

THE
AGRICULTURE
BUILDING

UNIVERSITY OF MISSOURI, COLUMBIA, MISSOURI




DEDICATION,
MAY 4, 1961



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PROGRAM

Thursday afternoon, May 4, 1961

2:00 o'clock, Jesse Auditorium

President Elmer Ellis

Presiding

Invocation

Dean Thomas R. ShROUT

Address

*Research in Biological Sciences
Related to Agriculture*

Dr. Ernest M. Allen

*Associate Director
National Institutes of Health*

* * *

Presentation of New Building

*Honorable John M. Dalton
Governor of the State of Missouri*

Acceptance of Building

*James A. Finch, Jr.
President, Board of Curators
University of Missouri*

Introduction of Distinguished Guests

Elmer R. Kiehl, Dean, College of Agriculture

Reception Agriculture Building

ADDITION TO AGRICULTURAL BUILDING

AUTHORIZED BY THE
68TH GENERAL ASSEMBLY
PHIL. M. DONNELLY
GOVERNOR

ERECTED 1958-1960

JAMES T. BLAIR, JR.
GOVERNOR

BOARD OF CURATORS

JAMES A. FINCH, JR.	PRESIDENT
LESTER E. COX	FRED V. HEINKEL
J. A. DAGGS	RANDALE JR. KITT
BOYD EWING	ROBERT NEILL
OLIVER B. FERGUSON	MRS. BYRON T. SHUTZ

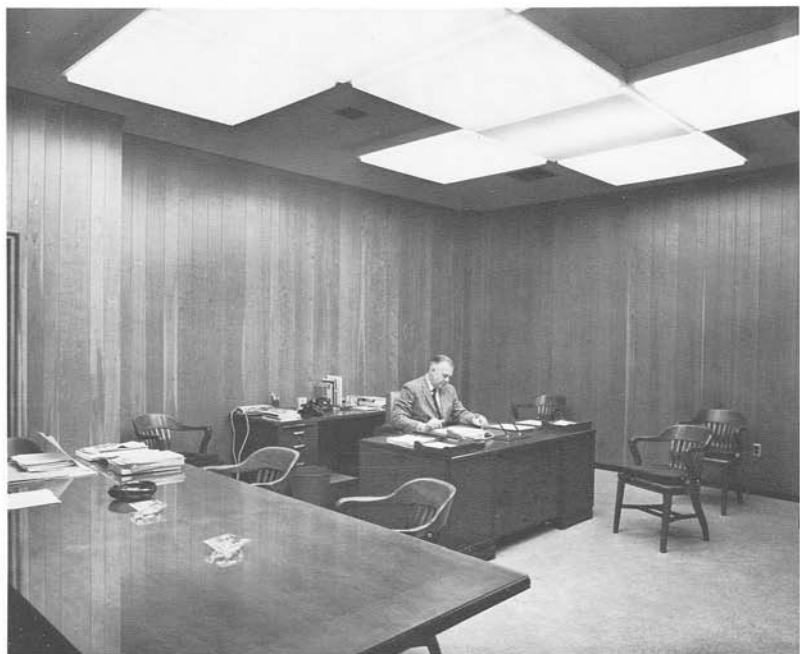
ELMER ELLIS
PRESIDENT OF THE UNIVERSITY

JOHN H. LONGWELL
DEAN OF THE FACULTY

SAMUEL B. SHIRKY
ASSOCIATE DEAN OF THE FACULTY

GENTRY AND VOSKAMP ARCHITECTS

JOHN EPPLE CONSTRUCTION COMPANY	GENERAL CONTRACTOR
WATKIN AND COMPANY	MECHANICAL CONTRACTOR
EVANS ELECTRICAL CONSTRUCTION COMPANY	ELECTRICAL CONTRACTOR



Dean Elmer R. Kiehl



Dean Elmer R. Kiehl
Dean John H. Longwell
Dean Sam B. Shirky

INFORMATION ABOUT THE AGRICULTURE BUILDING

Construction of the building was begun in November, 1958, and was completed in June, 1960. The financing of the building was the result of a state-wide bond issue under the administration of Governor Donnelly.

The structure was planned and begun under the University Administration of Dr. Elmer Ellis, with Dr. John H. Longwell, Dean of the College of Agriculture, and the following as members of the Board of Curators: James A. Finch, Jr., Lester E. Cox, J. A. Daggs, Boyd Ewing, Oliver B. Ferguson, Fred V. Heinkel, Randall R. Kitt, Robert Neill, and Mrs. Byron Shutz. When the building was completed the Board of Curators consisted of Boyd Ewing, Oliver B. Ferguson, Randall R. Kitt, Lester E.

Cox, Doyle Patterson, J. A. Daggs, Robert Neill, Henry Andrae, and James T. Finch.

The building has 90,000 square feet of floor, which is adequately spaced to accommodate 32 laboratories, five classrooms, and 125 individual offices. More than 1,000 students and visitors make use of the building's facilities each day.

The structure is the home of the School of Forestry, the Departments of Horticulture, entomology, Fertilizer Control, the offices of the staff of the Agricultural Editor, and the administrative offices.

The exterior of the building is constructed of shot-sawn Indiana limestone with Texolite interior. It is windowless, and fully air-conditioned, automatically heated, cooled, and ventilated.

THE PHILOSOPHY OF ABUNDANCE

This building is one of Agriculture's cradles in its world-wide fight against hunger and want. The architect, the bricklayer, the hewers of stone, and "the carriers of water," had you asked them what they were erecting as this structure took form, no doubt would have answered honestly, "A place to study Agriculture." Their reply would have been only a half-truth.

The President of this university, its Board of Curators, its deans, and planners, when they sat down and discussed how best to spend

money for an agricultural building did not think of just so many classrooms, laboratories, offices, desks, so much research equipment. They saw in their planning what this building when completed would mean to Missouri, and, of course, to the world. They saw a structure, not so much wherein test tubes would rattle in laboratories, nor where professors would counsel ambitious youth, nor where theories in research would be proved or disproved. They saw beyond those things to a hungry world.

They saw a beggar snatching a crust from



a garbage pail in an American slum. They saw in every land malnutrition, the scourge of the ages. They must have seen hunger in all its cruelty, but, happily, in these yet uncompleted laboratories and classrooms, they saw a way to combat it.

To the high calling of dispelling world despair, this building was planned in the minds of men long before it took shape on the architect's board. To what greater task could any building be destined?

The world is now populated with three billion human beings. Every second we bring forth 1.6 new persons on the earth. This means that more than 130,000 new mouths must be fed every 24 hours. In less than a half century, at this tremendous rate, the earth will double its population, and so multiply its problems. Time then will bring into sharper focus the old axiom that "hunger takes no holiday".

This building's sphere of influence is already foreseen. From its research laboratories and classrooms may come another Albrecht, Miller, Mumford, Etheridge, Hogan, Waters, or a Longwell. It would be foolish, though, for man to erect one building and think that thereby he will completely solve the problem which has been with us since world's dawn time. Our effort in that direction here today, though, will not be small, because one building such as this can house many beacon lights symbolized in the works of researchers, scholars, and students.

It is fitting here to recall the words of the Master: "How many loaves have ye?" He took those few pieces of bread and gave thanks, and handed them to his followers. Then finding that they had also some small fishes, these too were blessed and given to the hungry. That day, four thousand were miraculously fed. The hum-

ble Gallilean taught the philosophy of abundance, "And if I send them away fasting to their own houses, they will faint by the way: for divers of them come from far." So that peoples everywhere will not "faint by the way," and that hunger in time shall be a little less with us, these bricks, and stones that we have fashioned into a house have been dedicated in the name of Agriculture, arch foe of world want.

This day, because of this event, belongs not to Missouri, but to the world. This program of dedication stems from humbleness in the face of Agriculture's responsibility. Time alone will determine how well we have made use of that which the architect so wisely planned, the artisans so painstakingly built, and we so humbly dedicated here today. May we find locked here the ark and the covenant of Agriculture. May we ever find here the philosophy of abundance, as against the philosophy of threadbare want; find it in the thoughts and the hearts of men who teach and labor here.

To Agriculture's many friends who have gathered here to make this day one of humble devotion to a significant cause in humanity's name, we express our thanks and gratitude. We wish to thank the many representatives of business, education, and industrial organizations, who by their presence have joined hands with the leaders of agricultural organizations and associations in a common zeal, to the end that what we have envisioned here shall bear fruits on many tomorrows. In going from this service today let us bear in mind that it was vision that erected this building to the service of Agriculture. Let us always be mindful that "Where there is no vision the people perish."

Elmer R. Kiehl

Elmer R. Kiehl
Dean of the Faculty, College of Agriculture
Director of the Agricultural
Experiment Station

ENTOMOLOGY

The Entomology research laboratories occupy the entire south and east ends of the top floor in the new Agricultural Building. At the head of the stairs on the west end of the hall, the first room, called the "dust room" is the smallest of the group and is equipped with exhaust apparatus. Wheat stubble or other objects may be fragmented without filling the air with dust. This room also contains batteries of Berlese funnels used for extracting small insects and mites from leaf litter, soil, and sod.

Adjoining the dust room is the insect rearing laboratory equipped with two walk-in temperature enclosures and several temperature cabinets. This laboratory is devoted primarily to studies of insect nutrition using house crickets

as experimental animals, although various other arthropods are reared here, including stored grain pests, brown recluse spiders and fruit flies.

Opposite the entrance to the rearing laboratory is the insect laboratory equipped with much glassware and delicate instruments, including a centrifuge, balances, and a chromatography unit. Cultures of roaches are maintained as experimental animals.

Opposite the dust room, but adjacent to the physiology laboratory, is the animal parasites laboratory in which studies are in progress on pests of animals such as the face fly and on venomous arthropods such as the brown recluse spider. This laboratory is also the toxico-

logy room and is equipped for carrying on toxicological studies.

The adjoining laboratory is used for studies of insects which attack fruit, vegetable, and ornamental plants. This room is also used for studies in forest entomology, currently concerned with a study of the biology of carpenterworms. The study of the role of fruit insects as vectors of fireblight disease of apples and pears is just starting.

To the east of the fruit insect laboratory is the nematology laboratory. It is equipped with apparatus for recovering nematodes from soil samples and plants, and with photomicrography apparatus. The emphasis at the present time is on studies of root-knot nematodes.

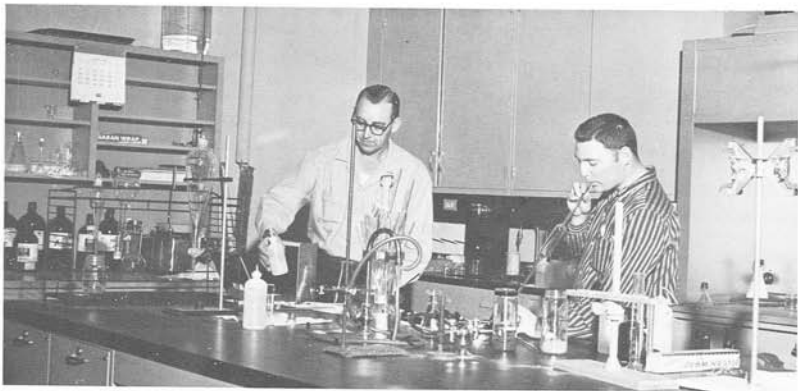
Across the hall to the east is the field crops insects laboratory. Equipment includes an incubator used in rearing various larvae on synthetic diets. The European corn borer, corn earworm, sorghum webworm and spotted alfalfa aphid are among the insects currently being studied.

Next to the field crops insects laboratory is the one designated for studies of forage crop pests. Investigations on grasshopper parasites, and on soybean insects are carried on here. In addition, the room contains electrophoresis equipment used in studies of the proteins in in-



sect "blood" or hemolymph.

Perhaps the largest of all the laboratories is the entomology museum at the head of the stairs on the east end of the building. This is not a museum in the usual sense; it functions more like a library where specialists may study insects and other arthropods in the moderately extensive collections. In addition to housing the collections, this room is devoted to studies of insect identification, taxonomy, and distribution. The collections include insect specimens from all parts of the world, with emphasis on Missouri insects. Collections of mites, spiders, and immature insects are also a part of the exhibit.



FORESTRY

The School of Forestry occupies approximately 23,000 square feet or 25 percent of the building's total floor space. It is located on the first and second floors. Approximately two-thirds of the space is on the first floor and consists of offices and research laboratories. The second floor space includes two teaching laboratories, classrooms, and two laboratories devoted to research.

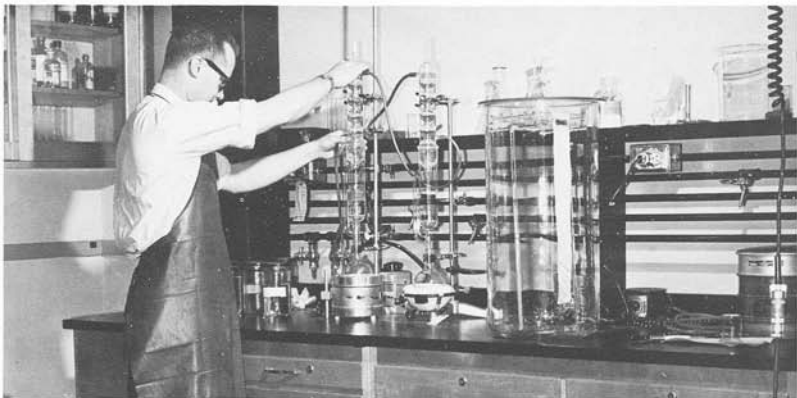
Seven laboratories utilize about 7,500 square feet of space. These laboratories provide facilities for research in tree physiology and ecology, wood technology and products, wood preservation, glues and finishes, and forest pathology. Each laboratory is equipped with specialized equipment to meet the study needs of each field.

Two teaching laboratories are specially designed with storage rooms. One of these laboratories is designed for instruction in wood technology (wood identification and characteristics), pathology, and dendrology (tree identification). The three adjacent storage rooms provide space for all of the laboratory equipment and specimens used in these courses.



The second laboratory is designed for instruction in forest cartography (drafting and mapping), forest mensuration (tree measuring and computations), and photogrammetry (application of aerial photographs). The three storage rooms adjoining this laboratory provide space for housing special equipment used in these courses.

Twenty-four offices on the first floor are used by the staff of the School of Forestry and the Columbia Forest Research Center.



HORTICULTURE

The Offices of the Department of Horticulture are located in the lower level of the Agriculture Building. Each of the staff members has an individual office near the main office, thus providing a close integration of all of the department's activities.

On the main floor are located most of the classrooms used by this department. One classroom has been especially designed for flower arranging and flower store management courses.

The top floor houses two classrooms for landscaping. The larger of these two rooms is devoted to the beginning classes in landscaping. The second provides space for advanced classes and an opportunity for the students to work on their projects at other than class time.

On the top floor are located the research laboratories for the Department of Horticulture. These laboratories have been planned and designed to give the maximum flexibility and use-



ability for tomorrow's, as well as today's, research work. Separate rooms are provided for studies in Food Processing, Microbiology, Bio-assay, and Environment Control. Those operations that create dust, fumes, or a very high temperature, have been isolated from the main laboratories. These facilities make possible the widely recognized teaching and research work of the staff of the Department of Horticulture.



AGRICULTURAL EDITOR'S OFFICE

The Agricultural Editor's Office consists of 19 rooms on the building's first level. This provides office space for nine professional staff members, four secretarial workers, and three student workers.

Members of the Editor's Office are in charge of educational programs in publications, press, radio, and television fields. This office has special facilities for carrying out these programs.

One facility is a sound-proof recording room which is used to make tape-recorded radio transcriptions on agricultural and home economics subjects. These taped recordings are used by Missouri radio stations at no cost to them.

Space is also devoted to a publication work room. This is used for editing and layout work on College of Agriculture, Extension Division, School of Forestry, School of Home Economics



and various departmental publications.

The area includes a work room where television films may be edited and prepared for use by television stations in the state. Space is provided for a duplicating room where press, radio, and television news releases are duplicated for mailing to news outlets throughout the state.



FERTILIZER CONTROL

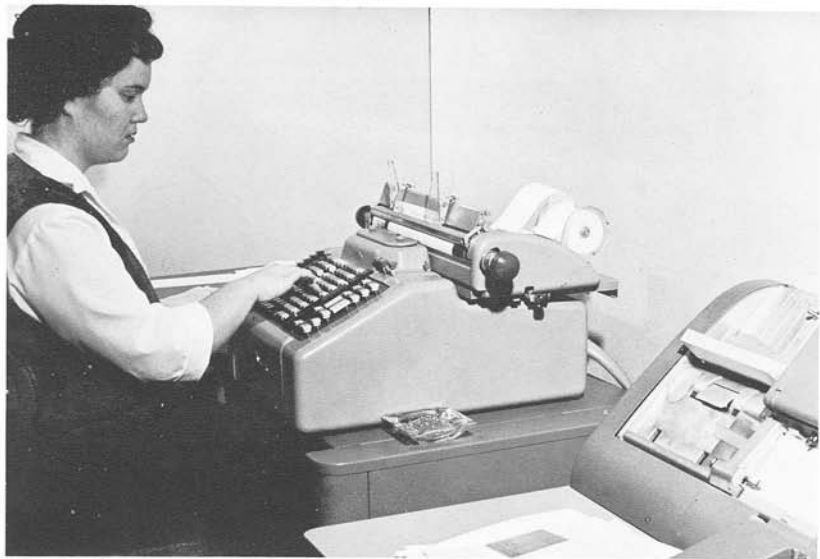
Facilities for this department in the Agriculture Building consist of four offices and a large reception room. Here, in addition to the routine office procedures, invoices are received and data are accumulated covering shipment of every lot of fertilizer sold within the state.

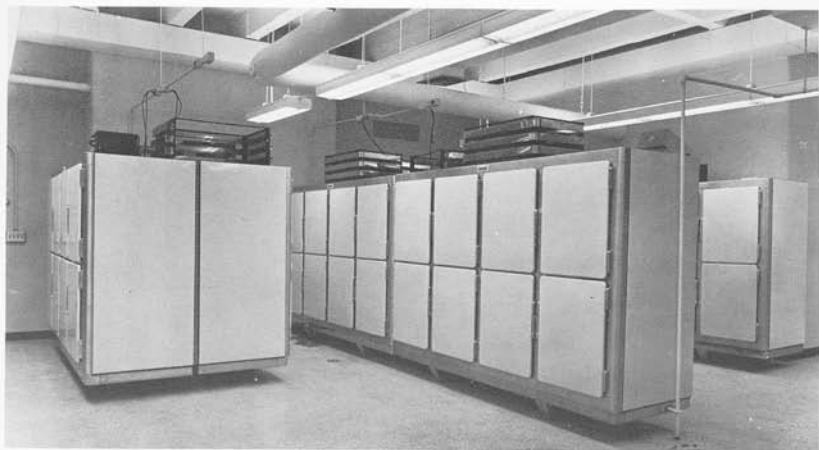
Information from these invoices as to manufacturer, date of shipment, invoice number, county destination, analysis, and amount of fertilizer is entered on a Burroughs Sensimatic posting machine. This machine is simultaneously punched into cards. By this means one person is able to keep a record of more than 250,000 sales of fertilizer each year and prepare an I. B. M. card for each entry. Information taken from invoices can then be sorted and tabulated in the manner desired. With this knowledge, tonnage reports listing the amounts of fer-

tilizer sold by grade and by county can be published semiannually.

The chief function of this department consists of administration of the Missouri Fertilizer Law. The Fertilizer Law is a regulatory statute enforced by the Director of the Missouri Agricultural Experiment Station. Its purpose is to assure that the fertilizer products offered for sale in Missouri meet the standards on which they are sold.

To help accomplish this, inspectors collect samples of fertilizer being offered for sale. Approximately 4,000 samples are collected and analyzed each year. The detailed analysis of these samples is published quarterly and a bulletin is issued annually summarizing all of the activities of the fertilizer control program.





Controlled Temperature Laboratories



Horticulture Research Laboratories



Stenographic Service



Information-Bulletins



North Foyer