

GUIDELINES FOR IN-SERVICE TRAINING FOR URBAN TREE MANAGERS

by Robert L. Tate

Abstract. Guidelines are developed for an in-service training program to increase the quality and quantity of production in a tree maintenance operation. The three major elements in a typical program of what to teach, preparation, and how to teach are explained. A typical job example in a tree maintenance operation is divided into two areas of theoretical and practical material necessary to perform it.

Urban tree managers, in addition to their many other duties, are responsible for maintaining a satisfactory level of efficiency, productivity and quality in their tree maintenance operations (3). Implementation of an in-service training program for tree maintenance workers can reduce labor turnover and learning time; helps prevent equipment breakage; increases the quality of production; lowers production costs and improves morale.

The need for employee training, information and education has been ranked as very important by urban tree managers (1) but concern and lack of knowledge about the mechanics of establishing and conducting an in-service training program have probably kept many from being started and have caused some to be abandoned because of poor results. An in-service training program is not as difficult to run as it may appear if the guidelines which follow are observed. A typical in-service training program should be divided into three major elements: 1) the determination of what to teach; 2) the preparation involved prior to actually teaching; and 3) how to teach the material (2).

What Material to Teach

A typical urban tree operations yearly work schedule is divided into various seasonal tasks, some of which are pruning, planting, removals and insect and disease control. Each of these tasks has unique sets of skills and areas of knowledge associated with it. Three of the objectives of a training program are to increase knowledge about each task for general enlightenment, to improve

production quality and quantity; and to identify a task problem area which needs solution.

Employees should be able to do a task better in the job environment after training. The goal of an in-service training program can be broadly defined or it can be very specialized. It may involve the development of general abilities or of a high degree of skill in a specialized task. Any job can be separated into two distinct areas of theoretical and practical material necessary to perform it adequately. Rose (2) has termed these "knowing" (theoretical) and "doing" (practical) units.

Knowing units would normally include the theoretical and background information required for the task while doing units would normally include specific skills, operations and procedures which occur repeatedly over the task. To further clarify this important distinction examine the typical urban tree work element of controlling an insect pest by the application of chemical insecticides as follows:

Knowing

- Life history of insect pest
- Method by which insecticides kill
- Various classes of insecticides
- Types of spraying equipment
- Safety practices
- etc.

Doing

- Mix insecticide properly
- Fill sprayer tank
- Start engine
- Correct spraying technique
- Record keeping
- etc.

First-level line supervisors who generally have a task-oriented doing background can teach doing units extremely well when properly trained; often better because of their daily close association with employees than can administrative/manage-

ment personnel. By including the first-level supervisor as an integral part of an in-service training program, the team management approach can be strengthened and employees may view their immediate supervisor as a person helping them develop their skills and less as a "boss."

Preparation

Probably most of the in-service training programs which fail in one form or another do so because of lack of instructor preparation¹. A common mistake can be assuming that since one has the knowledge of the subject there is little need to spend much time preparing to teach it. Preparation can be time consuming but the return from it can offset the time investment many times over.

I have found that preparation can be easily divided into five key elements as follows:

1) Objectives of the training program: these depend on the particular situation and employees can often help in establishing them. Objectives must be spelled out for evaluation purposes upon course completion and must justify the expenditure of time spent by employees away from normal working assignments. Objectives should be realistic and should illustrate what information will be learned and what attitudes are to be developed.

2) Determining the specific course content: this can be done by isolating a problem such as poor planting survival, an area of low productivity or one in which productivity has recently decreased. New or changed operations as a result of technological advances lend themselves to in-service training programs. Employees can aid in determining specific course content.

3) Arranging instructional items in the order in which they will be taught: Generally start with the least difficult first and teach knowing units prior to teaching doing units. If possible teach a particular subject just prior to when the operation involving it will be scheduled. For example, tree planting knowing units should be taught prior to the planting season while the doing units could be taught at the start of it.

4) Instructional materials and training aids: Writ-

ten materials in a variety of forms have been termed as essential to the success of a program (2). Textbooks, short articles and clippings and information sheets can be used to reinforce and emphasize ideas and procedures discussed in a classroom situation. Visual training aids such as the chalkboard, displays, and slides are valuable for their ability to attract and hold attention and their appeal to the senses. A picture is still worth a thousand words.

5) Preparation of the lesson plan: this is necessary because it allows the instructor to visualize the lesson prior to teaching, can give the instructor confidence while teaching and help organize the materials needed for the lesson. A good lesson plan will contain a title, objectives, introduction, presentation and summary.

How to Teach

Determining what to teach and preparation are two important parts of a well designed in-service training program. However, before the program can be termed successful in its aims (learning, information exchange, technology transfer, etc.), effective instruction must take place. Subject area competence, instructional ability, creativity and the desire to teach stand out as four of the qualities and techniques which contribute to instructor effectiveness.

There is no substitute for experience, knowledge and skill in the subject being taught. Students respect a competent instructor and generally learn quickly and are quick to determine if one is not. Few good instructors are good because they were born with a special knack. Most masterful instructors speak clearly, organize their instruction according to the learning capacities of their students, repeat and emphasize key material in such a way that it has a good chance of being remembered and conduct demonstrations and practice sessions in a way that promotes and develops desirable skills and attitudes. The instructor adopts teaching procedures to fit the particular students. Remember, most of the employees that are involved in an in-service training program have spent a con-

¹Personal communication, James Hill, Professor Emeritus, School of Business Administration, University of Michigan, Ann Arbor.

siderable length of time in learning situations at school, home and on the job. Many of them just don't respond to the typical classroom teaching experience.

There is probably no single factor more important in determining instructor effectiveness than the desire to teach. This desire may not be evident at first. It may have to be cultivated. There is normally a great deal of satisfaction involved in imparting knowledge to others, especially if it results in a positive change in a tree maintenance program.

As an urban tree manager you may feel that the demands on your time preclude your involvement in an in-service training program. However, it is no less important than any of your other responsibilities. Instruction is a natural and necessary part of supervision. It can be done during slack

periods or when inclement weather curtails outside work. An in-service training program can develop competence. Competent people are still the most vital asset of any organization.

Literature Cited

1. Ottman, Kenneth H., and Kielbaso, J. James. 1976. Managing Municipal Trees. Urban Data Service 8:11, Int. City Mgmt. Assoc.
2. Rose, Homer C. 1966. *The Instructor and His Job*. Chicago: American Technical Society.
3. Tate, Robert L. 1973. *Maintenance of the Urban Forest*. Arborist's News 38: 61-64.

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ABSTRACT

Kerr, John. 1980. **Climbing vs. bucket lifts; preferences in tree trimming.** Weeds, Trees & Turf 19(2): 28-29, 32-33, 80.

There are two ways to trim a tree — climb it or use an aerial lift truck. Certain circumstances clearly call for one method over the other and sometimes a combination of both ways does the best job. For the most part, though, arborists prefer either climbing or lifts and resist compromise. David Halsted, founder of the Oregon Arboriculture Company in Portland, has been called "violently opposed" to using bucket lifts. A born and bred climber, Halsted laughs at the severity of this description, but truly thinks proper trimming is only done through the eyes of the climber. "I could find more character, more design, and more creativity from working within the tree," he says. And the fact exists that some of the trees are just too tall for a lift, or if in a back yard, too inaccessible. John Hawthorne, owner of Hawthorne Brothers Tree Service, has worked without a bucket lift, but since he purchased one in 1972, he's been using it constantly. His private tree care firm is in Winchester County, New York. "It's helped us tremendously," says Hawthorne. "It's worth its weight in gold." Hawthorne would not disagree with Halsted that it takes a qualified person to take care of trees. He just feels there's no reason you can't use a bucket truck. "I'd say about 75 percent of our jobs can be done with a bucket truck."