

chromatographic verification of interspecific hybrids involving *G. triacanthos* as the male parent. The fact that most selected thornless cultivars of *G. triacanthos* are also predominantly male-flowering virtually eliminates the possibility of reciprocal crosses and suggests that this species will be more often used as a male. In view of the marked morphological similarity among many *Gleditsia* species, chemical criteria for judging hybridity will be critical factors in progeny evaluation.

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*Research Geneticist, U.S. National Arboretum,  
Agricultural Research Service, U.S.D.A.  
Washington, D.C.*

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## CREW EVALUATION BY THE CONTRACTOR<sup>1</sup>

by Howard L. Eckel

Evaluation methods of a crew's performance by a contractor must, by necessity of profits and growth, take a somewhat different approach than the evaluation methods used by the customer.

The contractor and the customer have a mutual goal—production. However, the necessity of profits and growth causes the contractor to use a different evaluation procedure.

The contractor has four subject areas that he must consider and include in his crew evaluation procedure. The contractor must consider: 1) personnel, 2) equipment, 3) cost, and 4) production.

The contractor usually uses two basic techniques in evaluating these four subject areas. The two basic techniques are: 1) records and/or statistics, and 2) actual on-site inspection.

In the record and/or statistical evaluation area, the contractor should keep records and statistics of the individual crew's performance on eight topics: accident control, damage claims, complaints, absenteeism, equipment costs, personnel development, expense accounts, and labor turnover.

These eight topics are extremely important in the contractor's evaluation of his crews. These

areas have a definite influence on profits, growth and production.

If we examine these eight topic areas briefly, it is obvious that they must be included in crew evaluation by the contractor:

*Accidents:* The frequency and the cost of accidents and the type of accidents are recorded as incurred by individual crews. This, then, allows the contractor to determine if there is a particular accident trend or repetitive situation either in the personnel or automotive area. Once this is outlined, corrective action by re-training can be initiated. As an example, we once had a crew that had a continual history of poison ivy infection. The supervisor, once alerted to the numerical repetitiveness of this accident type, displayed a picture of poison ivy to the crew members and found out that no one knew what poison ivy looked like. The solution, of course, was an instructional program, training them to spot poison ivy.

*Property damage claims and complaints:* Again, statistical records should be kept, by crew, of the type and cost incurred. These individual crew statistics can then be compared to corporate averages or service line averages which will

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enable all areas of management to isolate a careless crew and correct the situation, thereby eliminating the cost problem and the public relations problem.

*Absenteeism:* Is the crew working with a fully-manned work force, thereby achieving full utilization of the equipment assigned to it? If absenteeism by an individual crew member is a constant thing, the supervisor should determine what the problem is. Is it personal? Does he have an overwhelming problem, or is he just an "I don't care" man? Once the problem is isolated, then corrective action can be taken as absenteeism affects production and profits.

*Statistical records by crew should also be kept on equipment costs.* This, particularly, is becoming a major element in influencing the contractor's profitability due to the high capital investment in equipment. Is the crew's equipment operating within the general cost guidelines for the particular equipment type assigned to the crew? If not, what basic cost categories are out of line? Repairs? Miscellaneous expense? Gas and oil? Or, is it simply a case of low hours, which might be traced back to absenteeism? If the cost element that's out of line, within the total equipment cost heading, is gas and oil, why is it out of line? Is the crew doing too much running in the pursuit of their work assignment? Are they driving long distances to lunch? Are they taking the truck home? Or, is the gas and oil going into privately owned vehicles?

*Records of personnel development* should be kept by crew. Has the foreman assisted the supervisor in the development of trainable, promotable people? We use a training program that the foreman and supervisor follow in the training and development of newly hired people. Regardless of seniority, no crew member is promotable or due for a wage increase until such time as he has mastered the ten or twelve basic expertises assigned to his particular job function. Once he has mastered these, has become proficient, he is then usually, as soon as an opening becomes available, moved up into the next grade. If a foreman consistently has developed no promotable people, the contractor should be aware of it, by foreman, by crew. It should be understood that

some foremen are better trainers than others because of natural aptitudes.

*Foreman's expense account* is another statistical area that aids us in crew evaluation. Does he turn in an excessive amount of telephone toll charges? If he does, this usually indicates that we have an insecure foreman who constantly is calling someone for advice and help. Little problems become major areas of concern to him and he is incurring unnecessary costs and usually his production will also be suffering.

*Turnovers:* Statistically, turnover, by crew, should be evaluated by management periodically. We separate our turnovers and designate, as closely as possible, the significant reason an employee left. The reasons usually are: quit without notice; left to go back to school; discharged—we want to know why he was discharged. We feel that turnover is a major area that must be examined on each and every crew and a major element in the crew's evaluation. A constant turnover in a crew means that you consistently have inexperienced people who are not used to working together as a team and this will, of course, have a deleterious effect on the crew's overall productivity, costs and accident rate.

The evaluation of a crew's performance in these eight topic areas can be accomplished by reviewing records and statistics.

The second technique used in crew evaluation is on-site inspection. In preparing this paper, I felt very secure in reporting to you on the statistical record-keeping devices that we use in our company. In the technique of on-site inspection, it has been years since I, personally, have done it. So, I surveyed approximately 35 supervisors who work in the general geographic area that I am responsible for. These 35 supervisors manage approximately 200 production crews.

I asked these supervisors to tell me what they look for when they evaluated a crew on the production site. The overwhelming response from these supervisors was, "The first thing I try to determine is the crew's attitude." I was prepared for a response going along the lines of "Was the crew working or were they sitting down," or "Did they have their safety signs and cones out," or "Were they wearing their hard hats?" Quite

frankly, I was not prepared for the majority of the supervisors to tell me that the key, to them, in evaluating a crew, was to determine the attitude of not only the foreman, but the individual crew members. If there was a happy, smiling, work force with a good attitude, if the crew members had a good, positive attitude when the supervisor first approached their work site, the supervisor could almost be certain that production would be up and almost every other item I've discussed would be in line.

The on-site inspection centered on determining attitude, then the appearance of men and equipment, then work practices. Not just are the men working, but are they working as a team? The supervisor talks with the individual crew members. Has the foreman outlined what must be accomplished in the specific task assigned to the crew? Did the foreman point out ways to accomplish the work safely and efficiently? Had the potential hazards involved in the specific operation been discussed prior to commencing the work?

The supervisor then would look at the quality of the work and equate it to the quality level that the customer wants. Then, and only then, would the supervisor review the production or quantity of work produced in relation to the time spent.

I think it is extremely significant that the majority of the supervisors felt that without a good crew attitude some or all of the other items or subjects that we consider in crew evaluation will be in suspect and out of line. If the attitude is not right on the crew when you first approach it, you usually don't have to look any further. You'll know that production has not been attained and quality is not good, that the equipment has not been maintained, that usually you have more absenteeism, more turnover, higher costs, and your crew is about to receive or has already received a very poor evaluation from your customer.

*Vice President  
The Davey Tree Expert Company  
Kent, Ohio*

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## ABSTRACTS

Anonymous. 1976. **Pine beetle battle in Denver.** *Weeds, Trees & Turf* 15(7): 18, 20.

When hundreds and thousands of people moved up into their new homes in mountain valley subdivisions or onto their two or five acres further on up, they brought many changes with them. Along with the new homes came better fire protection. And because of that, trees are now growing where they've never grown before in such numbers. Weakened and overcrowded trees are most susceptible to mountain pine beetle destruction, so man created a situation that was ripe for a full-blown beetle infestation. And that's exactly what developed.

Sherald, J.L. and R.S. Hammerschlag. 1976. **How National Capital Parks control Dutch elm disease.** *Weeds, Trees and Turf* 15(7): 26, 30, 32.

Despite the constant threat from Dutch elm disease (DED), the elm continues to play the dominant role in the landscape of the Federal Enclave of our nation's capital. Over twenty-five hundred elms lend a graceful and majestic flavor to the streets, parks, monuments, and buildings of one of the world's most significant park areas. The successful perpetuation of our national elms has not been without a tremendous investment of time and effort. At a time when elms throughout the northeast and midwest were being devastated by DED, the National Capital Parks (NCP) took immediate action to maintain and preserve this elm resource. Successful elm management has been achieved through the conscientious implementation of an expanding, comprehensive, integrated control program.