



G. W. Bird
1974

I. INTRODUCTION

A. Departmental Objectives

The years 1963-1973 represent a tremendous growth period for the Department of Entomology. The faculty more than doubled in size, budgets for teaching, research and extension grew from about \$187,000 to just over a million dollars (state, federal and extramural funds), and facilities and equipment improved immensely. It was a most active period for the faculty as many new projects and programs were initiated, and the faculty regardless of assignment or responsibility worked extremely hard to establish a disciplinary base from which to conduct contemporary and progressive programs, to recruit dollars from which to operate, and to solve a multitude of problems concerning the agriculture and agribusiness sectors of Michigan's economy. As a result, the Department has gained the solid respect of its clientele and audience and is now in a position to consider consolidation of programs, particularly research and extension, and in-depth and innovative approaches for the future.

The Department is now undergoing an internal as well as external review, but since the Department Chairman selection process absorbed much of the faculty's time during the period of July, 1973 to March, 1974 and long range plans could not be laid under an Acting Chairman regime, the Department's plans and objectives for the next several years to come are not firmly set at this point. While the review of the Department by external reviewers will take place on April 18 and 19, 1974, the internal review will continue until about mid-summer.

In the next few years, the faculty believes that increased attention must be paid to the research function of the Department. While the faculty have been productive in research, the research has been characteristically short term and of a problem-solving nature. There is a definite need for increased emphasis of more substantive and longer termed projects than have been possible during the rapid growth and expansion years. Problem-solving projects will continue but more emphasis will be placed on the more substantive research projects.

During the chairman selection process, the faculty agreed that the unifying research emphasis should be pest management - the regulation of populations through utilization of biotic and abiotic principles. Major strides have already been made in this important area and several new participants and projects are in the development stages. The faculty are committed to using pests of importance to Michigan and/or the North Central region as study subjects. The program will involve basic studies of the several biotic and abiotic components necessary for pest management systems (i.e., the pest, the host, the natural control agent, the pesticide, the environment and).

Extension programs will continue along traditional as well as contemporary lines. While major commitments must be placed with agricultural problems, increased attention must be directed to the urban resident. The extension faculty are most interested in increasing their effectiveness through improved means of communication or information retrieval and delivery. We are convinced that much of the control recommendation and pest alert information can be computer generated.

Considerable progress along this line has already been made. The faculty are not content to rest on their excellent extension reputation for only a small portion of the populus is now being reached. With an assist from the computer, we are convinced that expanded information delivery can be achieved with modest increases in resources.

The Department's instructional program is now reaching more than twice the number of students that were reached a decade ago, and increases have occurred in the last three years. Yet the faculty believe that a curriculum revision is needed in the near future. The faculty are committed to offering courses that relate traditional and basic entomological principles as well as those that relate entomological material to societal problems, concerns and interests. In this environmental awareness period, there is no doubt that our potential audience for entomological instruction has expanded immensely; at least one new course will be developed to meet that audience of students concerned about the impact of insects and pesticides on their lives.

Graduate training has been an integral part of our instructional program and will continue to be so. The faculty are committed to providing our graduate students with the most thorough, relevant and progressive education possible.

Overall, the Department will continue its quest for balance and unparalleled excellence in its areas of responsibility. It is definitely a Department that is not satisfied with the status quo and can be looked to for leadership in the discipline and profession.

Table 1:1 Budget summary, Department of Entomology, 1969-74.

	1969-70	1970-71	1971-72	1972-73	1973-74
Nat. Sci. (Gen. Fund)	\$171,105	\$175,363	\$172,798	\$177,361	\$189,243
Agric. Exp. Sta.	323,045	374,154	416,798	435,476	446,257
Coop. Ext. Service	145,396	167,574	160,851	167,574	176,216
Inst. Agric. Techn.	-	-	-	11,071	11,541
Total	\$639,546	\$717,091	\$750,447	\$791,482	\$823,257

Table 1:2 College of Natural Science (General Fund) Budget, Department of Entomology, 1969-74.

	1969-70	1970-71	1971-72	1972-73	1973-74
Salaries	\$130,633	\$136,257 ^a	\$133,017 ^b	\$147,636	\$158,418
Faculty	(106,305)	(114,198)	(98,661)	(123,276)	(120,164)
Grad. Ass't.	(15,040)	(10,039)	(10,039)	(10,467)	(9,882)
Technical	(0)	(1,139)	(13,356)	(1,325)	(15,050)
Clerical	(9,288)	(10,881)	(10,961)	(12,568)	(13,322)
Supplies & Services	17,020	17,020	17,020	6,384	6,384
Labor	14,422	13,056	13,731	18,341	19,441
Equipment	9,030	9,030	9,030	5,000	5,000
Total	\$171,105	\$175,363 ^a	\$172,798 ^b	\$177,361 ^c	\$189,243

^aincluded general 3% base budget reduction (\$5,424).

^bincluded general 2% base budget reduction (\$3,526).

^cincluded transfer of \$11,071 to Institute of Agriculture Technology Budget, Department of Entomology.

Table 1:10. Budgetary alignments of faculty, Department of Entomology, 1973-1975.

Faculty Member	1973-74				1974-75			
	Natural Science	Expt.	Ext.	Other	Natural Science	Expt.	Ext.	Other
<u>REGULAR FACULTY</u>								
Bath, J. E.	50	50	0		50	25	25	
Bird, G. W.	30	0	70		20	20	60	
*Brown, A.W.A.	7	0	0	93 ^a	7	0	0	93 ^a
Cress, D. C.	0	0	100		0	0	100	
Croft, B. A.	0	100	0		0	100	0	
*Fischer, R. L.	100	0	0		100	0	0	
Haynes, D. L.	50	50	0		50	50	0	
Hooper, G. R.	60	40	0		60	40	0	
*Hoopingarner, R. A.	100	0	0		75	25	0	
Howitt, A. J.	0	100	0		0	100	0	
Knierim, J. A.	0	100	0		0	100	0	
Leavitt, R.	0	100	0		0	75	25	
Martin, E. C.	40	30	30		25	25	50	
Newson, H. D.	45	0	0	55 ^b	0	35	20	45 ^b
Ruppel, R. F.	0	70	30		0	70	30	
Sauer, R. J.	0	0	100		20	0	80	
Stehr, F. W.	100	0	0		75	25	0	
Thompson, W. W.	0	0	100					
Tummala, R. L.	0	60	0	40 ^c	0	60	0	40 ^c
Wallner, W. E.	0	0	100		0	40	60	
Wells, A. L.	10	90	0		10	90	0	
Zabik, M. J.	0	20	80		30	70	0	
(Aquatic-Rec. Entomologist) ^d					50	50	0	
(Fruit Entomologist) ^d					0	100	0	
(Insect Biochemist) ^d					50	50	0	
(Pesticide Coordinator) ^e					0	0	100	
<u>ASSOCIATE FACULTY</u>								
Connin, R. V.								U.S.D.A. Cereal Leaf Beetle Program
Webster, J. A.								U.S.D.A. Cereal Leaf Beetle Program
Wellso, S. G.								U.S.D.A. Cereal Leaf Beetle Program
Wilson, L. F.								(Joint w/Forestry, U.S. Forest Service)

Budgetary alignments of faculty, Department of Entomology continued

JOINT APPOINTMENT FACULTY-PRIMARY RESPONSIBILITIES IN OTHER UNITS

Cummins, K. W. (Kellogg Biological Station)
 Taboada, O. (Department of Natural Science)

FACULTY WITH NON-DEPARTMENT ADMINISTRATIVE POSITIONS

Butcher, J. W. (Associate Dean, College of Natural Science)
 Guyer, G. E. (Director, Cooperative Extension Service)
 King, H. L. (Assistant Provost)
 Laughlin, C. W. (Assistant Director, Resident Instruction, College
 of Agriculture and Natural Resources)
 Hoffman, J. R. (Assistant Dean, College of Natural Science)

^aProvost's Office

^bCollege of Human Medicine

^cDepartment of Electrical Engineering and Systems Sciences

^dApproved position to be filled

^eProposed position to be filled

- A. W. A. Brown, John A. Hannah Distinguished Professor, Professor of Entomology, and Director of Pesticide Research Center, Ph.D. University of Toronto 1936; Department Position 7% Natural Science: 93% Provost's Office, current and 1974-75.

As John A. Hannah Distinguished Professor, assigned to the Department of Entomology, to make as great a contribution as possible to the activities of the Department and of the University, including the Gull Lake Biological Station. This involves giving a course in Insect Toxicology in the department, part of a course in Environments of the Future open to the entire University, and a Summer course in Ecology of Pesticides at the Biological Station. Seminars are also given in the Department of Entomology and in other departments, as well as in the Agricultural Experiment Station. During my tenure, a certain number of graduate students will be trained, at least one postdoctoral will be directed, and one visiting professor will be incorporated into the toxicological research program.

As Director of the Pesticide Research Center, primarily to promote an esprit-de-corps among the scientists working there, and to ensure that maximum opportunities are taken of their expertise. Under the first heading, interdisciplinary and other seminars are held frequently, along with staff meetings but only when really necessary. An effort is made to know what research each staff member is doing, and to promote that knowledge among all staff members. Administrative matters are managed with the help of the Associate Director, the department secretary, and the Chairman of Entomology. Secondly, to develop a research program that fills a gap and rounds out the activities of the Pesticide Research Center. This is done by means of a project on the biochemistry and genetics of arthropod resistance to new insecticides; or portion of this, dealing with the resistance hazard of juvenile-hormone mimics, is up for national funding. Thirdly, to cooperate with other members of the P.R.C. in developing research programs; a project proposal on the evaluation of side effects from insecticides liable to be used for forest spraying in Michigan and elsewhere is being put forward for funding by granting agencies.

2. Services

The Department is administratively responsible for the operation of the Pesticide Research Center and three service laboratories - the Pesticide Analytical Laboratory, the Electron Optics Laboratory, and the Nematode Laboratory. The Pesticide Research Center involves faculty, staff, and students from five departments in the Colleges of Natural Science and Agriculture and Natural Resources, and has as its mission fundamental research on plant and animal protection against pests. The service laboratories are primarily for the benefit of students and faculty on this campus but also serve extension personnel outstate.

THE PESTICIDE RESEARCH CENTER

Director - A.W.A. Brown
Assoc. Director - Matthew Zabik

The MSU Pesticide Research Center was conceived out of recognition of the need for interaction and coordination among investigators in diverse disciplines. The need for a sustaining competence in the rapidly changing instrumentation and methodology of pesticide analysis was also recognized.

From the moment of its conception, the Pesticide Research Center has served to catalyze fulfillment of both needs. The cooperative effort in its planning and promotion carried over directly into the development and initiation of research programs which it would implement. During the five-year period from conception to completion of the Center in December, 1969, pesticide research at MSU has evolved from a group of mainly independent investigations into a wide-ranging group of interdisciplinary programs in a total environment context.

The Center was financed with funds from the U.S. Public Health Service and the U.S. Department of Agriculture. These were matched by appropriations from the State of Michigan to Michigan State University and the Michigan Agricultural Experiment Station.

The structure includes 18,000 sq. ft. of greenhouse space, a 6,000 sq. ft. controlled environment room and 39,000 sq. ft. of laboratory and office space.