
THE FIRST TWO DECADES OF THE OKLAHOMA ACADEMY OF SCIENCE¹

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The history of the Oklahoma Academy of Science begins in 1909, as is recounted in an historical discussion in the first volume of its official organ, which was issued in 1920. The historical statement referred to was prepared by C. W. Shannon, at that time Director of the Geological Survey of Oklahoma. Since this volume of the *Proceedings of the Oklahoma Academy of Science* is out of print, it is probably worth while to quote rather copiously from Mr. Shannon's remarks before carrying the history on through the succeeding years. "The Oklahoma Academy of Science was organized Dec. 30-31, 1909 at Oklahoma City. A call issued by H. H. Lane and 20 other members of the faculty of the University of Oklahoma brought together in Oklahoma City, 21 scientists from various State institutions and schools. That the organizing body was a representative one and that the demand for the movement was general, is shown by the list of persons attending from widely separated parts of the State." At this organization meeting, ten papers were presented, a constitution adopted, and officers elected for the following year. The constitution was very simple in character, but it expressed nobleness of purpose on the part of the charter members. Section II reads as follows: "PURPOSE: The purpose of this Academy shall be to stimulate scientific research, to promote fraternal relationship among those engaged in scientific research in Oklahoma, to diffuse among the citizens of the State a knowledge of the various Departments of Science, to investigate and make known the material, educational and other resources of the State and to publish such reports, papers and discussions that may embody the purpose of this Academy." The constitution set up a simple machinery for meetings and made provisions for officials who would carry on the work of the Academy. These officials were a president, two vice-presidents, a secretary, an assistant secretary, a treasurer, and a chief curator and keeper of the archives. The annual meeting was set for the first day following Thanksgiving each year, unless otherwise ordered by the executive council. Eleven by-laws also prescribed the conduct of the meeting.

The first year of the Academy's existence concluded with the annual meeting held on Nov. 25-26 at Science Hall at the University of Oklahoma. Twenty papers were presented and an annual banquet was held as well as the business meeting. At the second meeting, twenty papers were presented. This meeting was held in Edmond, Dec. 1-2, 1911. The third annual meeting

¹At the request of the former Secretary-Treasurer, Dr. O. C. Dermer, for the Executive Council of the Oklahoma Academy of Science, and because the facts regarding the Academy's early history are not now available to many of its members, the writer has prepared this statement. It records the formative events of the first two decades, with the second of which he had intimate experience.

TABLE I
Principal officers of the Oklahoma Academy of Science under the original constitution

Year (s)	President	First Vice Pres.	Second Vice Pres.	Secretary	Treasurer
1909-1910	H. H. Lane	C. E. Sanborn	D. D. Dunkin	F. B. Isely	H. I. Jones
1910-1911	D. W. Ohern	D. D. Dunkin	M. L. Perkins	F. B. Isely	H. I. Jones
1911-1912	S. W. Reaves	C. N. Gould	L. L. Lewis	F. B. Isely	H. I. Jones
1912-1913	C. W. Shannon	?	?	A. F. Reiter	H. H. Lane
1913-1915	C. W. Shannon	G. W. Mukleman	A. G. Vinson	A. F. Reiter	H. H. Lane
1915-1916	C. N. Gould	L. C. Ralford	L. B. Nice	G. K. Stanton	H. H. Lane
1916-1917	L. C. Ralford	M. M. Wickham	A. F. Reiter	L. B. Nice	H. H. Lane
1917-1920	M. F. Reiter	A. F. Reiter	T. C. Carter	L. B. Nice	R. O. Whittenton
1920-1921	A. F. Reiter	J. B. Thoburn	T. C. Carter	L. B. Nice	R. O. Whittenton
1921-1922	J. B. Thoburn	G. Y. Williams	R. O. Whittenton	L. B. Nice	H. L. Dodge
1922-1923	R. O. Whittenton	S. Weidman	W. G. Friedemann	L. B. Nice	H. C. Roys
1923-1924	S. Weidman	J. E. Guberlet	F. G. Brooks	L. B. Nice	J. K. Breitenbecher
1924-1925	C. E. Sanborn	H. L. Dodge	Oscar Ingold	A. Richards	F. W. Padgett

TABLE II
Principal officers of the Oklahoma Academy of Science during its first five years under the second constitution

Year	President	Vice President		Vice President		Secretary-Treasurer	Asst. Secretary-Treasurer
		Section A	Section B	Section C	Section D		
1925	H. L. Dodge	L. B. Nice	C. N. Gould	J. H. Cloud	H. Patterson	A. Richards	F. G. Brooks
1926	J. H. Cloud	L. B. Nice	V. E. Monnett	F. E. Knowles	J. R. Campbell	A. Richards	H. Patterson
1927	C. N. Gould	L. B. Nice	A. Koschmann	F. E. Knowles	J. Dowd	A. Richards	H. Patterson
1928	O. M. Smith	P. V. Beck	H. C. George	C. R. Otto	J. F. Bender	H. Patterson	A. I. Ortenburger
1929	A. Richards	M. Shackelford P. B. Sears	G. A. Waring	J. R. Nielsen	C. H. Kimbrough	H. Patterson	A. I. Ortenburger

was held at Stillwater, Nov. 29, 1912. The fourth was at Phillips University, Nov. 28, 1913. No meeting was held in 1914 for reasons that are not clear. In 1915 the fifth annual meeting was held in Oklahoma City in conjunction with the Science Section of the Oklahoma State Teachers' Association and this plan was repeated for the sixth and seventh meetings in 1916 and 1917 respectively. During the war years of 1918-19 no meetings were held. The eighth annual meeting also was held in Oklahoma City with the Oklahoma Educational Association in 1920. The ninth annual meeting was a combination meeting, one day being joined with the O. E. A. at Oklahoma City, Feb. 12, 1921. Combination meetings again were held in 1922, Feb. 10-11, occurring Friday in Oklahoma City and Saturday in Norman. The eleventh annual meeting, similarly, was held on Feb. 9 in Oklahoma City and Feb. 10, 1923, in Norman at the University of Oklahoma. The 12th annual meeting followed the same plan, being held in Oklahoma City on Feb. 8 and in Norman on Feb. 9, 1924. In 1925, the meeting was limited to one day, Feb. 14, and was held at the University of Oklahoma.

But the meeting in 1925 was the last held under the old plan of organization, for a new constitution was adopted during the following year having an entirely different basis, that of sections for different sciences, which has been continued to the present time. The tables give the list of officers except for two in 1912 and 1913, the names of whom are lost.

It is of some interest to note the list of subjects which were presented by the Presidents of the Academy during its early years as the materials for consideration. The subjects of the early presidential addresses were at least ambitious and displayed a very considerable range of interest on the part of a young academy:

- Inefficiency of Natural Selection—H. H. Lane, 1910;
- Theory of Isostasy—D. W. Ohern, 1911;
- Foundation of Geometry—S. W. Reaves, 1912;
- Development of the Science of Geology—C. W. Shannon, 1913;
- Oklahoma Academy of Science—C. W. Shannon, 1915;
- Archeological Provinces of Oklahoma—J. B. Thoburn (introduced by C. N. Gould), 1916;
- Behavior of Some Closely Related Organic Compounds When Mixed Together—L. C. Raiford, 1917;
- Research in Secondary Schools—A. F. Reiter, 1921;
- The Possibility of the Redemption of the Great Plains from Its Semi-Arid Condition—J. B. Thoburn, 1922;
- The Life of Dr. L. L. Lewis—C. E. Sanborn, 1924.

The leadership in organizing the Academy seems to have fallen upon Dr. H. H. Lane, now Professor of Zoology at the University of Kansas. He was ably assisted by a group of well-known scientific pioneers in Oklahoma, men who contributed materially to the development of the Geological Survey, the University, and other schools of higher education in this State. Some of them still remain active in scientific work in Oklahoma but others have gone to other states. Perhaps the person most continuously active in the development of the Academy during the formative years in addition to Dr. Lane was Dr. L. B. Nice, who served as Secretary longer than any other person. Deserving of special mention in the very early years of the Academy, the contributions of Prof. F. B. Isely, of the University Preparatory School of Tonkawa, Dean A. F. Reiter of Phillips University, and Mr. C. W. Shannon and Dr. C. N. Gould of the Geological Survey were perhaps basic to the future development of the Academy. Most of the founders have either died or removed to other states, and some of the remaining ones have given up active participation in the work of the Academy. Through all the years of the Academy's life the

name of Dr. C. N. Gould is probably the most outstanding for continuous service.

During the early years the membership stabilized at about 100 and means were sought for extending the influence and the importance of the organization. Helpful in this connection was the affiliation with the American Association for the Advancement of Science, which had worked out a scheme for coordinating the scientific societies and academies of the Nation with its own work by affiliating their memberships and permitting local members to become members of the A. A. A. S. upon payment of the dues without the initiation fee, and also had developed a plan of granting a small sum (\$0.50) to the academies for each member who was also a member of the A. A. A. S. This money was used variously by the Oklahoma Academy but at length the policy was developed of setting aside that amount for a research grant.

Perhaps the most important accomplishment of the Academy during its formative years, other than welding the science organizations of the State into one organization, was the initiation of its own publication, the *Proceedings of the Oklahoma Academy of Science*. The first volume of the journal was published in 1920 by the University of Oklahoma in its University Press. President Brooks had agreed to finance the publication from University funds and issue it as a bulletin of the University. His desire to encourage publication of the results of scientific research, especially as it related to this State, led President Brooks to take this step. It was a policy which from some standpoints was exceedingly far-sighted.

It made it possible to exchange publications with other societies, and since the University met the expense of publication, the exchanges were deposited in the University Library, to the development of whose scientific aspects they have contributed materially. The first eight volumes were published by the University out of its own funds, the Academy paying the cost of illustration only. Beginning with Volume IX the cooperation of Oklahoma A. and M. College was enlisted although place of publication for both IX and X remained the University Press. Subsequently for a short while A. and M. College issued the *Proceedings*, but during the depression years both the University Press and the A. and M. College withdrew their assistance and the Academy was forced to limit itself to the publication of brief abstracts of the papers presented at its meetings. During the later twenties, longer and more elaborate papers were published in the *Proceedings* than at other times, a practice which should certainly be continued in the interest of the development of scientific work in Oklahoma.

Volume I of the *Proceedings* was issued in February 1921 and contained records (where it was possible to incorporate them) of the earlier meetings, including copies of the programs of most of them. The programs of the third and fourth meetings were not available for publication at the time and no copies of them have been found since. A large number of the papers presented in the programs had been published elsewhere and some of the earlier had become out of date, but abstracts of 22 papers given prior to the 1920 meeting were included in the first volume. The first volume also contained eight abstracts and one longer paper presented at the meeting in 1920 and five abstracts and one longer paper presented in 1921. It is the writer's opinion that this material was compiled and prepared for publication by Dr. L. B. Nice, the Secretary, and Mr. C. W. Shannon, although the documentary evidence on this point is uncertain.

The policy having been adopted of publishing the *Proceedings*, Volume II was prepared by an editorial committee consisting of H. L. Dodge, Samuel Weidman, and A. Richards, Chairman. For Volume III, the committee consisted of William Schriever, Charles E. Decker, and A. Richards, Chairman. Volume IV was issued by a committee of which Dr. Schriever was Chairman and Dr.

Decker and Dr. A. I. Ortenburger were the other members, Dr. Richards having been elected Secretary of the Academy for the ensuing year.

The first period in the history of the Academy was brought to a close with the publication of Volume IV of the *Proceedings* under the committee just mentioned. Thus the first decade and a half was a formative period during which pioneer scientific conditions and inadequate staff, time, and support prevented the highest type of scientific accomplishment, but nevertheless a time during which the foundations were laid under the guidance primarily of the men at the University of Oklahoma for the erection of a more substantial institution and more influential scientific output of the subsequent years.

The most important forward step taken by the Academy during the second decade of its existence was the revision of its constitution. The old constitution had served for 15 years, but in the meantime the development of the institutions of the State had taken on a much more promising character and it came to be felt that the constitution of the infant Academy was not adequate for carrying on the work of a more mature organization. Consequently at the February meeting of the Academy, in 1925, the Executive Council was instructed to take up the matter of revising and rewriting the constitution of the Academy. The burden of this work fell upon the President and the Secretary, Profs. Dodge and Richards respectively, but the participation of the Executive Council made possible many improvements. It was decided that the constitution should be entirely rewritten, but as a revision of the old organic law, to make it conform to recent practices and experiences. Major changes were made in the sections dealing with membership and its classes, active members and fellows. The most important change of all, however came in the organization of the Academy into sections. According to the major interests of its members, four sections were organized as follows: Section A, for biological sciences, including medicine, agriculture, and other related subjects; Section B, for geological sciences, including geography; Section C, for physical and mathematical sciences, including engineering sciences; and Section D, for social sciences. The officers of the Academy are a president, vice president for each section, a secretary-treasurer and an assistant secretary-treasurer; and these officers comprise the executive council. All are elected annually except the secretary-treasurer whose term of office was set at two years in order to provide for some continuity of policy. Provision was made for a program committee with the secretary as chairman and the vice president, of the several sections as members, and an editor-in-chief was provided for by appointment by the executive council, who with the president should select the other members of the publications board. By-laws were also adopted of which the chief difference from those of the old constitution was in the provision for publications and for the care of exchanges received by the Academy at the hands of a librarian.

The Executive Council anticipated several advantages from dividing the Academy into sections. Chief among them were the opportunities for longer papers and more discussion of the papers at each section. It was felt that more attractive programs would make the members of the Academy desire to extend the activities of their respective sections in securing additional members and in planning for the presentation of the results of their work.

The Executive Council thought it desirable to put these changes into operation immediately and accordingly distributed proposals for the new constitution to the membership with a ballot upon which spaces were provided for a favorable vote or an unfavorable vote on the constitution in its entirety as proposed, or for a favorable vote for it except for certain sections. Since the division of the Academy was thought urgent, members were asked to return their ballots for a count on April 20 of that year. The Executive Council announced that it would regard a favorable vote as authority to conduct the

forthcoming meeting according to the new plan. Tabulation showed that no votes were cast against the constitution and three-fourths of the votes were for it as proposed (with the exception of editorial revision).

Since the annual meeting of the A. A. S. was to be held at Kansas City during the Christmas holidays of 1925, the Executive Council announced that the regular meeting would be held as prescribed by both old and new constitutions on the days following Thanksgiving. Accordingly the annual meeting for 1925-26 was held in Norman immediately following Thanksgiving under the new plan and the new constitution was ratified at that meeting. In the years subsequent to its adoption several amendments have been made to the constitution but in general the plan proposed has been adhered to. Since the Executive Council was authorized to divide the sections into program groups for separate sciences whenever the papers to be presented warranted that division, the plan has been elastic enough to meet all the needs that have arisen, at least in their major features.

The meeting held Nov. 27-28, 1925, the fourteenth annual meeting, marks the beginning of the new era in Academy affairs. The subject of Dr. Homer L. Dodge's Presidential Address, "Research as a State Policy", is cited here in order to show the sharpness of transition from the former plan to the new one. At this meeting, 95 papers and three addresses were given and the roster of the Academy reached the number of 177 members. For the first time the membership can be properly spoken of as representative of the various institutions of the State.

The election of J. H. Cloud, Professor of Physics at the A. and M. College, as President for the year 1926-27 gave opportunity for another important advance in the affairs of the Academy. The meeting of 1926 was held on Nov. 26-27 at the A. and M. College at Stillwater after careful preparation and was signalized by the presentation of 108 papers and three very important addresses. These were: President Cloud's address on "Research and Industry", an address by President Bradford Knapp of the A. and M. College, "The Academy and Oklahoma's Future", and a companion address by President W. B. Bizzell of the University of Oklahoma on "The Academy and the State's Institutions for Advanced Study." The hearty support given the Academy by both President Bizzell and President Knapp was responsible for a very significant increase in membership and in interest in the accomplishments of the Academy. For the first time a large number of faculty members from Oklahoma A. and M. College became members of the Academy and all of the accomplishments of the Academy since that date have felt the impetus given by these significant accessions to membership. From that date the Academy has felt the full force of the support of the A. and M. College as well as of the University. Needless to say, these two institutions contain in their faculties the largest bodies of scientific men in the State. It has therefore been the policy of the Academy since the adoption of the new plan of organization to alternate its meetings between these two institutions primarily, but with occasional visits to other institutions. It is obvious that this policy serves the largest number of members of the Academy, since these two institutions have larger representations than the other institutions in the State. In the opinion of the writer, the policy has justified itself and is one that in all likelihood will be pursued indefinitely. The membership list of the Academy for 1925 is no longer available to the writer, so the exact number of members for this year cannot be indicated in this statement. From that date the membership has been large and representative of the scientific workers of the State.

Subsequent annual meetings held during these first two decades followed the pattern set by the two annual meetings of 1925 and 1926. The new plan of organization fully justified itself by the greatly increased interest in Academy doings and much larger numbers of papers presented on the programs of

sections; and it is not too much to say that the Academy came to be thought of as a real agent of the scientific activities of Oklahoma.

The year 1927 was one of innovations in Academy procedure. Dr. Charles N. Gould, Director of the Oklahoma Geological Survey, was again serving as President of the Academy, having also been President in 1916. On April 22-23, 1927, a spring meeting of the Academy was held at Price's Falls, Falls Creek, in the Arbuckle Mountains six miles south of Davis, Oklahoma. Arrangements had been made for the use of the Baptists' Assembly Grounds, and meals were furnished at the Dining Hall. The program consisted of field trips and camp-fire talks. The field trips were mostly of from one to two hours in duration and had for their objectives firsthand contact with the principal local features of natural interest. George R. Phillips conducted a study trip on trees, A. I. Ortenburger on reptiles, Mrs. M. M. Nice on birds, O. F. Evans on geology, Robert Stratton on flowers, and A. O. Weese on ecology. This new scheme was looked upon as highly successful and the very good attendance has been repeated in subsequent spring meetings, which have been among the most successful ventures the Academy has ever tried. Students as well as more mature scientists have been attracted to these meetings and sometimes their numbers have been very gratifying. The plan was followed every year until 1943 when the restrictions on gasoline consumption made it impracticable to have the meeting which otherwise might have been scheduled. Spring meetings have been held in various parts of the State so that the Academy members have been able to familiarize themselves with most of the types of habitats and the geographical and geological objects of interest in the State.

Another innovation for the year 1927 came in the introduction of an address by a visiting scientist. Dr. Raymond C. Moore, Head of the Geology Department of the University of Kansas, gave a lecture entitled "The Changing World." At the meeting of 1927 the number of members of the Academy had risen to 289. At the meeting 88 papers and four addresses were presented. The meeting of 1928 was held on November 30-31 at Stillwater and a total of 90 papers and three addresses were given. The number of members as reported in Volume IX was 301. For this year, Professor O. M. Smith of Stillwater was the President of the Academy and Dr. Herbert Patterson, the Secretary.

The meeting for 1929 was held November 29-30 at the School of Medicine of the University of Oklahoma in Oklahoma City. This meeting concluded the second decade of the Academy's existence. It was held under the Presidency of A. Richards and Herbert Patterson continued as Secretary. Four brief talks, two addresses, and 159 papers were presented at this meeting. The membership of the Academy at this time reached 357. When it is recalled that Oklahoma had become a state only in 1907 the growth of the Academy since 1909, when 21 members organized the society and ten scientific papers were given, to the figures just quoted for 1929, seems little short of phenomenal.