

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

International Shade Tree Conference Report

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.