well as the precedent it sets. If they do it for arborists, then who else will they have to do it for? What about enforcement? Who would do it and where would the funding come from? Even where licensing for arborists exists, I only know of two states that enforce it to any extent and they are Maine and Maryland.

Where certification exists there is a very important item to keep in mind. Peer review for the purpose of evaluating an individual's performance should never be considered. Peer review may be construed as fraud under RICO, The Racketeer Influenced and Corrupt Organizations Act. This act was originally intended to keep organized crime out of legitimate businesses. The law allows private parties to sue for treble damages in Civil Courts when their property or business has been injured because of a RICO violation. In 1985 the United States Supreme Court upheld the right of an individual to sue under RICO.

In recent years the concept has been applied to societies and trade association and several law suits have been filed particularly in California. The cost of defending one of these actions is very high and with triple damages, settlements can be tremendous. Recognizing the potential liability, the insurance industry specifically asks trade associations if they have peer review before issuing a liability insurance policy.

As a result of this almost all trade associations and societies have dropped peer review, and updated their constitution and by-laws to be certain they are not vulnerable. The National Arborist

Association did so in 1987.

My projection is that certification will develop into a multi-tier process as it becomes a reality across the country. I wouldn't be surprised if, in the process, one or more sponsoring groups finds itself defending a RICO suit.

Another issue is everyone's concern for trees in the public domain. Budget shortfalls in recent years have resulted in a decline in municipal tree care programs and reduced funding for urban forestry programs. Last May representative members of the public and private sectors met to discuss the matter seeking to find a way to transfer some of the enthusiasm that property owners have for their own trees to enthusiasm for the care of public trees. Many ideas were discussed. An action plan was developed and more meetings will be held.

My projection is that this will be a slow process but will gain momentum as the awareness of the value of the trees of our urban forest increases.

The last issue that I wish to touch upon is the image of this industry. Many pay lip service to technology, standards of practice, professionalism and ethics. Many spend considerable time and money attending meetings and seminars, ostensibly improving themselves so as to provide the best possible service to their clients be they residential, commercial, municipal or utility.

Yet, we all know that for the sake of expediency, perhaps in the name of efficiency or even pure greed, this industry projects a most unprofessional image. Trees are still being topped, skin-

ned and otherwise abused. Every time there is a major storm we read in the newspapers about tree companies gouging the public. Inadequately trained people are given responsibilities that they aren't qualified to handle, particularly in the area of pesticide application.

The appearance of our field personnel and our equipment in many cases leaves a great deal to be desired. Trade association and society affiliations as well as certification are used by some to provide firms and individuals with credentials that aren't supported by performance.

I hear a great deal about unfair competition, incompetent performance and unethical business practices. No doubt that will always be the case but I see something else evolving in this industry.

I see many young professionals sincerely interested in caring for the trees of the urban environment, projecting an image based on performance, encouraging their field personnel to do a better job working safely through training, affiliating themselves with proven professionals in all of the disciplines of this industry. They are better educated, more business oriented and more successful than their predecessors were. My projection is that this industry will continue growing and prospering and I am proud to be a part of it.

*Executive Vice President
National Arborist Association
P.O. Box 1094
Amherst, New Hampshire 03031*