

TECHNICIAN TRAINING¹

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The present-day trend toward formal, post-secondary-school training of technicians has found a fertile field for development in a substantial number of professional and scientific areas, including engineering and forestry. Quite recently, such training has been making rather significant gains in our specific field of interest, with obvious implications regarding both the future education and the employment of wood scientists and professional wood technologists.

The technician has performed in the various aspects of the wood industries for years, of course, but generally has been a company-trained, largely self-educated individual who has had the skills to perform many tasks in the organization. Frequently, he has risen to a position of supervisory and even administrative importance by dint of his native ability and diligence. But with the changing times and the increasing need for technical competence, these locally-experienced people will increasingly be replaced by the new breed of formally-trained personnel, who have completed two years of post-secondary-school education in the forest products or wood utilization field.

Compared with forest technology programs, concerned primarily with forest management, which are currently being offered at some 28 separate institutions in the United States, the wood products technology offerings are relatively few but are steadily increasing in number. Nine such courses are reportedly in operation, and definite plans have been made to initiate two others, with an additional trio under consideration (two of them in institutions already offering timber harvesting and forest management technician programs). The first of these two-year programs was initiated in 1959, at the Stockbridge School of Agriculture, University of Massachusetts; four others came into existence in 1965, at

Lane Community College (Eugene, Ore.); Salem (Ore.) Technical-Vocational Community College; Lower Columbia College (Longview, Wash.); and the Forestry and Wood Technician School of the University of Kentucky (at Quicksand); two more were established in 1966 at the State University of New York Agricultural and Technical College at Morrisville and the Vocational Technical Institute, Southern Illinois University, at Carbondale; and two additional programs were reported as being offered in 1968, at Jefferson Community College (Louisville, Ky.) and Prestonburg (Ky.) Community College.

The institutions known to be planning or seriously contemplating such training are the Ford Forestry Center, Michigan Technological University, L'Anse; University of Maine; College of the Redwoods (Eureka, Calif.); Haywood Technical Institute (Clyde, N.C.); and Wilkes Community College (Wilkesboro, N.C.). Preliminary interest in the prospects for such training has been shown quite recently by at least two additional institutions. The programs now being offered carry a variety of designations: Forest Products Technology, Forestry and Wood Utilization, Wood Technology, Wood Products Technology, and Wood Utilization Technology. For the most part, these programs are intended to be terminal; but graduates may, on occasion, enter the university to study for a professional degree.

The technician-training programs are typically geared to the specific kinds of work now being performed at the lower-management level in the wood-using industries. They are aimed at those activities which have often been regarded as on-the-job training assignments for university wood-technology graduates just beginning their professional careers. Regrettably, in too many instances, these jobs have also constituted the total career assignments of some of the less qualified of these technologists.

¹ Based on a paper presented at the annual meeting of the Society of Wood Science and Technology, Washington, D. C., June 23, 1968.

To quote from the 1968/1970 bulletin of one of the university-related technician-training programs (Stockbridge):

The field of wood utilization . . . [includes] such activities as primary manufacture of lumber from logs, remanufacture, air seasoning and kiln drying operations, gluing, machining, and finishing in the fabrication of other products, merchandising of lumber at the wholesale and retail levels, and the preservative treatment of [wood]. . . . The wood utilization graduate is therefore prepared for employment in such enterprises as sawmills, wood processing and fabricating industries, and both wholesale and retail lumber yards and sales organizations. The [two-year] curriculum provides a foundation for these fields through basic study of the fundamental nature and properties of wood, with courses dealing with the processing and application of wood for specific areas of use. The program is further strengthened by appropriate course work in English, mathematics, economics and business practice.

At this particular institution, the three members of the staff responsible for the several wood utilization courses are professional wood scientists (two with doctorates and the third with a master's degree)—all members of SWST—who also instruct in the regular undergraduate and graduate wood science and technology programs.

The total output of the forest products technician programs now in operation is relatively low, with 5 of the 7 institutions reporting a total of slightly more than 50 graduates in 1968. This compares with the 108 students who received their B.S. degrees in 1967 on completion of the wood science and technology programs at the 16 U.S. colleges and universities offering such instruction in that year. The average number of graduates per institution was thus somewhat higher for the technician-training courses (10) in 1968 than for the baccalaureate programs (7) in 1967. Over the most recent five-year period for which such statistics are available (1963–1967), an average of 95 B.S. degrees in wood tech-

nology were awarded annually, for an average of about 6 per institution. It is probably a fair assumption that, over the next decade, forest (or wood) products technicians will be graduated in somewhat greater numbers than professional wood scientists and technologists.

It is noteworthy that the Society of American Foresters has, at long last, given definite recognition to the technician level of education, through the appointment of an active Committee on the Training of Forest Technicians. This group has concerned itself with various aspects of the subject, including qualifications and role of technicians, nature of their duties and responsibilities, employment opportunities and demands, program guidelines, and capital investment and operating costs. The initial progress report of the Committee was published in the July 1967 issue of the *Journal of Forestry*, with a second followup paper by the chairman in 1968. The Committee has plans for presenting to the SAF Council a recommendation for establishing minimum guidelines for forest technician training programs.

This action of the Society of American Foresters raises the question of a parallel interest on the part of the Society of Wood Science and Technology in its own field of endeavor. In fact, the chairman of the SAF Committee has expressed the hope that SWST may become interested in the development of standards for guidance of technician training in the forest products field, and in studying the various impacts of such training on baccalaureate and graduate programs in wood science and technology. If SWST is looking for promising worlds to conquer, I suggest this project as one worthy of its best talents. It could well be of marked mutual benefit to those involved in both levels of education.