volves the mapping of lichen distribution in a seven state area. Some lichen species are very sensitive to low levels of SO<sub>2</sub> and are being considered a good indicator plant.

Transmission line sighting has become a very complex, involved issue because of the Federal Environmental Policy Act of 1969. That act required that all projects which significantly effect the environment had to have an Environmental Impact Statement.

No longer can utility engineers determine the most direct and economical route when considering transmission line locations. An Environmental Impact Statement must be filed, hearings held and all possible consideration resolved before the utility can get a permit to construct the line.

Recently, one power plant required 101 permits from 67 different state and federal agencies before construction could begin. The refusal of any one of the permits would kill the entire project. The utility had to establish the needs and benefits of the power plant 101 times before starting construction.

Concern has been expressed that mercury vapor street lights have been affecting plants as a result of research conducted by the U.S.D.A. at Beltsville, Maryland. The Maryland research involved seedling plants enclosed within containers such that the only light source was street light. Research by John Andresen, professor of urban forestry, Toronto University, conducted for the City of Chicago indicates that mercury vapor street lights do not affect urban trees.

There is concern about the effect of extra high voltage transmission lines on biological organisms, animal and plant. American Electric Power for a number of years has utilized Johns Hopkins University to evaluate the physical effects of E.H.V. transmission on employees exposed to those voltages. Westinghouse Corporation has a grant from Electric Power Research Institute to perform research on the effects of E.H.V. on plants. These E.H.V. lines have a large magnetic field around the conductor.

## 5. What is the Future?

There is increasing importance and emphasis on the esthetic, environmental, and ecological areas in which the utilities arborists are concerned. Presently many utilities have curtailed their tree and brush control programs, landscaping, grounds care, pole treating, etc. because of economic necessity. These operations will be resumed with increased importance in the future. You can postpone doing some of the work, but you cannot eliminate the need. The expense is temporarily deferred only to cost more in the future to perform the given activity. Presently large areas of the country are feeling the effects of an extensive ice storm. The delay in restoring electric service and the cost of restoring electric service are directly proportional to the deferment in their utility tree trimming activities.

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## **ABSTRACT**

Anonymous. 1976. Tree anchors aid large planting project. Grounds Maintenance 11(3): 64, 70.

When the town of Radisson, N.Y., decided to have 100 trees transplanted in a long strip of land alongside a new waste water treatment facility, guying problems were a matter of particular concern. Wooden stakes used for guying some 200 trees in an earlier project had been unable to withstand the high prevailing winds and soil conditions. The Radisson officials agreed to change the specifications to allow the use of a special anchor, called Arrowhead Earth Anchors. The arrowhead shape of the metal anchors makes it easy to drive them into any kind of soil with a minimum of ground disturbance. The anchor shaft can be fitted into the driving rod of a pneumatic hammer for easier installation. Manual installation of the anchors is another alternative. As many as three turnbuckles may be attached to one anchor, reducing installation costs and improving appearances.