

At the next N.A.C.T.A. Convention (March 20-22, 1958) Dr. E. B. Knight, Tennessee Polytechnic Institute, Cookeville, Tennessee, was elected chairman of the Publications Committee. Dr. Knight edited the NACTA NEWSLETTER for two years, and in 1961, Dr. John A. Wright, Louisiana Polytechnic Institute, Ruston, Louisiana, became the new editor. An article on the return of Dr. Wright had this comment, "Dr. John A. Wright of Louisiana Tech is returning to active teaching duties after a leave of absence which permitted him to complete his Ph.D. at Louisiana State University. Dr. Wright will be well remembered by veteran N.A.C.T.A. members as the initial Editor of the NACTA NEWSLETTER . . . The present Editor predicts that under the capable hand of Dr. Wright the JOURNAL will show constant improvement."<sup>5</sup>

In order to finance some of the early issues of the NACTA NEWSLETTER and JOURNAL, various members prevailed upon commercial concerns and private individuals to underwrite an issue. Many companies and some individuals responded, enabling the JOURNAL to remain current on its obligations. For those donations, the N.A.C.T.A. is deeply grateful.

At the business meeting of the Fourth Annual Con-

ference of N.A.C.T.A., the Publications Committee made six proposals to drastically change the format of the NEWSLETTER and to put it on a more businesslike basis. "Among other things it was pretty generally agreed that the name NEWSLETTER should be discontinued and replaced by JOURNAL. It was moved by Dr. Schwengerdt, seconded by Mr. Wolford, that these proposals be accepted and the Publications Committee given the responsibility of carrying them out. The motion prevailed.<sup>6</sup> Beginning with Volume II, Number 1, the publication has been the JOURNAL OF THE NACTA. It has been published quarterly since that time. Dr. Wright served as editor for fifteen years and the JOURNAL did indeed increase in "constant improvement" and has become the only scientific publication dedicated wholly to the improvement of the teaching of agriculture.

In 1972, Dr. Wright was granted a \$300 stipend, subject to annual review and a life membership to N.A.C.T.A. He has an article in the JOURNAL entitled "A History of NACTA JOURNAL."<sup>7</sup>

Jack Everly, University of Illinois, Urbana, Illinois, was named associate editor in 1971 and became editor with the March issue 1975. The JOURNAL has been enlarged and still further improved under his leadership.

## Academic-Career Counselling In Agriculture

### Abstract

*A chart that shows the interrelationships among majors, with regard to employment opportunities, helps students in the B.Sc. program at the Ontario Agricultural College resolve their academic and professional objectives.*

G. M. Jenkinson

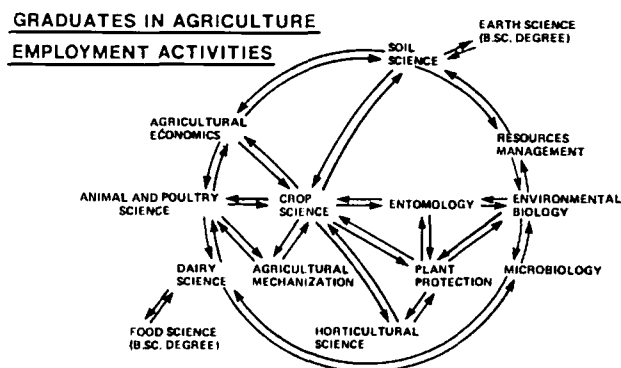
Students in agriculture are often perplexed and confused by the array of specializations and/or majors available to them in a 4 year agricultural science program. Some employment opportunities are specifically available to graduates of a particular major. Other employers are quite prepared to hire graduates from a variety of different majors or specializations.

On the chart entitled "Graduates in Agriculture - Employment Activities" each major in agriculture at the Ontario Agricultural College, University of Guelph, is shown to be "in equilibrium" with those other majors in which there is an employment interaction. Majors are "in equilibrium" if there is a significant number of employment opportunities in which graduates from both majors compete equally. For example, agricultural pesticide companies will employ, on an equal basis, graduates from Plant Protection, Entomology, and Crop Science. Food and/or dairy processing firms will employ gradu-

ates in Microbiology or Dairy Science. Some Dairy Science graduates are engaged for the same positions as are Animal and Poultry Science graduates. The extension service will employ agricultural representatives (county agents) whether they be graduates of Crop Science, Soil Science, or Agricultural Economics.

I have found this chart useful in counselling students, particularly freshmen who are undecided on their selection of a major. By being able to visualize the interactions of various majors, students are often much more at ease with their indecision. Some students find it difficult to choose between Crop Science and Animal Science. This chart suggests that, for some career opportunities, the choice is of no significance in relation to employment opportunities. Similarly there is no reason to be concerned in deciding between Crop Science, Horticulture, and Plant Protection from an employment viewpoint.

Other students may be considering majors that are unrelated. Resources Management or Environmental



Jenkinson is assistant professor in the Office of the Dean, University of Guelph Ontario Agricultural College, Ontario Canada, N1G 2W1.

Biology may be of interest to a student who is also thinking about Animal Science. Again, the chart enables the student to visualize the differences among majors and the degree to which they are related or unrelated.

Our faculty have always considered it desirable to have each major open to any student in agriculture. We have never subscribed to the view that there should be quotas and restrictions on some majors but not others. In some majors we now face increasing numbers of students and the overcrowding of facilities beyond capacity. It is our desire to advise rather than force students to enter majors that will fulfill their objectives and, at the same time, balance student enrollment in the various majors in the agricultural science program.

Table 1. Selected Employment Activities Compared To Major - 1977 Graduating Class in Agriculture

Major <sup>1</sup>	Employment Activity					
	Farming	Ag. Ext.	Chem Fert/	Feed	Food Proc	Bank/Credit
Agricultural Economics	X	X		X		X
Animal and Poultry Science	X	X		X		X
Dairy Science		X	X		X	
Crop Science	X	X	X	X		X
Soil Science	X	X	X			
Horticultural Science	X	X	X			
Entomology		X	X			
Plant Protection		X	X			
Environmental Biology			X		X	
Resources Management			X			
Microbiology			X		X	

<sup>1</sup>no graduates in Agricultural Mechanization in 1977.

Table 1 illustrates some of the types of employment activities in which graduates in 1977 are presently engaged. These employment activities are tabulated with reference to the majors from which students graduated. This table illustrates in detail the basis for setting majors "in equilibrium." The chart presents the information with much more visual impact than does the table.

### Summary

Students in agriculture often have difficulties in visualizing the interrelationships that exist among various majors as they relate to employment opportunities. A chart outlining the interrelationships among the majors in the B.Sc. (Agr.) program at the Ontario Agricultural College has proven extremely useful in advising students and helping them resolve their academic and professional objectives.

# PLATO in Forestry

Dieter R. Pelz and  
Donald J. Ware

### Abstract

*PLATO is a computer based education system that provides individualized student instruction. Presently more than 4000 lessons in over 100 different subject areas are available. The PLATO computer system is being used for instruction in several forestry courses. Forestry lessons include introduction to forestry, tree identification, forest inventory methods, and THREPS, a 3-P sampling simulator. Potential applications in forestry are in college education, training of field foresters, and public information and education.*

Several computer systems have been developed that provide a unique learning environment for students. The PLATO system (Programmed Logic for Automatic Teaching Operations) was developed at the University of Illinois.<sup>1</sup> Applications of PLATO to various areas have been reported by Bitzer et al [2], Hyatt et al [5], Grossman-Walter [4], and Smith-Sherwood [8]. This paper describes the present use of the PLATO system in forestry education.

The computer system is based on a central large scale computer with terminals at various locations. The central computer is a Control Data Corporation Cyber series computer with 6500 60-bit words of central memory [10]. Ten peripheral processing units, two central processing units, and several disk storage units complement the system. Finished course lessons are permanently on the disks. PLATO terminals consist of keyboard, a touch sensitive plasma panel, and input/output devices, such as a microfiche selector for slide viewing and an audio device for instant playback of prerecorded messages [9].

### PLATO Lessons

Lessons must be programmed in TUTOR, a specially developed language for PLATO. It can be learned easily so that instructors can program their own lesson materials. Manuals for beginners and advanced programmers are available [3], [7].

Presently there are more than 4000 hours of instructional materials available in more than 100 different subject areas [6]. In forestry several courses are using the PLATO system; for others lessons are being developed presently.

Completed PLATO lessons in forestry are Tree Identification and Introduction to Forestry. Subject areas under development include forest inventory methods, and three-P sampling simulation. Planned are

*Pelz is Assistant Professor of Forest Biometrics and Ware a student in Forestry at the University of Illinois, Urbana.*

*1) The PLATO system was developed and is administered by CERL-the Computer based Education Research Laboratory, Donald L. Bitzer, Director, at the University of Illinois, Urbana.*