

A HISTORY OF THE ILLINOIS STATE ACADEMY OF SCIENCE

PART 2. THE SECOND TWENTY-FIVE YEARS OF THE ACADEMY, 1932—1957

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The second twenty-five years of the Academy began during the Great Depression, continued through World War II, and ended with the launch by the Soviets of Sputnik 1, October 4, 1957. Federal support for science increased greatly following World War II. Among the agencies funding basic research and education in the sciences was the National Science Foundation which was created in 1950. Academies of science benefitted from the greater awareness of the value of science and from the strengthened funding for scientific research and education.

MEMBERS

Membership in the Academy declined during World War II but quickly recovered following the war. The membership exceeded 1,000 during the 1950's.

For over forty years the annual dues remained at \$1. In 1948 the Council voted to increase the annual dues from \$1 to \$2. Life memberships increased from \$20 to \$50. Student memberships were set at \$1 per year in the 1950 constitution but were abolished in the 1957 constitution. Sustaining memberships in the 1950 constitution remained at \$10 per year or more, the same as originally approved in 1941. The dues from sustaining memberships were earmarked for the Junior Academy. The 1957 revised constitution added patron memberships at an annual dues of \$50 or more, the proceeds of which, like the sustaining memberships, went to the Junior Academy.

ANNUAL MEETINGS

The annual meetings continued to be held throughout the war years except for 1945 when the Office of Defense Transportation refused to allow the state meeting scheduled for Bloomington to be held. The Academy held only an executive session on May 5th in Bloomington.

More than 600 people attended the first annual meeting following the war, 1946. In 1947 attendance topped 700 with 112 papers presented in nine regular sections and 31 papers presented in two collegiate sections, Physical and Earth Sciences, and Biological and Social Sciences.

SECTIONS

The 26th annual meeting, 1933, had sections in Agriculture, Anthropology, Botany, Chemistry, Economics, Geography, Geology, Medicine and Public

Health, Physics, Psychology and Education, Zoology, and High School Science and Clubs (Junior Academy).

A Social Science Section was approved by the Council at its November 2, 1940 meeting and held its first meeting in 1941. The Social Science Section and the Psychology and Education Section merged to form the Science Education, Psychology and Social Science Section on November 6, 1954.

A Collegiate Section for undergraduates to present results of their research was authorized by the Council in 1941 and met for the first time in 1942. The Aquatic Biology Section was approved in 1953 and held its first program in 1954.

In 1935 the Council voted to drop the Economics Section because of lack of interest and the Agriculture Section disbanded in 1946. The Medicine and Public Health Section was inactive during the second 25 years of the Academy, and in 1956 a committee was set up to explore the re-establishment of this section. The committee did not find adequate support for this section and in 1957 the committee was discharged.

SYMPOSIA

The practice of the early years of symposia on topics of general interest pretty well disappeared during the second 25 years. The symposia that were held were usually sponsored by sections rather than by the Academy in general.

TRANSACTIONS

The Academy went through lean times its second 25 years. Like Volume 25, Volumes 26-36 of the *Transactions* contained only abstracts of papers presented at the section meetings. Page charges for articles over two pages were imposed, and at the April 30, 1936, Council meeting an editorial fee of \$1 for each paper published in the *Transactions*, except for those given at the general sessions, was approved.

At the November 4, 1943, Council meeting the Council decided that because of the war only one issue per year would be published, no longer would abstracts of technical papers be published, the few papers selected for publication would be published in full, and there would no longer be page charges or editorial fees. From Volume 37, 1944, through Volume 50, 1957, each volume consisted of only one issue. Papers given at section meetings were ranked by the section chairmen and the Publications Committee then decided which would be published.

From 1919 until 1950 the Academy conferred with the State Museum regarding the funds necessary to publish the *Transactions*. These funds were requested as part of the State Museum budget each two years. In 1950, "Little Hoover Commission" set up by Governor Adlai E. Stevenson to investigate government organization and efficiency declared that the "gentlemen's agreement" between the Academy and the State Museum had never been authorized by the Legislature, and until such time as the Civil Administrative Code had been amended to allow such support, all further funding was cut off. Through the efforts of Academy President Percival Robertson, House Bill 631 was passed by the Legislature and approved by Governor Stevenson on July 11, 1951, allowing such expenditure. Chapter 127, Section 58.33 of the Civil Administrative Code authorized the Department of Registration and Education which the State Museum was then under "to cooperate with the Illinois State Academy of Science

and to publish a suitable number of the results of the investigations and research in the field of natural science to the end that the same may be distributed to the interested public."

Dorothy E. Rose of the State Geological Survey edited Volumes 24-29, 1931-1936; Rose also prepared an index to Volumes 1-25 which was published in 1935; Grace Needham Oliver of the State Geological Survey edited Volumes 30-35, 1937-1942; Rose served a second stint as editor of Volumes 36-42, 1943-1949; Jane V. Olson, State Geological Survey, edited Volumes 43-47, 1950-1954; and Harvey I. Fisher of Southern Illinois University edited Volumes 48-52, 1955-1959.

COMMITTEES

The Committee on Ecological Survey was chaired by Arthur G. Vestal, University of Illinois professor of botany, from 1930 to 1936. Part 1 of the Committee's bibliography of the ecology of Illinois containing over 1,400 items and partially annotated was published in the *Transactions*, December 1934.¹ In 1936 Vestal suggested that the Committee on Ecological Survey be discharged since the committee members had been working as individuals and would continue to work that way, with or without a committee on ecology. The Council voted instead to replace the Committee on Ecological Survey by a Committee on Ecological Bibliography since work was still progressing on Part 2 of the bibliography. For many years Vestal continued to add references to a card file in his office but the committee was discharged in 1953 without Part 2 having been published in the *Transactions*.

A subcommittee of the Committee on Conservation was approved in 1935 to study, protect, and preserve anthropological remains in Illinois. This subcommittee was chaired by Fay-Cooper Cole, head of the anthropology department of the University of Chicago. This subcommittee became a full-fledged committee, the Committee on the Conservation of Archaeological and Historic Sites, in 1937. Cole urged that a bill be introduced in the Legislature to require those who planned to excavate any archaeological or historic site in Illinois to be licensed by the State. In 1940 the Committee reported that a licensing law had been drawn up but a licensing agent had not been identified. The State Museum might have been a logical agency to supervise the licensing, but the State Museum was unable to take on the extra work at that time.

In the 1940's and 1950's the Committee on Teacher Training worked on certification standards for Illinois high school science teachers. The Committee in general advocated a stronger science background and fewer education courses for teacher certification.

The Committee on the History of the Illinois State Academy of Science was discharged in 1952 following publication of an article by its chairman, William M. Bailey, on the beginning of the Academy.²

The Committee on Animal Experimentation in Research was established in 1953 at the suggestion of Academy President Wilbur W. Grimm. This Committee actively opposed legislation supported by anti-vivisection groups.

In 1956 Milton D. Thompson, assistant director of the State Museum, reported on errors he had discovered in science educational films used in the state. He was appointed chairman of the committee to study educational films and for

several years thereafter, film reviews, written by members of the committee, appeared in the *Transactions*.

THE ILLINOIS JUNIOR ACADEMY OF SCIENCE

The number of Junior Academy exhibits increased rapidly in the late 1940's and early 1950's. By 1957 there were 910 exhibits at the state meeting, and the Junior Academy had difficulty locating halls that could handle that number of exhibits.

The Junior Academy state meetings featured the exhibits, the presentations of research papers by selected students, speeches by scientists, a banquet, and an invitation to attend the Saturday field trips of the Senior Academy. The Senior Academy schedule by the 1950's included a recess when members could view the Junior Academy exhibits and talk with the students about their research. Members of the Senior Academy also served as judges for the Junior Academy exhibits.

Science Club Service was a publication started in the early 1930's to serve Junior Academy officials and affiliated clubs not only in Illinois but also in other states. It was edited by Louis A. Astell and financed by the Illinois Senior and Junior Academies, by other state academies of science, and beginning in 1939, by the Extension Division of the University of Illinois. Also in 1939, the title of the publication changed to *Science Aids Service*. When Astell left the University in the early 1940's, *Science Aids Service* ceased. It was succeeded in 1944 by *Illinois Junior Science Leaflet*, published cooperatively by the Division of University Extension of the University of Illinois and the Illinois Junior Academy of Science. The Junior Academy also published a yearbook starting in 1945 with photos of students and their exhibits and short summaries of their research.

Radio broadcasts sponsored by the Junior Academy began in the early 1930's and continued into the 1940's. The speakers included scientists and members of science clubs which were affiliated with the Junior Academy.

In the mid-1950's the Academy began to cooperate with the Illinois Society for Medical Research and other state medical and veterinary organizations in sponsoring an essay contest on the value of animal experimentation in research.

SCIENCE TALENT SEARCH

The Westinghouse Science Talent Search, administered by Science Service through Science Clubs of America, was created to recognize high school seniors with research potential and encourage their further education by the awarding of scholarships. The criteria for selection were a science aptitude examination, rank in class, teacher recommendations, and a paper. The first national winners and national honorable mentions were selected in 1942.

The Academy began to cooperate with Science Talent Search in 1947. Two Senior Academy committees were appointed in connection with the Science Talent Search, the Science Talent Search Selection Committee and Science Talent Search Scholarships. The first selected Illinois honorable mentions in addition to those selected nationally, and the second tried to secure scholarships for those recognized nationally and by Illinois. By 1948 the two committees were combined as the Science Talent Committee with Lyell J. Thomas as chairman.

Following the death of Frank H. Reed, at one time the chairman of the Science Talent Committee, in 1957, a memorial was set up in his name and an

award was made each year starting in 1959 to the writer of the best report in the Science Talent Search.

AAAS RESEARCH GRANTS

From 1925 to 1935, members of the Academy who were also members of the American Association for the Advancement of Science had 50 cents of their dues to AAAS returned to Illinois to help support the Academy. From 1935 on AAAS restricted the use of these funds to the support of research, preferably at small institutions where researchers were not as likely to be able to attract large grants. An Academy committee, the Committee on Research Grants, administered the program and decided to whom the grants should be awarded. The first AAAS research grants were awarded for 1935-36 to Arthur G. Vestal of the University of Illinois for the completion of the ecological bibliography of Illinois and to Frank C. Baker of the Natural History Survey for his study of land and freshwater gastropods.

UNDERGRADUATE RESEARCH CONFERENCE

In 1954 and 1955 the Council discussed trying to stimulate undergraduate research by bringing together experienced and inexperienced researchers. Garrett W. Thiessen, past president of the Academy, was appointed chairman of the State Research Conference Committee in May, 1955, to plan such a conference. The Undergraduate Research Conference, funded by a National Science Foundation grant of \$7,000, was held at the University of Illinois, Urbana, February 22-23, 1957, with 153 people in attendance from 39 colleges and universities. The conference, called "Experiment in Experimentation", inspired some research, but the planned supplement to the *Transactions* containing the results of this research was found to be unnecessary.

RESOLUTIONS

Some of the issues which the Academy supported in its second 25 years were the commission plan for the Illinois Department of Conservation, the use of unwanted dogs and cats for medical research, construction of a State Museum building, protection of Volo Bog, and professional training for Department of Conservation employees. The Academy opposed the transferring of public lands to private interests (specifically the land in Olympic National Park), the transferring of 3,000 acres of Yellowstone Park to the state of Montana, the issuance of temporary teaching certificates, and the wasteful loss of gas from oil fields.

SUMMARY

The Academy attracted several hundred to its annual meetings during its second 25 years. State funding for the *Transactions* continued after authority had been obtained from the Legislature to include a request for printing of the *Transactions* in the State Museum budget.

The second 25 years was a time of growth in the Junior Academy. The number of exhibits at the annual meeting increased dramatically. A publication aimed at junior academy officials was launched, and radio programs were aired, thus providing more exposure for the Junior Academy. The Senior Academy

began to cooperate with Science Talent Search in identifying and encouraging prospective scientists. Near the end of the second 25 years of the Academy, James W. Neckers, in his presidential address, said in reference to the Junior Academy, "After a number of years of work in this Academy, I have come to the conclusion that this sponsorship in itself justifies the existence of our Senior Academy."³

FOOTNOTES

1. A.G. Vestal, "A bibliography of the ecology of Illinois, part 1," *Trans. Ill. State Acad. Sci.* 27 (1934), pp. 163-261.
2. W.M. Bailey, "The beginning of the Illinois State Academy of Science," *Trans. Ill. State Acad. Sci.* 43 (1950), pp. 24-33.
3. J.W. Neckers, "Scientists—more or less?," *Trans. Ill. State Acad. Sci.* 45 (1952), p. 7.