- Kozlowski, T.T. 1971. Growth and Development of Trees. Vol. 1. Academic Press, New York, NY. 443 pp.
- Long, A.J., H.D. Gerhold and M.E. Demeritt Jr. 1973. Metropolitan Tree Planters Survey: Initial Results. Penn. State Univ. School of Forest Resources, Res. Paper No. 41, 14 pp.
- McPherson, E.G. and G.H. Graves. 1984. Ornamental and Shade Trees for Utah. Cooperative Extension Service, Utah State University. 144 pp.
- Mendenhall, W. 1979. Introduction to Probability and Statistics. Duxbury Press, North Scituate, MA. 594 pp.
- Richards, N.A. 1979. Modeling survival and consequent replacement needs in a street tree population. J. Arboric 5(11):251-255.
- Richards, N.A. and J.C. Stevens. 1979. Streetside Space and Street Trees in Syracuse—1978. SUNY Col-

- lege of Environmental Science and Forestry, Syracuse, NY, 66 pp.
- Thayer, R.L. and B.T. Maeda. 1985. Measuring street tree impact on solar performance: a five-climate computer modeling study. J. Arboric. 11(1):1-12.
- Valentine, F.A., R.D. Westfall, and P.D. Manion. 1978. Street tree assessment by a survey sampling procedure. J. Arboric. 4(3):49-57.

USDA Forest Service NE Forest Experiment Station Syracuse, New York 13210

ABSTRACTS

SMIT, BARBARA. 1989. Water stress. Am. Nurseryman 170(4):103-104, 106, 108.

Those who care for plants can make more informed water-management decisions if they understand why water is so important to plants, how plants use it and what conditions lead to plant water deficits. Water is a major constituent of plants, accounting for 80-90 percent of the fresh weight of herbaceous plants and 50 percent of many woody plants. Water has a unique chemical nature, and most components of plant cells need it to maintain their molecular structure. To live, plants obviously need a water transportation system. There is a continuous water column from the soil into the roots and through the plant to the leaves. The most obvious cause of plant water deficits is a lack of adequate water in the soil, due to inadequate precipitation (or drought). Competition among plants can also diminish the amount of water available. Though soil is the plant's primary source of water, the driving force behind water uptake is transpiration. Finally, root zone conditions affect a plant's water status by determining how quickly roots can take up water.

ROSENFELD, SPENCE. 1989. The roots of success. Arbor Age 9(7):12-14, 16.

What are the major problems facing the tree care industry today? How about this list of problems familiar to any tree care company: Hiring, turnover, absenteeism, poor production, equipment abuse, safety problems, lack of training, and insurance rates. To survive in business now and in the 1990s, we must meet these problems as challenges and face them head-on. Fortunately, all of these problems are interrelated and can be addressed from a common perspective. They are all "people problems" and can begin to be resolved when we take an honest look at ourselves and how to relate to our most valuable resource: people. We must understand our people, the learning process, and what motivation is all about. We must step back and allow our employees to be responsible, stand on their own, and fulfill their potential. We can only be there to guide and direct. We can't make it happen. The roots of success lie in resolving our problems with employees. On a very practical level, we must promote safety, train aggressively, inspire motivation, and encourage teamwork.