

ployment possibilities within the campus Grounds Department. This is under the direction of the Ornamental Horticulture Department, as we act as advisors with regard to the planning and planting. We feel that the student's knowledge is enriched by his work experience on the grounds for which he receives pay.

A sixth and important aspect is the speakers who are brought to the campus as guest lecturers. Often these are former students who are now established in business. Because of their former student status we feel they are most effective in directing the student's attention to the various phases of the industry.

I would be most remiss if I did not close by indicating the importance of our teaching staff. At Cal Poly we are, of course, concerned with a proper educational background for our instructors, but of equal importance is his interest, knowledge and experience in industry in the area in which he is teaching. All of our staff have been successful in industry and are now not only teaching in the subject area of their academic training but also in the areas which they have successfully handled in industry.

It would be naive to believe that formal education at the College will fit all men for all jobs. We realize that every firm has its own "modus operandi" and because of this feel that an orientation or "in-service training" should be carried on continually. By this procedure communications in both directions is usually improved. This generally results in better understanding, greater efficiency of operation, and a generally improved morale factor.

TOK FURUTA: Thank you, Jolly. We have one more panel member now. Mr. Ed Gardner of Stribling's Nurseries will give us his views of "In-Service Training", Ed:

### **IN-SERVICE TRAINING**

ED GARDNER

*Stribling's Nurseries  
Merced, California*

Have you ever heard the expression, "Get out of my way. I can do it in less time and a lot cheaper than by standing here, watching you fumble around." Does this sound familiar to you? Maybe not, but a good many of us have heard a variation of this at one time or another in our lives, especially in the formative years in our work.

This somewhat exaggerates a very real problem that we have when training personnel for our nursery operation. Few nursery operations are organized and fully staffed in all departments so that a new employee merely has to imitate the man who is directly in charge of him. If your situation is typical of our operation you may find yourself with a new em-

ployee and a new problem. How do I get this man so that he can be left on his own and still give me a feeling of confidence — that of knowing the job is in good hands.

The diversified nursery that we have consists of field and container grown ornamentals, deciduous tree and vine growing, farming of cotton and beets, a complete propagation facility and peach seed harvest. Also selling, on a wholesale, commercial and a retail basis. With this diversification we find ourselves with only a few men who are able to spend their full time in one division. Many must rotate from one division to another. Today a man is a budder of trees, tomorrow he is assembling plants for delivery. He may be putting in pipe lines, or inventorying the stock, and then he may very well be the one to deliver this stock to our customers. This, you can see, is a very versatile man; but, also a very hard man to train on an organized basis.

I personally find that there is a certain amount of “sink or swim” attitude that must be exercised in order to make this new employee or trainee realize he must demonstrate some personal judgement. He must use his “noodle”. This, I find, is a shocking experience to some. However, after the shock, I find that they are very adept and appreciate the new confidence they have found in themselves.

For example, I have a tree-packing operation to struggle with each year on a crash program. We do 60 days of packing in 30 days time. This pressure brings out the worst or the best in leadership.

It has been my misfortune to start each packing season with a new packing and warehouse foreman. Sometimes the bench crews know what is going on but the new foreman must gain control and make production schedules and learn the operation at the same time. I must point out to this man that he must do two things—gain the respect of the crew and get the job done. This is no small task when you are under such pressure. But most of all *he must not try to do all the work himself*. He must delegate authority. This must be done if there are two men or 100 men. He must delegate and follow up.

In our production division, large crews are formed on a seasonal basis and these crews are generally staffed by an experienced employee. This trained employee does not conduct classroom sessions or give training lectures, but he does get right to the meat of the problem. He gets the crew moving and thinking and he does this by simple demonstration. He must constantly follow up his demonstration to see that everyone is doing his assigned task.

If you were to ask one of these foremen to give a resume of how he teaches and how he plans to get results it might prove quite difficult for him, but you can be sure that those men working for him have received his message and understand what he means very well. This, then, is a never-ending

training program that goes on at our nursery day in and day out, but I find it hard to put my finger on any part of it to say, "This is our formal training program. This is our way of teaching a new employee the skills of a nurseryman."

Training is often done on a buddy system. Budders and tiers are often the foremen of our work crews. Each season they are called on to work on their hands and knees in the field. They work in teams of two. The budder generally chooses his tiers and trains him in the process of budding and tying. This training is done while working on a piece-work basis; the better performance receives the better reward. Each year a few of the tiers advance to be the budder and they become the teachers. The budders are highly skilled in budding, but are short on text-book theory for teaching. Yet, I am always amazed at the proficiency with which these men train their helpers. I am sure the good pay they receive for the piece work has something to do with it but I am also sure that a certain amount of pride and integrity is involved when one team is scored against the other for quality and quantity of budding.

Now this pride and integrity is what I have been leading up to, for without these two basic ingredients most of us would find our jobs very dull and uninteresting regardless of the pay. So, when we speak of training and education of employees, we must also consider what we can do to instill pride and integrity into these employees as well. It seems hard to relate pride and integrity with our personal program at times, but it is a very real part of it.

We don't often use these words when speaking to our employees, so there must be some other way that this is conveyed for it surely is a part of our business. So my thought is—that the lack of text-book terms does not mean that a training program, however informal, needs to lack in quality, a quality that shows in an employee as a man who has pride in his work and integrity in his dealings with others.

TOK FURUTA: At this time it is with great deal of pleasure that I present to each of our speakers, as was done for all the other speakers, a "Certificate of Appreciation" for their participation. I hope that each of you individually has had an opportunity to see one of these, but in case you have not, I should like to take this opportunity to read it. "International Plant Propagators Society — Western Region, takes pleasure in presenting this certificate of appreciation as an expression of our gratitude and high esteem for your interest in the art of propagation. We sincerely appreciate your generosity in sharing with us your knowledge, and your time in addressing our members".

Now is the time for questions and answers, so now the floor is yours for questions to any of the panel members from this afternoon or to the members of the firms we visited this morning.

BILL CURTIS: In regard to this employee relationship, what do you people feel is the best — to give a person who comes to work for you a raise right away, a big raise, or to give him a series of small raises? Which gets the best results?

JOLLY BATCHELLER: You've got to earn them all.

MARGARET FLEMING: We feel that if the starting wage is not so marginal that the guy is starving while he's learning, then it would be better to give him a series of small raises. They earn it first, then we pay them. They earn some more, then we pay them more.

JERRY MAILMAN: On the Monterey Peninsula, California, at the cities of Seaside, Marina, Pacific Grove, and Carmel the groundskeepers are now required to take six units of Ornamental Horticulture, which is a four-hour class, one night a week for 17 weeks. This program is strictly related training, no manipulative work at all other than demonstrations; these are for the purpose of upgrading units for salary increases. Such programs could also be used perhaps in the propagation and nursery business in cooperation with the local high schools or junior colleges.

TOK FURUTA: In this regard, I might point out that I had the privilege of working with Program Teaching, Inc., Palo Alto, Calif. I don't know how many of you know of this firm but they specialize in developing program text material for industry and for schools. They have been working under contract with the Office of Economic Opportunity last year and have developed a course which they call Landscape Aid; they are now embarking on the development of one more advanced or in a little more detail. They haven't really titled it, but it would be in terms of nursery employees; some of you may be interested in this, perhaps trying to work this type of program material — which is really a self-teaching type of thing — into any training program that you are developing. Any further questions?

JACK WICK: I'd like to ask if at the Lewis Azalea Garden they water the azaleas in their cold storage house.

MR. LEWIS: No, we don't. There are two theories of how azaleas should be pre-cooled. One, which we do not follow, suggests cooling at about 45° to 50°F. with added lights and watering the plants as they use the water. We store in complete darkness, below 40°F., generally around 36°F. The respiration, transpiration, all functions of the plant are so limited that water consumption is quite low. We have supplementary humidification in the boxes. The coils are designed for minimum moisture removal. The fan speed is adjusted once the plants are brought to temperature to an absolute minimum movement so that dehydration is reduced just as far as practical. The greatest problem we have is to get the plants into the cooler thoroughly wet. For plants that go in wet we have kept them at that stage for 12 to 13 weeks.

VOICE: I'd like to ask a question about the potted azaleas

plants. Are they fully budded when they're put in cold storage? Fully developed?

MR. LEWIS: Yes, they are — but that's something with which we're still experimenting. No one could actually tell us what we should do so we're doing it on a "try and see if it'll work" basis. We're progressively putting the plants in at a lesser stage of maturity. We don't exactly know what point is too immature for the pre-cooling to work. However, we're putting them in primarily to "even" the bud. Since bud development is uneven without the cooling, if we try to wait until all buds are mature, some of them would be in bloom; so we have to pick the plant, say with the furthest advanced buds, to just the maximum point that we feel we can leave that plant out, and then put it in. Some buds will be so small that you can hardly see them, but the pre-cooling over a long period of time does even them up. It seems to work satisfactorily.

HERMAN SANDKUHL: I have another question for Mr. Lewis. Do you find an acceleration or deceleration when you take them out of the cooling chamber to bring them into bloom — or do you send them straight to market from there? In comparison with plants in a greenhouse at about the same budding stage, will they come into bloom all at the same time or are the ones in cold storage slower coming in bloom?

MR. LEWIS: Well, that's a complicated question. Here in southern California we probably have the most ideal conditions for budding an azalea without greenhouse treatment that exists in the United States. We have no trouble preparing the plants for Christmas delivery — forcing without this pre-cooling; plants for Christmas (pruned in May or June) can be forced into flower in about six weeks. We bring them into the greenhouse in November and have them ready for Christmas delivery. Now the pre-cooling is sort of an extension of nature in the fact that we are providing this artificial fall and winter cold at any time of the year that we desire, so the same situation occurs with plants from cold storage as occurs with plants that have not received it, depending upon the season. We can fool the plants in thinking that they have had the fall cold. Plants of the same variety cooled approximately the same time as they would have been naturally out-doors will bloom in approximately the same length of time.