

CALIFORNIA hosted a festive, colorful 48th annual convention for the International Shade Tree Conference. Time — mid-August. Site — Newport Beach.

A total of 784 registered. Registration included 506 men, 186 women, and 92 youths. Both women and youth registrations were records.

Theme of the Conference, "Trees—Our Survival Legacy," proved to be a subject dear to every professional arborist. Formal presentation included more emphasis this year on ISTC efforts to accelerate environmental programs as well as a sharing of technology.

A concern of practically every professional arborist and of their equipment suppliers, voiced for the first time at an ISTC convention, was the effect of Occupational Safety and Health Act requirements on the tree care industry. Private opinions of many professionals at the Conference was that a number of OSHA standards are impractical, which likely accounts for the many bills pending before Congress to re-examine current OSHA standards.

McCulloch Corporation manager, J. B. Bailey, Los Angeles, offered a technical review of both research and practical applications of efforts to solve the noise levels of chain saw operation. Pointing out the absurdity of certain efforts he offered as an extreme example the 5-year plan of the city of Tallinn, capital of Estonia. This city plans to reduce all sources of daytime noise to 35 decibels. This would outlaw motor vehicles, talking, music, wind, birds, etc. It would allow only soft whispers, leaves falling and tiptoeing.

In a more serious vein, he offered technical research related to OSHA's 90 decibel limit. Here, Bailey said, autos, quiet trucks, quiet motorcycles, and even the majority of chain saws make it if the sound level is measured at 50 feet. But, he pointed out, OSHA regulations are for sound level measured at the ear. For chain saws, the sound level is 26 decibels greater at the ear than at 50 feet. Thus, to meet the 90 decibel limit at the ear, the sound level would be 64 decibels at 50 feet. Incidentally, Bailey reported, the sound level of normal conversation measured at 18 inches is about 75 decibels. Obviously, this OSHA specification of 90 decibels, measured at the ear, for chain saws is beyond the present state of the art.

Despite the fact that chain saw manufacturers have done much to reduce both noise and vibration level of commercial chain saws, the OSHA sanctioned standards appear

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unrealistic. Bailey answered the oft asked question as to why not use ear protection and eliminate the stress placed on noise level. This, he pointed out is not the answer.

There are a number of problems which arise when ear protection is used. For example, ear covers cause the inside of the ear to perspire; also, some people find that the pressure on their earlobes can become painful after a short time.

Secondly, ear plugs, to be effective,

are usually uncomfortable. Japanese research shows that individuals using ear protection partially lose their sense of balance.

And finally, enforcing the use of ear protection poses a challenge. Convincing some people that they must wear ear protection falls in the same category as telling them they shouldn't smoke, or should use seat belts.

Baffled mufflers, to bring the sound level down to 90 decibels is

OSHA Requirements Explained...

Concern expressed by arborists about the Occupational Safety and Health Act requirements has caused a good deal of confusion on just what the Law specifies.

WEEDS TREES AND TURF recently interviewed John P. O'Neill, chief of the division of general industry standards, Office of Safety and Health Standards, Occupational Safety and Health Administration, Department of Labor.

According to Mr. O'Neill, OSHA's maximum permissible noise exposure is based on an average of 90 decibels per hour measured on the A-scale over an 8 hour day. "There is no one limit," O'Neill said. "This is the maximum; the minimum could be sustained sound levels of 115 decibels for an average of 15 minutes."

Rules and regulations of OSHA as published in the Federal Register show a table for noise exposures:

Duration per day, hours	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
½	110
¼ or less	115

Mr. O'Neill pointed out that most power saw operators do not continuously operate a chain saw for more than 30 minutes to an hour at a time. It is usually a start and stop operation. Further, he said that work breaks and lunch breaks would be counted into the overall exposure period. Thus, a power saw operator may be exposed to high noise levels for only a small portion of any average day.

WTT asked O'Neill whether any chippers currently on the market complied with OSHA standards. "I am not aware of any," he said. "However, two administrative controls can be implemented in cases where chippers are used. Ear defenders (protectors) can be worn by operators. And rotation of people from the source of the noise can be accomplished." If employees cannot wear ear protectors, because of infection, ruptured ear drum or configuration of outer ear, a simple rotation of work will decrease noise levels at the ear.

O'Neill said that the American National Standards Institute (ANSI) is currently developing standards for tree trimmers. "These will be reviewed and possibly adopted by OSHA," he said.

In addition, the Environmental Protection Agency (EPA) is developing noise standards for communities. These will be incorporated in the Environmental Protection Act.

not the answer, Bailey said. Research shows that, if the exhaust noise is eliminated, the purely mechanical noise, including the chain, is about 100 decibels at the ear or 74 decibels at 50 feet. In fact, even electric chain saws can exceed the OSHA acceptable sound levels.

A summation of the current situation of OSHA sanctions would indicate that there is a need for legislation at the Congressional level to bring some semblance of realism to the approach which is now the law.

Speaking on why OSHA came into being was John Holgdren, manager, Loss Control Services, Bayly, Martin & Fay Insurance Brokers, Los Angeles. He emphasized the point that each year 15,000 men die as a result of their jobs. In only four years, he said, as many people have died because of their employment as have been killed in almost 10 years of the Viet Nam war. Further, he said, more than two million men are disabled in industrial accidents annually.

OSHA came into being, he said, because states were not fulfilling their responsibility in the areas of occupational safety and health. To



Limb-Lopper booth is typical of 50 carnival type tents for commercial exhibits at '72 ISTC. Exhibitors reported much interest in equipment. The upcoming 1973 ISTC convention is scheduled for Boston, Mass. No final date has been selected.

comply and live within the meaning of the Act, Holgdren said that he believed that a firm who made a practice of safe working conditions for employees over the past years would have little or no difficulty living with OSHA. He said that he believed that it is reasonable to assume that enforcement of the act will tend to upgrade the profession to the degree that those firms who

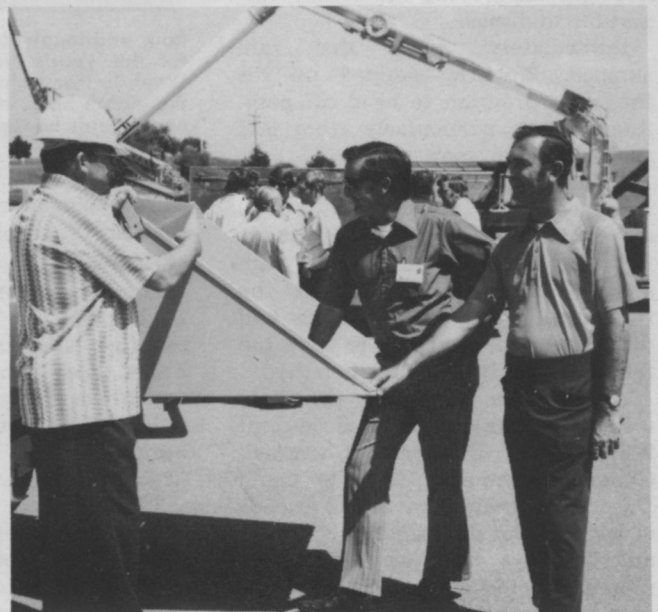
do not comply will gradually be upgraded or phased out.

Convention delegates and other speakers on specific phases of OSHA effect on the tree care industry apparently failed to agree with the simplicity of compliance voiced by Holgdren. One industry representative indicated that the current

(continued on page 32)



William T. Bell, superintendent for street trees, Long Beach, Calif., and general chairman for the California Conference, left, and George D. Foster, general sales manager for Skyworker, Delaware, Ohio, visit at evening barbecue.



John Dougherty, Asplundh, Azusa, Calif., left, discusses new model chipper with Charles H. Cissel, Guardian Tree Experts, Kesington, Md., center, and Robert E. Pletcher, Asplundh division manager, Azusa.

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chipper models on the market would not meet OSHA requirement. Efforts to develop kits to reduce noise levels of existing models have not as yet been successful; new models not as yet on the market, however, hold promise of meeting OSHA standards, he pointed out.

Dr. Paul Cheo, chief of research at the State and Country Arboretum, Los Angeles, discussed oak root rot disease (*Armillaria mellea*) and its control. He listed it as one of the most widespread diseases of woody plants in Southern California. It is able, he said, to parasitize almost 700 species of woody plants and some herbaceous plants, and is also a saprophyte, meaning it can flourish in the soil for many years on infected stumps, roots and other organic matter.

Dr. Cheo emphasized practical control. He pointed to soil fumigation as effective for a large scale operation, but as expensive and not recommended for home-garden, street plantings, or already infected trees. A valuable tree can be saved, he said, if its crown and anchor root trunk area can be protected from further damage. With good fertili-

zation programs to keep up the vigor of the tree, an infected tree can live to its normal age. Exposing the crown and main root trunk area in the immediate circumference of a yard to the air-dried conditions, is highly recommended for oak and many other shade trees, he pointed out.

Deep watering, Dr. Cheo said, is recommended when watering is needed, and surface watering, especially the wetting of the crown and root trunk area should be avoided.

Effort has been made in the L. A. Arboretum, he said, to find chemicals which are effective in inhibiting the growth of *Armillaria* and which can be applied to exposed areas for further protection. Of 20, Dr. Cheo reported on three which have proved to be highly effective, showing strong inhibitory effects to the growth of *Armillaria* at or below the 50 ppm level.

These three effective chemicals, Dr. Cheo reported, are: (1) Actidione, an established fungicide, (2) Karmex diuron, an agriculture herbicide, and (3) 2,4 dichlorophenoxy-acetonitrile, a closely related compound of 2-4,D.

Actidione, he said, is now being

studied in the Arboretum laboratory for its practical application. It completely inhibited growth of *Armillaria* at the 25 ppm level in culture medium tests, he stated. When incorporated with 1% dimethyl sulfoxide (CMSO) as penetrant, Actidione at 900 ppm can be applied topically on the crown and exposed root trunk area. In oak trees where corky bark is thick, the reports debarking vertically for one-quarter inch in width near the crown area to promote penetration of Actidione to protect these areas. For smooth trees, such as lilac, Dr. Cheo said, constant wetting above the crown area with the chemical solution promotes the effectiveness of chemical action.

Further experiments are underway to find better means of application of Actidione to woody seedlings infected with *Armillaria* and also, he stated, to analyze whether active forms of Actidione can be transported to root zones.

Norman Gray, president of the Associated Landscape Contractors of America, Transit Seeding, Inc., Mansfield, Mass., discussed change in trade associations and criteria for their survival and effectiveness to their respective industries. Among the best moves made in his own

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company, he said, was joining the ALCA. He reported he has since joined several other associations-oriented toward his business, and that membership is "the only way to go," for a businessman.

Associations, he said, have something to offer members, but their future is dependent on the results accomplished. Mortality rate is high, he said, when members are disinterested. He strongly urged member support in maintaining and building association projects. Gray stressed the need for a strong association voice which carries clout. "Associations," he said, "are listened to, but individuals, not very often.

"The big thing today is confrontation," he pointed out, stating that, "Your organization is the only one really capable of handling this for you." As an example, he said that the ALCA is working to create a strong national voice to speak for the landscape industry. "We must make ourselves heard, become involved at all levels of government, as well as all related building, financing, and designing industries."

Awards presented at the '72 convention included: Award of Merit — Harry J. Banker, West Orange,



President-elect John A. Weidhaas, Jr., Virginia Polytechnic Institute, Blacksburg, Va., left, and outgoing President H. M. Van Wormer, Van Wormer Tree Service, Inc., Richmond, Va.

N. J., and John Z. Duling, Munice, Ind.; Authors Citation — George H. Hepting, Asheville, N.C., and Leslie Laking, Hamilton, Ontario, Canada; Honorary Memberships — Clayton M. Hoff, Wilmington, Del., Ethil M. Hugg, Johnstown, N.Y., L. R. Quinlan, Manhattan, Kan., and Lois Wilson, Toronto, Ontario, Canada; and

Honorary Life Membership — Winston E. Parker, Moorestown, N.J., and Archibald Enoch Price, Glenview, Ill.

The upcoming '73 ISTC convention is scheduled for Boston, Mass., with Dan Warren, Jr., superintendent of parks, Brookline, Mass., as chairman of the local committee.

John D. Cyprien, assistant general chairman for the California Conference, (l) and Eugene B. Himelick, executive-director of ISTC.



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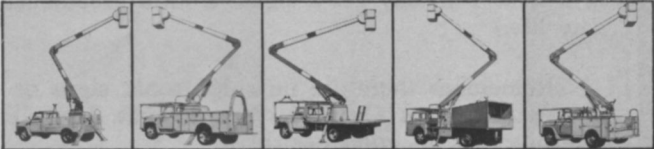
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