

A TREE HEALTH CARE PROGRAM FOR GROUNDS MANAGERS

David G. Nielsen
The Ohio State University, O.A.R.D.C.
Wooster, OH

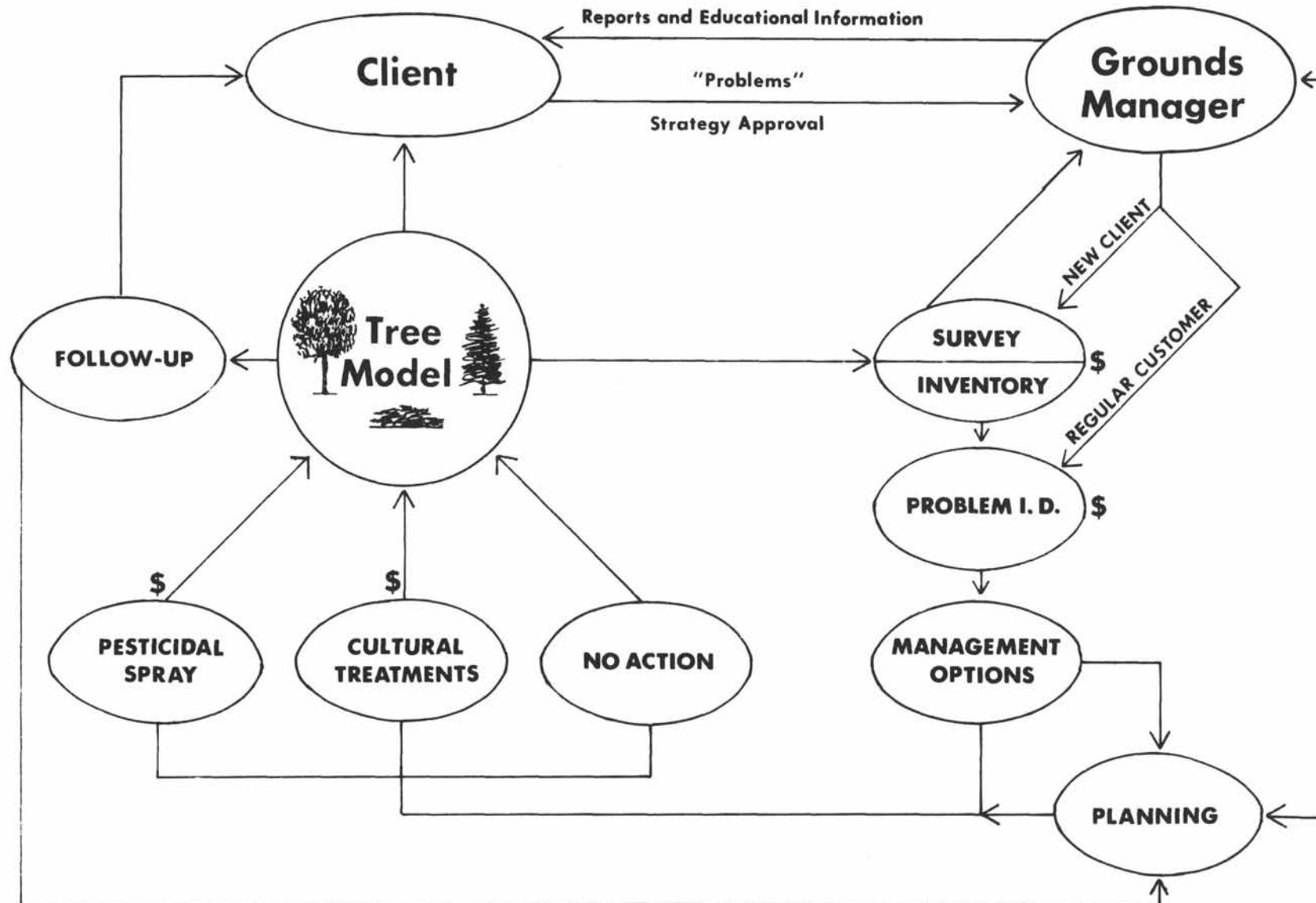
Most grounds managers who have been involved with controlling pests of trees and shrubs have relied on scheduled spraying to prevent build-up of pest species or targeted sprays against an obvious pest infestation. The so-called brush fire and scheduled spraying approaches are rapidly losing popularity with clients and may be legislated against at municipal, state, and federal levels in the near future. I believe that a tree health care approach will be used almost exclusively by arborists and other grounds maintenance professionals within a decade. Now is the time to begin moving your business in this direction.

Although insects dominate the animal world in kinds and numbers, relatively few are pests of woody plants. Most insects are not able to make a living on most plants, including trees and shrubs. For example, birch leafminer and bronze birch borer only infest birches. Lilac borer only infests ash, lilac, and sometimes privet. So, although there are exceptions to this rule of specificity, an insect that destroys a white-barked birch in a landscape will not infest nearby oaks and ashes. Cottony maple scale will not infest or at least not build-up damaging population density on sweetgums and lindens. Consequently, we need to learn, in depth, about only a single or a few key pests on each kind of tree or shrub in our service area. This is a can-do exercise. Extension specialists, professional conferences, reference tests, and consultants can help us achieve this entomological expertise.

We also must be knowledgeable about trees and their requirements in order to implement a tree health care program. Armed with this information, we can inventory trees on each of our management units and survey them for pests and other factors that threaten their beauty and survival or influence implementation of management tactics. Once we know what kinds of trees we are dealing with, which pests to expect on individual species, and which pests are already present, we can learn when each pest is vulnerable to direct control tactics and which tactics best suit our management objectives. Once we get to this point we are on the path to rational tree care and insect control strategies.

Many times when a pest species is detected during our spring, summer, or fall survey, the best course of action is to record the occurrence and its population level. We may also wish to implement one or more cultural practices (see "Tips for Improving Tree Health Care" elsewhere in these Proceedings) to help the tree deal with its pest. We will then monitor the infestation during the next survey to determine if a direct control tactic is necessary when the pest is next vulnerable. Whenever a control tactic is used, we will follow-up to determine its impact on the pest and the tree. Follow-up allows communicating to the client the results of your efforts and allows the practitioner to monitor his or her effectiveness.

The days when the public will accept and governments will permit "shotgun" spraying in the urban environment are numbered. An attempt to move toward providing tree health care now will facilitate and expedite the process of change required to practice tree pest control in the 1990's.



Basic Model for Implementing Tree Health Care