1987

The University of Nebraska-Lincoln College of Agriculture: The First Century -- Part II The College of Agriculture (Overall)/IANR

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Part II - The College of Agriculture (Overall)/IANR

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Chapter 1. The College of Agriculture/IANR

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Administrators

Principal Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samuel R. Thompson</td>
<td>Professor (Chair of Agriculture) and Dean of the College of Agriculture</td>
<td>1872-1875</td>
</tr>
<tr>
<td>Harvey Culbertson</td>
<td>Superintendent of the Farm and Teacher of Agriculture</td>
<td>1875-1877</td>
</tr>
<tr>
<td>Harvey Culbertson</td>
<td>Acting Professor of Agriculture and Superintendent of the Farm</td>
<td>1878-1881</td>
</tr>
<tr>
<td>Samuel R. Thompson</td>
<td>Professor and Dean of the Industrial College</td>
<td>1881-1884</td>
</tr>
<tr>
<td>Charles E. Bessey</td>
<td>Professor of Botany and Horticulture and Dean of Industrial College</td>
<td>1884-1888</td>
</tr>
<tr>
<td>Lewis E. Hicks</td>
<td>Dean, Industrial College</td>
<td>1888-1890</td>
</tr>
<tr>
<td>J. Sterling Kingsley</td>
<td>Dean, Industrial College</td>
<td>1890-1891</td>
</tr>
<tr>
<td>C. L. Ingersoll</td>
<td>Dean, Industrial College</td>
<td>1891-1895</td>
</tr>
<tr>
<td>Charles E. Bessey</td>
<td>Dean, Industrial College</td>
<td>1895-1908</td>
</tr>
<tr>
<td>Edgar A. Burnett</td>
<td>Dean, Industrial College</td>
<td>1908-1909</td>
</tr>
<tr>
<td>Edgar A. Burnett</td>
<td>Dean, College of Agriculture</td>
<td>1909-1928</td>
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<tr>
<td>William W. Burr</td>
<td>Dean, College of Agriculture</td>
<td>1928-1948</td>
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<td>William V. Lambert</td>
<td>Dean, College of Agriculture</td>
<td>1948-1960</td>
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<tr>
<td>Elvin F. Frolik</td>
<td>Dean, College of Agriculture</td>
<td>1960-1973</td>
</tr>
<tr>
<td>Howard W. Ottoson</td>
<td>Acting Dean, College of Agriculture</td>
<td>1973-1974</td>
</tr>
<tr>
<td>Duane Acker</td>
<td>Vice Chancellor, IANR</td>
<td>1974-1975</td>
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<tr>
<td>Howard W. Ottoson</td>
<td>Acting Vice Chancellor, IANR</td>
<td>1975-1976</td>
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<tr>
<td>Martin A. Massengale</td>
<td>Vice Chancellor, IANR</td>
<td>1976-1981</td>
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<tr>
<td>Howard W. Ottoson</td>
<td>Interim Vice Chancellor, IANR</td>
<td>1981-1982</td>
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<tr>
<td>Roy G. Arnold</td>
<td>Vice Chancellor, IANR</td>
<td>1982-1987</td>
</tr>
<tr>
<td>Edgar A. Burnett</td>
<td>Associate Dean in charge of Agriculture</td>
<td>1901-1908</td>
</tr>
<tr>
<td>William W. Burr</td>
<td>Associate Dean</td>
<td>1927-1928</td>
</tr>
<tr>
<td>David P. McGill</td>
<td>Assistant to the Dean</td>
<td>1963-1970</td>
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<tr>
<td>Franklin E. Eldridge</td>
<td>Associate Dean and Director</td>
<td>1968-1972</td>
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<tr>
<td>David P. McGill</td>
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<td>1970-1974</td>
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<tr>
<td>Roy G. Arnold</td>
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<td>1973</td>
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<tr>
<td>Ted Hartung</td>
<td>Associate Dean and Director</td>
<td>1973-1974</td>
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<td>John L. Adams</td>
<td>Associate Dean and Director</td>
<td>1968-1974</td>
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<td>Howard W. Ottoson</td>
<td>Associate Dean and Director</td>
<td>1968-1974</td>
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<tr>
<td>Clyde C. Noyes</td>
<td>Associate Dean and Director</td>
<td>1973-1974</td>
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<tr>
<td>David P. McGill</td>
<td>Assistant to Vice Chancellor</td>
<td>1974-1984</td>
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<tr>
<td>Charles Koopman</td>
<td>Assistant to Vice Chancellor-Finance and Personnel</td>
<td>1974-1977</td>
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<tr>
<td>Leslie F. Sheffield</td>
<td>Assistant to Vice Chancellor</td>
<td>1975-1983</td>
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<tr>
<td>Alan R. Moeller</td>
<td>Assistant to Vice Chancellor-Finance &amp; Personnel</td>
<td>1977-present</td>
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<tr>
<td>Howard W. Ottoson</td>
<td>Assistant Vice Chancellor</td>
<td>1979-1983</td>
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<tr>
<td>Richard L. Fleming</td>
<td>Assistant to Vice Chancellor</td>
<td>1980-1982</td>
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Other Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Years</th>
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Locations of Principal Administrative Offices on Campus

<table>
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<tr>
<th>Years</th>
<th>Names of Buildings and Locations</th>
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<tr>
<td>1872-1884</td>
<td>(N.A.)</td>
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<tr>
<td>1884-1888</td>
<td>Chemical Laboratory, City Campus</td>
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<tr>
<td>1888-1900</td>
<td>Nebraska Hall, City Campus</td>
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<td>1901-1908</td>
<td>University Hall, City Campus</td>
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<tr>
<td>1908-Mar 31, 1974</td>
<td>Agricultural Hall, East Campus</td>
</tr>
<tr>
<td>Apr 1, 1974-present</td>
<td>Administration Building, City Campus</td>
</tr>
</tbody>
</table>

1As far as we have been able to determine, there was no Dean of the Industrial College appointed until the College had been in existence for four years, which was in 1881.
The Beginning Years, 1869 to 1875

Opening of the University

Two years after Nebraska attained statehood on February 15, 1869, the State Legislature passed, and on the same day the Governor signed, a bill entitled “An Act to Establish the University of Nebraska,” (2, pp 15, 309-312). Although there is evidence of considerable interest in higher education before Nebraska obtained statehood, the overriding reason for establishing a university at this particular time was no doubt the desire to take advantage of the Morrill Land-Grant Act passed by Congress and signed by President Lincoln in 1862.

The Morrill Act provided for a federal grant of 30,000 acres of public land for each senator and representative in Congress. For Nebraska to be able to take advantage of the provisions of this Act, it had only three years after attaining statehood to pass appropriate legislation creating the university, and only two years after that to erect a building and open the university.

The Act (23, p 1) also required that:

“... each State which may take and claim the benefit of this act to the endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts in such manner as the legislatures of the States may respectively prescribe in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.”

Although there have been a number of amendments to the original Act since the original passage, the basic philosophy has been maintained.

Beginnings of the College of Agriculture

Lack of public support. In the early years, prior to and after the University was chartered, the support for a College of Agriculture was not great, to say the least. One cannot help wondering how long it would have taken to establish an agricultural college if it had not been a requirement of the Morrill Act. An attitude which persisted, to some degree, well into the twentieth century was that “book learning” for becoming a farmer was somehow not only not necessary but actually detrimental.

For example, it was stated in the \textit{Nebraska City News} (of which Milton W. Reynolds was editor) on March 12, 1859:

“... one of the most visionary, impractical, unnecessary and useless schemes for the political self-

aggrandizement that was ever thought of, is this of building agricultural colleges all over the country. They are a sinecure, perfectly useless, absolutely detrimental. We want the sturdy bone and sinew, the strong arms and stout beard\footnote{Commonly known as the Charter of the University of Nebraska, ratified in the State Constitution in 1875.}, to cultivate our soil, not gentlemen farmers, kid-gloved, cologne-scented and pampered gentry, with a smattering of science — with a strong compounded laziness. Agricultural colleges have been tried and have resulted in miserable ... failures.”

Inclusion in the Charter. The Act of 1869 provided that the University was to consist of six colleges — 1) the College of Ancient and Modern Literature, Mathematics and the Natural Sciences; 2) the College of Agriculture; 3) the College of Law; 4) the College of Medicine; 5) the College of Practical Science, Civil Engineering and Mechanics; and 6) the College of Fine Arts\footnote{Today, one would probably say “macho”}. The establishment of the College of Fine Arts was to be delayed until income from the University’s endowment reached $100,000 (2, p 310).

In the College of Agriculture there were to be chairs of applied chemistry, botany, agriculture, horticulture, meteorology and climatology, and veterinary surgery. In addition, the Act provided for “... two sections of any agricultural land or saline land ... to be set aside as a model farm, under the direction of a superintendent.”

The first building had been built and the University opened its doors to students in September 1871 with only one college in existence — Ancient and Modern Languages, Mathematics, and Natural Science. With respect to agriculture, the announcement stated “the Agricultural College will be organized at the earliest practicable time, to meet the requirements of the law ...” (1, p 14). A total of 130 students matriculated in the University but of this number 110 were enrolled in a preparatory department, so there were actually only 20 regular college enrollees (2, p 29).

Fitting the College of Agriculture into the rest of the University. Manley (2, p 34) reported that in the early years of the land grant universities “The opposition of the faculties ... could be surmounted only with the greatest difficulty, for few of the professors were interested in agricultural education.” However, Chancellor Allen R. Benton was interested in farming and supported the concept of an agricultural college, as did the Board of Regents (possibly due in part to the legal obligation involved).

The Board of Regents established the College of Agriculture on June 25, 1872. Samuel R. Thompson was elected to the “chair of agriculture” effective in the fall of 1872.

In December 1873, the Regents at the behest of Chancellor Benton authorized Thompson to spend...

\footnote{It is to be noted that the requirements of the Morrill Act for instruction in agriculture and mechanic arts is covered among the colleges listed.}
“... at least one-third of his time during the term attending Farmers’ Institutes, and working up the interests of Agricultural Education throughout the State,” (2, p 36). Four Institutes were held in 1873-74.

One year after the College of Agriculture was officially established (and before it had any regular students), research and extension programs, i.e., the precursors of the Agriculture Experiment Station and the Cooperative Extension Service, were underway.

The Faculty

Although the first Announcement of the University of Nebraska, 1871-72 listed “S. R. Thompson - Professor in Agricultural Department”, he actually did not come to the University until the fall of 1872. Credit for the first work in agriculture at the University goes to Samuel Aughey. He was obviously a man of many talents, for in the 1872-73 The Register and Catalog of the University of Nebraska, he was listed as professor of theoretical and practical agriculture, as well as professor of agricultural chemistry and natural sciences. Crawford (I, p 39) stated that Aughey taught classes in German and developed a herbarium of the flora of the state. According to Manley (2, p 42), Aughey was a strong advocate of the theory that “rainfall follows the plow”. He was a very busy man, highly productive, with interests in various areas, and he was enthusiastic about Nebraska. For example, his work in entomology helped to bring Lawrence Bruner, a world famous entomologist, to the University. Aughey wrote many treatises and spoke widely around the state. In later years Roscoe Pound referred to Aughey as a charlatan, but Professor George E. Howard, in a more generous note, stated “... the enormous burden laid upon his (Aughey’s) shoulders by the University did not tend to foster scientific precision” (2, p 44).

Samuel R. Thompson is credited by Crawford (1, p 37) as being “... the first professor of agriculture and first dean of the college.” It is true he was listed as “Dean” in the second University catalog (1872-73), but these catalogs might not always have been accurate (i.e., whether Thompson had been given the title of Dean by the Board of Regents is not known). At any rate, Thompson was the chief administrative officer for agriculture from 1872 to 1875 at which time he left the University. He returned in 1881 and resigned in 1884.

Thompson made a significant contribution to the state, to the University, and to the College in particular. Though never expressed in those terms, from his work and his writings it is obvious that he had in mind the concept of the triad in an agricultural college, i.e., that it should encompass resident instruction, research, and extension. Bessey (I, pp 37-39) gave him a fine tribute when he pointed out that Thompson, a graduate of Westminster College in Pennsylvania, had taught natural sciences and served in various educational administrative positions at the secondary and college levels. Thus, in spite of no academic background in agriculture, he adjusted to the position at Nebraska in a remarkable fashion. Bessey pointed out that mistakes were made but “as we look back to those days of small things, those days in which the beginnings were made, we are led to honor the man (Thompson) ...”

The Period 1876 to 1889

The College of Agriculture was made a part of the Industrial College in 1877. The period 1876 to 1889 witnessed the formal opening in 1887 of the Agricultural Experiment Station, and the continued growth of extension-type work with the increasing popularity of the Farmers’ Institutes.

The Industrial College (see also Part III, Chapter 1.)

The Industrial College was created by an act of the Legislature in 1877, embracing the former College of Agriculture, and the former College of Practical Science, Civil Engineering and Mechanics (1, p 44). Actually, the latter College had not yet become operational (2, p 61). Creation of the Industrial College meant that the College of Agriculture, per se, ceased to exist.

The Problems of Agriculture Continue

Creation of the Industrial College did not solve the problems of agriculture within the University. Chancellor Irving J. Manatt’s reference to it as “a sort of educational Botany Bay” (2, p 101) was not entirely unrepresentative of the thinking of the times. Harvey Culbertson, who had been superintendent of the Farm and was given the additional title of “Acting Professor of Agriculture” in June 1878, and S. R. Thompson, tendered their resignations on March 20, 1884 (1, p 47). Thompson had been accused by the Regents of “… incompetence, inefficiency, and neglect to duty ...”. Manley (2, p 101) stated that thereafter Culbertson and Thompson “... became ringleaders in an attempt to separate the College of Agriculture from the University.”

In September 1884, Charles E. Bessey was appointed professor of botany and horticulture, and dean of the Industrial College (2, p 101). E. P. Savage served as superintendent of the Farm from September 1, 1884 to March 1885. In June 1885, H. H. Wing was appointed instructor in agriculture and director of the farm. Wing resigned on June 15, 1888 and was succeeded by John S. Kingsley, effective July 1, 1889 (1, p 47). The rapid turnover in staff reflected general dissatisfaction with agricultural education and operation of the farm. Bessey, a renowned scientist, educator and highly respected administrator, escaped personal attack.
Research

As far as is known the first publication of agricultural research results was made in 1880(1, p 50) with Culbertson as the author (2, p 62). It included a description of the farm, a statement of instruction offered in agriculture, and results of experimental work. The publication included work on pig feeding, sorghum for syrup, wheat, potatoes, sugar beets for feeding purposes, and a record of rainfall and temperatures.

The Nebraska Agricultural Experiment Station was established by an Act of the Legislature on March 31, 1887, mainly to take advantage of federal funds made available by the passage of the Hatch Act by Congress and signed on March 2, 1887.

Extension

The extension-type activities during the period 1876 to 1889 were carried out principally through the Farmers' Institutes. In addition, College staff members answered inquiries through correspondence and individual conferences. They were also called upon to appear at meetings other than the Institutes.

Famous Staff Members

Some famous names came into evidence during the 1876-1889 period. S. R. Thompson is discussed above.

New faces included Charles E. Bessey at the head of the list (2, p 80-81). He came to the University in 1884 as professor of Botany and Horticulture, and dean of the Industrial College. He built a strong Botany Department, one which gained national renown. He contributed significantly to the Industrial College, including the Station. He was a highly capable scientist and an effective administrator.

During the period 1876-1889 staff assignments were not sharply defined among colleges. Thus, Lewis E. Hicks (former pupil of the famous Louis Agassiz at Harvard) was hired by the University as professor of geology and allied sciences, and authored the first Station bulletin, Irrigation in Nebraska. He replaced Bessey as director of the Station in 1889 (1, p 53). Roscoe Pound, Botany Department, later to become dean of the Harvard Law College, was author of one section of an Experiment Station Bulletin (4, p 80). Frank S. Billings was employed in 1886 to work on a control for hog cholera and as a preliminary to the establishment of a School of Veterinary Science (2, p 104).

Other prominent staff members were Lawrence Bruner, entomology, and H. H. Wing, agriculture with emphasis on dairy, (1, p 53). S. W. "Dad" Perin became foreman of the "University Farm" in 1889.

The Period 1890 to 1909

For the first time, during the period 1890 to 1909, agriculture, within the framework of the University, began to be recognized as a respected, worthy field of education and research, approaching in academic circles the role agriculture occupied in the private sector of Nebraska. It should be emphasized that this was the real beginning — but only the beginning — of the appropriate academic recognition of agriculture, for much remained to be done and, in fact, the task has still not been completed.

Highlight developments of the period were: 1) demise of the Industrial College and re-creation of the College of Agriculture; 2) marked increase in financial support, both federal and state; 3) significant growth in and greatly increased output by the Station; 4) increased extension-type activities, including start of 4-H Clubs (although not under that name); 5) start of the School of Agriculture at Lincoln; 6) establishment of the North Platte Substation; 7) erection of a number of "permanent" buildings on the Farm (East Campus); 8) establishment of home economics; 9) employment of highly capable faculty members, many of whom became truly distinguished and probably were never exceeded in quality as a group for a like period in the history of the College; and, 10) establishment of common carrier transportation between the two campuses through the construction of a street car line in 1903 (1, p 97).

Financial Support

State tax support for the University which had been cut to a quarter of a mill levy and later raised to three-eighths of a mill, was restored to the full mill levy in 1899. This increase in state support, along with increases in federal funds coming to the University through the Second Morrill Act of 1890, the Adams Act of 1906, and the Nelson Amendment of the Morrill Acts of 1907, had during these years placed the Industrial College in a significantly improved financial position.

Staff

Throughout this period the technical staff of the Station was listed in the annual reports as "The working staff" (4). This brings to mind a story that the late Marvel Baker enjoyed telling about the late Chancellor Edgar A. Burnett, who when once asked "How many people work at the Ag College?" replied in a sardonic manner, "Oh, I guess about half of them".

Included among the staff members were a number of renowned individuals. Illustrative of this group were the following:

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1Since these publications were issued prior to 1887, they do not appear in the official list of Station publications.

2In 1909 the Legislature divided the Industrial College into the College of Agriculture and the College of Engineering (1, p 22).
Charles E. Bessey, professor of botany (and horticulture, at one time), who at various times was acting chancellor, dean of the Industrial College, dean of the Academic College, and director of the Experiment Station.

Frank S. Billings, investigator of animal diseases, who returned to the University in 1891 and left two years later, as before, a very controversial figure (2, p 139). Unfortunately, his considerable ability was never fully exploited because he seemed more anxious to vilify his "enemies" than to pursue his research.

Rosa Bouton who taught the first course at the college in home economics "domestic chemistry" in 1894 and became the first director of the School of Domestic Science when it was organized in September 1898 (1, p 76-77).

Edgar A. Burnett who came to the University on September 1, 1899 "... in charge of the Division of Animal Husbandry" (4, Jan 2, 1900, p 7). Subsequently, he was appointed (in the following order): associate dean of the Industrial College and director of the Station; dean of the Industrial College; dean of the College of Agriculture; and chancellor of the University.

R. A. Emerson, horticulture, who later continued his work at Cornell University, attaining an international reputation as a plant geneticist.

Charles W. Pugsley, animal husbandry (4, Feb 1, 1909, p iv); agronomy and farm management (1, p 139); director of Extension beginning in 1914 (1, p 139-140); editor of the Nebraska Farmer, 1918 (1, p 148); Assistant Secretary of Agriculture (1, p 93) and finally president of South Dakota State University (1, p 94).

W. W. Burr, (4, Feb 1, 1909, p xviii) appointed assistant in crops and soils at North Platte in 1908, was later to become head of the Agronomy Department and still later dean of the College of Agriculture.

L. W. Chase, (8), who became head of the Department of Agricultural Engineering, and for whom the present building was named on March 18, 1982.

T. A. Kiesselbach who was appointed assistant in agronomy (crops) during the 1908-09 fiscal year (4, Feb 1, 1910, p xx). He must have "hit the ground running" for he published his first paper in the Station report for that year (4, Feb 1, 1910, pp 125-139). The paper was entitled "Transpiration experiments with the corn plant", a field of research for which (along with many other lines of experimentation) he became world famous.

Other staff persons who attained distinguished records in their fields and who joined the University during this 10 year period (with their first years of appointment) were: Lawrence Bruner, 1888 (1, p 91) and Myron H. Swenk, entomology, 1907-08 (4, Feb 1, 1909, p xviii); Hudson H. Nicholson, chemist, listed in the first report of the Station (4, Jan 26, 1888); T. L. Lyon, Chemistry and Soils, 1890-91 (4, Dec 31, 1891); C. L. Ingersoll, agriculturist and later director of the Station, 1891 (4, Dec 31, 1891, p 7); Albert T. Peters, animal pathology, 1894 (1, p92); H.R. Smith, animal husbandry, 1901 (1, p 93); S. Avery, chemist, later to become chancellor, 1901-02 (4, Dec 31, 1903); A. L. Haecker, dairy husbandman, and department head, July 1, 1909 (4, Jan 21, 1902, p 7); Frederick D. Heald, Station botanist, July 1905 (4, Feb 1, 1906, p 11); Alvin Keyser, Soils, 1904-05 and later department head, Colorado State University (4, Feb 1, 1906); W.P. Snyder, animal husbandman, 1900-01 (4, Feb 1, 1901), and later superintendent of the North Platte Substation; O. V. P. Stout, irrigation engineer, April 16, 1897 (4, Jan 27, 1897, p v); F. J. Alway, station chemist and professor of agricultural chemistry, 1906 (4, Feb 1, 1907, p 8); E.G. Montgomery, adjunct professor of field crops, in charge of both instructional and Station work, 1906 (4, Feb 1, 1907, p 8) left the University in 1912 to go to Cornell University where he became head of the Farm Crops Department (4, Feb 1, 1912, p xxiii); Robert F. Howard, horticulture, 1907-08 (4, Feb 1, 1909); Erwin Hopt, crops and horticulture, North Platte Substation and later at Lincoln (4, Feb 1, 1910, p xx); and E. H. Barbour, geologist (4, Dec 29, 1892, p 6).

During this period there were a fair number of staff members with primary appointments in other colleges of the University and who, in some cases, taught courses in the Industrial College and/or held appointments in the Station. Some of these are not listed above as their primary appointments were in other Colleges of the University.

Edna C. Noble came to the Farm in charge of the ag library in 1904. It was then housed in the Experiment Station Hall and later moved to Agricultural Hall. Miss Noble was known among students as a strict disciplinarian, but respected by all as an excellent librarian.

S. W. "Dad" Perin, who had joined the staff in 1889 was continuing with his duties (3). "Assistant in Agriculture" was added to Perin's title for two years (4, Jan 29, 1902 and Dec 31, 1903), following which that portion of his title disappeared (4, Feb 1, 1904). In 1905-06, Perin was listed for the first time as Farm Superintendent (4, Feb 1, 1907). The name of William W. Marshall, executive clerk, appeared for the first time in the 1895-96 Station report (4, Jan 27, 1897). There were probably never any more conscientious, loyal and unselfish employees of the College than these two men.

The Period 1910 to 1924

By 1910, the College of Agriculture had developed into a well recognized and respected institution. It was now ready to embark in an organized manner upon the performance of its mission in research and education. The College had gained a sense of direction. It had a physical plant worthy of the name which continued to grow markedly during the 1910-1924
period; the Industrial College (basically a factitious creation) had disappeared and there was now once again a College of Agriculture; educational services to farmers and homemakers were developing rapidly; and youth work attained an ever-increasing volume and importance. In addition to North Platte, substations which had been authorized by the Legislature were established at Mitchell and Valentine.

The most important world event during this period was WW I. The College of Agriculture contributed substantially to the war effort, especially in assisting in food production, preservation, and conservation. Extension which had had its informal beginning as the Department of Agricultural Extension in 1911 (4, Feb 1, 1912, p xxvi) attained an official status in 1914; it was strengthened by the Smith-Lever Act (federal) of 1914; and received extra federal funds for assisting in the WW I effort.

Youth work grew rapidly and the county agent system was started. The Univ. Fruit Farm came into being, the Culbertson Demonstration Farm experienced both its start and demise, buildings were added and the School of Agriculture at Curtis was established. Enrollment in both the College of Agriculture and the School of Agriculture at Lincoln grew substantially. Much excellent research was being conducted by the Station.

Tractor testing, and the production and distribution of hog cholera serum and virus to farmers had their beginnings during this period.

An interesting process in the evolution of the Station was the gradual disappearance from the roster of staff from other colleges, such as those in physics, geology, botany and meteorology. By the time the 1923 report was issued, the Station roster consisted exclusively of staff in the College of Agriculture. This was a significant development because over the years since that time there have been numerous requests for other than College of Agriculture staff to be placed part time on the Station staff. A few, but not many, of these requests have been granted. Former Chancellor Zumberge once told the senior author that he thought agriculture was so important in Nebraska that attempts to place it elsewhere within the University organizational structure since that time.

Extension-type activities and interests had been reported in the Station annual reports from the start. For example, in the first Station report published January 26, 1888, Director Bessey recommended establishment of various types of collections which “... may become a source of instruction to the people of the state who visit them” (4, Jan 26, 1888, pp 8-9). Gradually, these portions of the Station reports dealing with extension-type activities and in time with the Agricultural Extension Service, per se, constituted an increasing portion of the entire reports. In the 36th annual Station report, dated February 1, 1923 (4), the section entitled “Eighth annual report of the Agricultural Extension Service” consisted of 27 pages, including a list of publications and a financial report. In addition, pages 59 through 77 which consisted of “100 worthwhile accomplishments of the College of Agriculture the past two years” could also be credited partly to Extension. This shows the relative emphasis being devoted to Extension at that time. However, the inclusion of Extension in the Station reports was dropped completely beginning with the 37th report published February 1, 1924 (4). No explanation was given for the deletion. Abbreviated sections devoted to both the Station and Extension were still being carried in the 1923-24 College of Agriculture catalog (9). Beginning with calendar year 1913 (10), Extension also began to issue its own annual reports.

Extension was considered a segment of the Station as late as the early part of 1914. This is attested to by the fact that a bulletin carried the following title: “Pugsley, C. W., March 9, 1914; What is a farm demonstrator? Extension Bulletin 23. The University of Nebraska Agricultural Experiment Station, Lincoln, NE.” However, not long thereafter, Extension was shifted from, being considered a part of the Station to becoming a parallel segment of the College of Agriculture, as shown from the following title of a later bulletin: “Anderson, A. E., August 20, 1915; Second annual report of county agricultural agent work, 1914; bulletin of the University of Nebraska College of Agricultural Extension Service; Lincoln, NE. (See picture on next page.) Just how the change was effected is not known.

The Extension Service constituted, beginning formally in 1914, the third segment of the triad of the College of Agriculture where it has remained organizationally to this day, although there have been some attempts to place it elsewhere within the University organizational structure since that time.

Prominent Staff Members Who Resigned During This Period

Prominent staff members in the College who resigned during the period 1910-1923 were:

**F. J. Alway**, agricultural chemistry. He started with the University in 1906, and resigned in 1913 to become head of the Division of Soils at the University of Minnesota (4, Feb 31, 1914, pp xvi-xvii).

**R. K. Bliss**, animal husbandry. He came to Nebraska September 1, 1912, as head of the Department and resigned August 31, 1914 to accept the position of director of the Extension Service at Iowa State University (11, p 12).

**L. W. Chase**, was head of the Department of Farm
Mechanics from 1905 to 1909 and of Agricultural Engineering from 1910 to 1920. He left the University in 1920 to found the Chase Plow Company (8).

R. A. Emerson who came to the University April 2, 1899, was to become a world-renowned plant geneticist. He resigned in 1914 to accept the position of head of the Plant Breeding Department at Cornell University (4, Feb 1, 1915, p xx).

Julius H. Frandsen, first listed in the 25th Annual Report of the AES (published Feb 1, 1912), was professor of dairy husbandry and chairman of the Department. He resigned December 1, 1920 (4, Feb 1, 1921, p 38).

Porter L. Gaddis was first listed in the 32nd Annual Report of the Station, (published Feb 1, 1919). He was professor of agronomy and agricultural chemistry and resigned September 1, 1920 (9, Feb 1, 1921, p 38) to enter commercial work in land appraisal.

A. L. Haecker (4, Feb 1, 1912, p xxiii) was first appointed September 1, 1896 in charge of the Dairy Department. He resigned in 1912 to enter commercial work.

C. A. Helm was appointed in 1913 and resigned as assistant professor of experimental agronomy September 1, 1916 (4, Feb 1, 1917, p xxviii). Later he became head of the Farm Crops Department at the University of Missouri.

Fritz Knorr was the first superintendent of the Scotts Bluff Experimental Station. His name first appeared in the 24th Annual Report of the Station, published Feb 1, 1911 (p iv). He resigned January 1, 1917 (4, Feb 1, 1918, p xxviii).

E. G. Montgomery was first listed in the 20th Annual Report of the Station, published Feb 1, 1907. He was in charge of experimental agronomy (4, Feb 1, 1912, p xxiii) when he resigned January 1, 1912 to go to Cornell University.

Charles W. Pugsley was first listed in 22nd Annual Report of the Station, published Feb 1, 1909, as associate of animal husbandry. The next year (23rd An-
annual Report, published Feb 1, 1910), he was associated with agronomy and farm management. In 1911, he became superintendent of work in agricultural extension and from 1911 to 1914 he was also in charge of work in farm management (1, p 130). In 1914 Pugsley became the first director of the "Extension Service of the College of Agriculture" (1, p 140). He resigned in 1918 to become editor of the *Nebraska Farmer*, (16, p 2), later Assistant Secretary of Agriculture and, finally, president of South Dakota State University (1, p 93).

**H. R. Smith** was professor of animal husbandry at the University for 11 years and resigned February 1, 1912 (4, Feb 1, 1912, p xvii), to accept the position of chairman of the department at the University of Minnesota (11, p 9).

**Edwin Mead Wilcox** was appointed in September 1908 as agricultural botanist and later was listed as plant pathologist. He resigned April 1, 1920 (4, Feb 1, 1921, p 37).

**The Total Staff at the End of 1923**

The academic staff listed in the 1924-25 College of Agriculture catalog totaled 115 members (9). This consisted of the teaching staff including the School of Agriculture at Lincoln, but only the superintendent at Curtis; the Station including the substations; the Extension staff headquartered on the Lincoln Campus; and 10 staff members from other colleges or divisions who devoted a portion or all of their time to the College of Agriculture (e. g., Roscoe C. Abbott, instructor in chemistry). Not listed and not included in the total were the approximately 50 county agricultural and home economics agents.

**The Period 1924-1974**

**The Burnett/Burr era 1924-1948**

E. A. Burnett and W. W. Burr carried on the deanship in a rather similar manner. Both were fine gentlemen, completely honest, very conscientious, conservative, loyal to the University, dedicated, and highly respected by both the staff and the other citizens of the state. Both had come up through the ranks at the University, Burr had gone valuable research and classroom teaching. They had come to the University (Burnett in 1899 and Burr in 1906) when there was very limited financial support. They had experienced the difficulties brought on by WW I, the farm depression of the early 20's and the great depression and extreme drought of the 30's. Burnett retired in 1938 at age 72, but Burr was to experience the effects of another war, WW II, before he retired in 1948 at the age of 68.

Under the conditions prevailing in Nebraska during this period, these two Deans did as well as was possible with the limited funds available. They made good use of the dollars appropriated and kept the College in a highly respected position. In spite of financial limitations, as will be noted in other chapters of this book, the College of Agriculture made significant progress during this period.

The University received a serious setback when the 1933 Legislature reduced appropriations to the extent that salaries of all University employees had to be cut by 22 percent. The salary cuts were accompanied by a severe reduction in operational funds. Salaries were never directly restored to the former levels. Instead they were increased gradually on an individual basis and at best it took a number of years before a staff

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*For a lack of records, we have been unable to do justice to the accomplishments of W. W. Burr. The Burr files in the UNL Library Archives are incomplete.*

*Burnett had been Dean since 1908 — the period 1908 to 1923 is covered in earlier sections of this Chapter. In 1917 he had received an honorary doctor of science degree from Michigan State University (his Alma Mater) (31). In 1927, at the time he was named acting chancellor of the University, Burnett was serving as president of the American Association of Land Grant Colleges and State Universities (32).*

*Burr left the University in 1913 to accept a position in the Office of Dry Land Agriculture, USDA, Washington, D. C., and came back as head of the Agronomy Department in 1916.*
member was brought back to the 1932-33 salary level. Although universities over the country generally suffered financial problems as a result of the great depression, restoration in the University of Nebraska was slower in coming than in many other states.

There is a question of whether or not adequate advantage was taken of federal funds available during the early years of the “New Deal”. Some universities added buildings and made other physical improvements through the use of funds from federal agencies such as the PWA and WPA, whereas the University of Nebraska made very limited use of such monies.

Burr was dean during WW II. The War had a major impact on the College, including enrollment which dropped precipitously. The Station and Extension attempted to tailor their programs to those which would be most helpful in the War effort. New automobiles and other equipment were generally unavailable, while such items as tires and gasoline were rationed. Labor was in short supply. The staff members often had to do with what was already available and generally had to improvise in order to carry on their work. Details of the functioning of the College during the War are provided in other chapters of this book.

W. W. Burr was dean of the College of Agriculture from 1928 to 1948. His tenure included the World War II years, when the Experiment Station and Extension attempted to tailor their programs to be most helpful in the War effort.

During the period 1924-1948 the dean was also director of the Station, in fact the title was commonly listed as “Dean and Director”. The term “dean” also implied being directly in charge of Resident Instruction. Thus the dean directly administered Resident Instruction and the Station programs. Extension had a director of its own throughout this period, and operated fairly independently of the rest of the College. The Extension director reported administratively to the dean but Extension was organized to handle most of its own operations. The working relationships between the dean of the College and the director of Extension throughout this period were excellent.

S. W. “Dad” Perin. The accomplishment of the staff members generally is covered in other chapters of this book. An exception is the contribution of S. W. “Dad” Perin, mentioned earlier in this chapter, who was employed by the College from 1889 until his death on January 18, 1930. Born in 1859, his first given name was “Senator” but he used only the initial “S” to avoid confusion. He commonly went by the name of “Will”, his middle name, and in later years by the name of “Dad”. The high esteem in which he was held by the University staff was shown by the fact that when his funeral services were held on January 21, 1930 (28) in the College Activities Building, classes were excused, offices were closed and the flag was flown at half mast. In Chancellor Burnett’s eulogy he said that Perin “… was one of God’s noblemen” (33). Dean Burr said: “In the passing of S. W. Perin, the University has lost one of the most faithful and efficient workers it has had in any capacity … He loved the Agricultural College and took a keen interest in its every activity … His passing is a deep personal loss to me” (28).

When the Perins came to the College of Agriculture in 1889, they moved into the house which had been built in 1867 out of native sandstone on what later became the University Farm (East Campus) (3, 34). The house was not modern — they had no inside toilet, electricity, central heating, or telephone. About 1896 the family (there were four children) moved into the 12-room frame house which had been constructed by the University in 1875 to provide rooms and board for College students. Gradually the house was modernized. Here the Perins continued to live until 1923, at which time they moved into their own house at 33rd and Holdrege Streets. During the entire time that the Perins lived on the Campus, they roomed and boarded students, first boys12 and later girls. They also provided noon meals for various University employees12, and towards the end, they roomed Ms.

12 Including William W. Marshall who is described in this book as a "colorful character".
Charlotte Hickman, a 20-year assistant to Professor Filley, Jessie Green of the Extension Service, and Matilda Peters, home economist (34).

During Perins early years at the College, there were always several teamsters working at the Farm. They worked from 7:00 a.m. to 6:00 p.m. six days a week and were paid $45 per month. Usually they had homes with large yards on which they raised big gardens, chickens and in the “real early days”, one or two pigs which they butchered (34, p 9).

Perin retained the title of superintendent until the end, although in the later years the title was more honorary than functional. Early on he was in charge of the “Farm”, but as the College grew in size and complexity, his duties became more or less miscellaneous. He gave up supervision of his last area of experimental work on 10 acres of land which was taken over for development when the College Activities Building was built (completed in 1926) (15, 34).

The Perins experienced a great deal of change over the 41 years that “Dad” Perin was with the College. When they first came to the University, transportation was by street car and horses. Perin helped by transporting prospective and newly-arrived faculty members, first using a spring wagon, and later a buggy or a carriage. He resisted the use of an automobile, but in his later years he was well known on campus as a driver of a Model T Ford pickup truck with the words “AGRC'L COLLEGE” painted in large letters on the sides (34). Perin summarized his work as follows: “In my service to the College of Agriculture, I have always done anything which had to be done right away and which no one else could get around to do” (15). He remained active on the job until forced by a lingering illness to his bed for the nine months preceding his death (34).

On giving counsel and predicting the future. Following the end of WW II, in August 1945, the College of Agriculture issued a 113 page bulletin devoted to “Postwar agricultural problems and proposed programs” (35). The bulletin contained much useful information, but some of the predictions and advice proved, in time, to be far off target. This was pointed out by Dean Frolik when he was asked to talk about the future at the annual Extension Conference on November 5, 1964 (36). Noting the danger of predicting the future, he referred to the 1945 bulletin, quoting some of the statements contained therein, and making responses to them. The audience was much amused and to this day some still mention the speech — a few have suggested including that part of his speech in this book.

The overall committee in charge of planning the bulletin was headed by Dean Burr. The bulletin contained 15 chapters, each written by two to five persons. The 31 authors (15) were principally from the faculties of the Station, Extension, and the Conservation and Survey Division of the University but included also the State Sanitary Engineer and a representative from the USDA Farm Security Administration.

Following are a number of quotations from the bulletin followed by a 1987 response to the same.

Quote: (35, p 55) “... it seems probable that approximately 4,000 more irrigation wells ... may be constructed in the state.” (There were 4,800 irrigation wells in Nebraska at the time.)
Response: On September 30, 1986, there were 71,107 irrigation wells registered in Nebraska.

Quote: (35, pp 62-63) “The person who buys land under existing conditions and is unable to make payment in full or nearly in full is accepting a highly speculative risk.”
Response: The person who disregarded the advice and did just the opposite was the one who was able to take advantage of increasing his net worth through increasing land prices until 1981 when land prices started their downward spiral. The correct advice would have been to keep buying land for the next 30 years, i.e., until the latter 70’s, then start liquidating and complete the liquidation before 1981. It would have taken a very high degree of clairvoyance to have been able to make this kind of prediction.

Quote: (35, pp 36-37) “At the Nebraska Agricultural Experiment Station over a period of 24 years (1918-1941), soybeans have given an average yield of 14.7 bushels per acre ... yields comparable to those cited for the Nebraska Station may gradually be approached by farmers in the sections of the state best adapted to soybeans.”
Response: In 1985 the average yield of soybeans in Nebraska was 36 bushels per acre. The estimated yield for 1986 was 39 bushels per acre.

The senior author of this book was one of the 31, albeit he was the last named in two chapters, each with four and five authors, respectively.
Quote: (35, p 45) “Nearly every farm has a poultry flock... The city consumer is able to buy eggs and poultry at relatively low prices because they are produced with family labor and quite largely on home-grown feeds.”

Response: In 1950, 65,000 to 67,000 Nebraska farmers raised chickens. Today the number is down to 8,000 to 9,000 and most of that is for home consumption. Poultry production has generally become a highly specialized, large scale industry. Commercial production remaining on U.S. farms is carried on partly under contracts. Yet today, in real dollars, prices at the farm for eggs, broilers, and turkeys are lower than they were in 1945. Often there is no market at all for the small producers who have old hens to sell (37). Nebraska does produce eggs and turkeys.

Quote: (35, p 90) “Sanitary privies should be made available on all farms... Privies on farms where the houses are equipped with indoor toilets should be located conveniently to the barn and feed lots... at least 125,000 more sanitary privies are needed in rural areas.”

Response: In 1980, of the 181,873 Nebraska “rural” homes, 95.3% had one or more complete bathrooms (38). Privies on Nebraska farms are on the list of “endangered species”.

Quote: (35, p 92) “Since the density of population will be a controlling factor in the extension of power lines, it will be impossible for all of the houses... to have central station service.” Referring to the middle income group, it was stated: “Approximately 50 percent of the homes can be electrified from high lines or private plants... The other 50 percent can have at least two lamps with mantles to assure good light in the kitchen and one other room.”

Response: Today, largely through the extension of power lines statewide by the REA, electricity is available to all Nebraska farmers and ranchers. A very small number have chosen not to use it.

Quote: (35, pp 89, 105) “Windbreak and ornamental plantings are needed around a high percentage of rural schools... Trees, outdoor tables and benches, and a stove might prove a popular community resource for picnics.”

Response: In the 1944-45 school year there were 5,074 rural school districts in Nebraska, whereas in 1986 there were 622 Class I School Districts in the state. A much bigger issue than beautification and picnic facilities was whether or not 88 percent of the schools should be consolidated into larger districts as has turned out to be the situation to date.

Quote: (35, p 89) “All houses... should... provide protection from rodents, reptiles, and insects...”

Response: No disagreement.

Quote: (35, pp 71, 74) In reference to Social Security, “Most farmers feel a greater interest in opportunity than in security... The best guarantee of security for farm families is a prosperous agriculture... social security should... find a plan that will give aid... without discouraging initiative and thrift.”

Response: Farmers came under the Social Security Act in 1955. There are exceptions but most farmers like it very much. Social Security helps many of them to retire comfortably. In earlier times many farmers worried about how they would live after they were no longer able to work, including even the threat of having to spend their last years at the “county poor farm”. We know of no evidence that Social Security has discouraged initiative and thrift among farmers.

Quote: (35, p 73) “Certainly no government should enact legislation that requires or encourages men and women to quit work at 60 or 65 years of age.”

Response: The authors were pointing their finger at the wrong entity. As will be noted in Part VIII, Chapter 2, the federal government has generally taken the lead in extending the retirement age.

The Lambert Era, 1948-1960

Lambert’s outstanding background. W. V. Lambert came to the College as dean with a prestigious background. Born and reared on a farm at Stella, Nebraska, he graduated from the College of Agriculture in 1921. He served for a short time as assistant county agent in Seward County. Subsequently, he received his PhD degree from the University of California at Berkeley and had done research principally in poultry genetics. Prior to returning to Nebraska in 1948 he served on the faculty of Iowa State University, and as associate director of the Purdue University Agricultural Experiment Station. In 1946, while assigned to the USDA, he attained the position of administrator of the Agricultural Research Administration (now the Agricultural Research Service). In announcing the appointment of Lambert as dean, Chancellor R. G. Gustavson stated: “He is without doubt one of the nation’s top-flight research men” (13, 14).

The administrative organization. Lambert was the first dean to be given direct administrative responsibility for all three of the major divisions of the College. Although the Station and Resident Instruction had been directly administered by the dean previously, Extension from the time of its official recognition in 1914 had had its own director. When this position was filled on a permanent basis in 1949, the title was changed to “associate director”. Marvel L. Baker continued as associate director of the Station. When a comparable administrative position was created in Resident Instruction in 1950, it was filled by Ephriam Hixson, also as associate director.

In spite of the titles, Lambert gave the associate directors a great deal of leeway and authority, and in essence the associate directors operated much as the deans of these divisions do today. Lambert was basically a friendly and considerate individual, and treated his associate directors in a most respectful manner. He had their full support.

Lambert emphasized depth in research. Lambert put forth every effort possible to promote the welfare
of the College. He was a firm believer in the strongest possible academic training for all staff. He encouraged high standards for programs in all divisions and especially supported increased depth in research. These were the days when some staff members in a few other colleges of the University, looked with some disdain upon programs in the College of Agriculture, an attitude which Lambert resented very much and opposed vigorously. He lost no opportunity to come to the defense of the College.

The Korean Conflict. In January 1951, referring to the Korean Conflict, Richard Ford of Agricultural Economics, wrote: "The developments on the international scene during the past two or three weeks may throw all previous production for agriculture onto a different footing...now that a national emergency has been declared, conditions may change. Agriculture will benefit from defense activities so long as price controls are not applied to farm products...Secretary Brannan has said on several occasions that agriculture's greatest contribution to the war effort will be more and more production" (16, pp 2, 14, 15).

The Korean Conflict which started June 25, 1950 and ended July 27, 1953, although very important in the history of the United States, especially from the standpoint of casualties, did not have a major direct impact on the College.

International Programs. Lambert spearheaded the preliminary work and development of a contract for establishment of a USAID supported University program of technical assistance in Turkey, which was officially in effect from 1955 to 1968. During the early years of the contract, he was the University of Nebraska administrator for the program. Later, when Chancellor Hardin took over direct administration (as the program came to include more work from other colleges) Lambert retained his interest and continued to provide assistance wherever it was needed (see also Part II, Chapter 5).

Lambert and the University gained international recognition when in 1955 the dean was asked to lead a delegation of 12 Americans (most of them farmers) on a tour of the USSR to observe farming practices and organization. The trip came as a result of a suggestion by Lauren Soth of the Des Moines Register and Tribune that there be exchange teams of primarily farmers between the two countries. The trip had the blessing of the USDA, but the agency did not serve as official sponsor.

The Americans departed New York by plane on July 12, 1955 en route to the USSR, spent about five weeks and traveled about 11,000 miles within the country. They returned to the U.S. about September 1. Meanwhile, a team from the USSR visited the U.S. This trip included a stop at the University of Nebraska and other points of interest within the state and elsewhere in the country.

Enroute home from the USSR, Lambert appeared on the television show "Meet the Press". Following his return, Lambert reported on his trip at many meetings over the state. He was accompanied on these trips by the junior author of this book, Ralston J. Graham. Graham, as editor of the Nebraska Experiment Station Quarterly, devoted the Fall 1955 issue almost entirely to Lambert's observations of agriculture in the USSR. It must be borne in mind, in order to understand why people were so interested in Lambert's observations, that few Americans had had the opportunity to see much, if any, of the USSR since the communists had come into power.

Establishment of a Faculty Committee on Promotion in Rank. Involving the faculty in the matter of promotions became formalized when the faculty approved a written plan on February 10, 1950. The plan provided for the establishment of a Committee on Principles and Policies of Promotion in Rank, which consisted of five members, the dean of the College and the chairman of the Home Economics Department as ex officio members, and three members elected by the faculty. Elected members served for three years and were not eligible to succeed themselves. The duties of the Committee included: 1) "...prepare a clear-cut statement of criteria for evaluation of faculty services consistent with the prevailing situations in the College of Agriculture...", to be approved by the faculty before becoming operative; and 2) "At the request of the dean, the committee may be asked to pass upon these recommendations" (for promotion of individual staff members) (29). This committee, with some modifications, is still in existence. It is now known as the "Committee on Policy for Appointments and Promotion" (30).

Establishment of the College Advisory Council. Dean Lambert, in 1954, organized the first lay group advisory to the College of Agriculture, called the College of Agriculture Advisory Council (see Part XI, Chapter 5). This group, which remained in existence until it was disbanded by Vice Chancellor Acker on March 3, 1975, was most helpful in helping to steer the programs of the College, in helping to educate the public on the contributions of the College, and in gaining financial support through the Legislature.

An attempt to place the College under surveillance. A sad day in the history of the College of Agriculture and for Dean Lambert, in particular, occurred on November 5, 1957, as shown by the following from the minutes of the University Senate: Charles H. Patterson, professor of philosophy, "...offered a motion that with respect to the violation of academic freedom in the case of Professor Mitchell, the University Senate charges the Committee on Academic Privilege to keep under surveillance all faculty-administrative relations in the College of Agriculture which may threaten academic freedom and privilege. The motion was seconded. Professor Dein moved that the motion be tabled...The motion to table carried" (17, p 6).

At a subsequent meeting of the Senate on December 10, 1957, the Patterson motion was raised from the
vigorously against Professor Patterson’s motion and
in turn Professor Patterson spoke in explanation of
his motion. He then moved that he be given the privi-
lege of withdrawing his motion” (18, p 1).

Growth of the College of Agriculture and plans
for the future. Throughout his tenure as dean, Lam-
bert worked vigorously to gain added financial sup-
port for the College, and major progress was made
during his regime.

In February 1959, Lambert outlined the building,
facility and land needs for the College. He said a new
experimental farm close to Lincoln was needed and
that that cost would be $1,696,000. He outlined the
building and facility needs for the East Campus and
for the outstate experiment stations as follows: a cen-
tralized radiation laboratory; a new library; a tractor
power locomotion laboratory; an animal science
building, a home economics building; a controlled
climate laboratory for growing plants; and a number
of smaller specialized structures for the outstate sta-
tions. The total cost of the buildings and other facil-
ities was estimated at $6,696,000. Funds for land and
buildings came very slowly during his era but Lambert
never stopped trying (19).

Working with Associate Director Baker he was very
much involved in getting the Fort Robinson Beef Catt-
le Research Station established and operative. The
Northeast Station at Concord was established in 1958.
Late in his time as dean, Lambert was working actively
to obtain surplus military land at Mead or Hastings
for a University field laboratory.

Notable progress was made in the College of Ag-
riculture during the period that Lambert was dean as
will be noted in other chapters of this book. Lambert
left the University in 1960 at age 62 to head up a
University of Illinois program to help establish a uni-
versity in India, with funds provided by USAID.

The Period 1960-1973

Elvin F. Frolik was appointed dean of the College
of Agriculture effective July 1, 1960. He was a native
Nebraskan with two degrees from the University of
Nebraska, and the PhD degree from the University
of Minnesota, with a major in genetics and agronomy.
His professional career was largely with the University
— he had served as Nemaha county agent, extension
agronomist, chairman of the Department of Agron-
omy, and associate director of the Station prior to his
appointment as dean.

In addition to striving to get increased state tax
support for the College (which is axiomatic), Frolik
placed his emphasis on: 1) setting highest standards
possible when new appointments were made; 2) mak-
ing research in the Station relevant to the problems
of the clientele; 3) integrating research and extension,
4) involving the lay public in helping to plan College
programs and the organizational structure, and to get
added financial support from the Legislature and the
governor; 5) involving the faculty to a greater degree
in making recommendations for promotions in rank
and in governance; 6) covering the entire state with
a regional research/extension grid system; 7) increas-
ing federal funds for Nebraska and getting surplus
military lands for research/extension/instructional
uses; 8) increasing enrollment in agriculture and home
economics; and 9) on conducting defensive actions to
prevent administrative action which would have re-
moved Extension and some other units from the Col-
lege of Agriculture. It must be noted that the principal
administrator of a college can set goals and lend en-
couragement, but the degree of success depends
largely on the staff and other administrators.

Recruiting and retaining a highly effective staff.
Some football coach has been quoted as saying that
90 percent of the success of any team is determined
at recruiting time. The statement, though obviously
an exaggeration, has a good deal of truth to it. Re-
search production, extension effectiveness, and qual-
ity of academic instruction, in total, determine the
success of a college of agriculture, and these depend
almost entirely upon the individual staff members. Of
course, the staff members must be given as favorable
an environment as possible in which to carry out their
duties and it is in this area that administrators can
provide their maximum contributions. Deans and di-
rectors do not really administer or direct the re-
searcher in his laboratory, nor the extension worker
in counseling a farmer or homemaker, nor the aca-
demic instructor in his classroom teaching. Once on
the job at hand, the staff person is largely on his (her)
own.

A great deal of time and effort in the College was spent in filling positions. It was a matter of not only selecting applicants with high academic capabilities, but also in trying to make certain the person had the interest and willingness to carry out the duties of the position in question. Since the applicants may be so anxious to be offered a position that they do not "level" on their true interests, this latter quality is oftentimes the most difficult to ascertain. Also "offers" are sometimes sought to strengthen the applicant's situation in his or her current position. But all in all, after years of interviewing applicants, reasonably accurate appraisal of their suitability for the positions can usually be made.

The second important factor in having a high quality staff is the matter of retention. The College has done a reasonably good job of holding successful staff members. Some have left for administrative or higher administrative positions, some to go into agribusiness or farming, but relatively few of those considered effective (and that has included most of the staff) have left for parallel positions elsewhere. This is attested to by the fact that the staff in 1974 (the close of the period principally covered by this history) was of excellent quality, as will be noted in other chapters on the accomplishments of the individual administrative units.

Conducting research in the Station which is relevant to the problems of the clientele. The research of the Station is mission oriented. Avoiding the pitfall of trying to differentiate between applied and basic research, there is no question but what the researcher in a college of agriculture has a basic responsibility to do work which directly or by a chain of events will be beneficial to the agricultural or home economics clientele. It was on this point that Lambert and Frolik differed somewhat — Lambert placed his emphasis on meaningful, in-depth research, whereas Frolik added the importance of relevance and accountability. Persons wishing to do research primarily or exclusively for scholarly reasons, fit more appropriately into a college of arts and sciences. However, regardless of the type of endeavor, the observing scientist always has the potential of making a noteworthy discovery through serendipity.

That the research staff members of the College have been highly productive and recognized nationally for their work is apparent from reading other chapters of this book. It is interesting that the only persons in the history of the University ever to attain the distinction of membership in the highly prestigious National Academy of Sciences were Myron K. Brakke of the Department of Plant Pathology in 1974 and J. M. (Mike) Daly of the Department of Agricultural Biochemistry in 1984. A similar distinction was election in 1984 of William E. Splinter, head, Department of Agricultural Engineering, to membership in the National Academy of Engineering. Still another "first" in the history of the entire University of Nebraska was the election in 1986 of J. M. Daly to membership in the American Academy of Arts and Sciences.

Integrating research and extension. In the early days of the College there were no administrative divisions, the same staff performing all duties pertaining to resident instruction, research, extension and even international programs\(^1\). Gradually, divisions were established as separate administrative entities - the Station in 1887, Extension in 1914, Resident Instruction in 1950, and International Programs in 1966.

Separate budgets and financial accounting are carried out for each division and staff appointments are made in one or a combination of divisions. Although the creation of divisions and departments was probably inevitable, the results of establishing them have not been entirely favorable. As administrative subunits are added in an organization, "islands" of interests and isolation may follow. As Hewitt (24) has said, we may come to suffer from "campus boxes" and "hardening of the categories".

It was to reverse this trend of a somewhat insular development within the College that a major effort was made during the 60's to reopen the channels of communication and cooperation principally between the Station and Extension. Frolik (25) pointed out in 1967 that the Station/Extension organizational arrangement in the colleges of agriculture “... might be viewed as a historical accident ... Perhaps if we were to embark today on the ideal organizational structure, without the background of a Hatch Act and a Smith-Lever Act, and corresponding state legislation, and without all of the rigidity and vested interests which are bound to develop from living with systems which are 80 and over 50 years old, respectively, we might establish only one organization.” He also pointed out that the functions of the experiment station and cooperative extension are largely one, i.e., doing research in agriculture and home economics and making the findings available to the constituents for whom it is intended. There are exceptions to this generalization, e.g., a portion of the educational program in 4-H Youth Development is not directly related to Station research programs. But for the most part the interrelationship of goals is a very close one.

The effort to integrate the Extension and the Station more closely was conducted on a low key and on a gradual basis. Organizational changes rarely come easily or without opposition. The Station staff were accustomed to joint appointments since many of them were involved also in teaching. However, Extension had operated since its inception largely as a discrete entity, and the staff had understandable pride in their organization. To have issued an edict calling for joint Extension/Station appointments might well have resulted in serious internal opposition. Thus, many joint

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\(^1\) Lawrence Bruner, entomologist, conducted a study of locusts (grasshoppers) in Argentina in 1897-98 (see Part II, Chapter 5).
Station/Extension joint appointments were made only as new personnel came on board. But gradually the integration took place. An important step in the process occurred in 1964 when Extension state specialists were placed administratively into the departments. This meant that henceforth they reported administratively to their respective department chairmen, the same as Station and Resident Instruction staff always had. A parallel development took place at the outstate Stations as the positions of station superintendent and district extension supervisor were combined and handled by one administrator. The number of district extension specialists was also greatly increased during the 60's (see Part II, Chapter 4) and as vacancies were filled, many were made on the basis of joint Extension/Station appointments.

With the integration of extension and research at the state and district levels, the next step was to develop a closer liaison with the county agents. This fell into place rather naturally, since the Station staff, especially those with joint appointments, felt a greater responsibility than ever before for conducting research which was meaningful to farmers, agribusiness persons, home economics interests, and also to carry the research results to the clientele. The traditional channel of reaching the clientele was principally through the county agents. Thus, the Station personnel and the county agents worked together as never before in planning and conducting both research and extension programs. Meanwhile, the close affinity between Extension specialists and county agents continued.

The integration of Extension and Station was well along by 1974. All departments and all research and extension centers except for the Southeast Extension Headquarters and the 4-H Youth Development Department had one or more staff members on joint Station/Extension appointments, some on Resident Instruction/Extension and a few on appointments involving all three divisions. On September 1, 1974, the number of staff on joint appointments totaled 75, out of a total of 165 State and District Extension staff members (26).

Developing a full-fledged grid system of research and extension district centers for the state. In 1960 there were three outstate research centers, — one at North Platte for west central Nebraska; one at Mitchell for the panhandle; and one at Concord for northeast Nebraska, plus a federal beef cattle research center at Crawford. Extension was not officially involved in any of the outstate stations. By 1974, a center had been established at Clay Center to cover the south central district of Nebraska, and an Extension supervisory district at Lincoln to serve the Southeast District. In addition, the Fort Robinson Beef Research Station, consisting of 21,405 acres of principally rangeland, had been terminated and replaced by the US Meat Animal Research Center at Clay Center. This tract of approximately 35,000 acres had been farm-land before it was taken over for the Naval Ammunition Depot for WW II.

The grid system was perfected to make available to all Nebraskans the services of the Station and Extension on a district basis, in addition to the services available on a state basis through the Station and Extension, and on a county basis through Extension. Adding extension functions to the existing stations, adding the South Central Station at Clay Center and the Southeast Extension headquarters at Lincoln and increasing financial support and numbers of district staff positions constituted one of the major steps in providing Extension and Station services to the people of Nebraska.

The state is too large and the conditions too varied and complex to permit provision of effective research and extension services on only a statewide basis from Lincoln. Also technology has advanced too far to make it possible for county extension agents to provide all educational (non-classroom) services, with the assistance of only a state staff. The District Stations (now Centers) have very strong support from their clientele.

Other important developments

1) Organized and active support of agricultural organizations (see also Part X). Farm organizations, both commodity and general, and other agricultural and home economics societies and associations have traditionally been generally favorable to the College of Agriculture. Historically, however, they had not worked together very effectively in supporting the College.

The first organized step toward harnessing such support started with Dean Lambert establishing the College of Agriculture Advisory Council in 1954, which was reorganized and strengthened in 1961. Further major steps took place with the organization of the ABN, Inc. in 1970 and the Group of 40 in 1973. It was in the early 70's, when these agricultural organizations of the state felt the status of agriculture in the University was threatened that they marshalled their forces and came to an almost militant support of the College of Agriculture. The outcome was the establishment of the IANR, a much strengthened and somewhat broadened College of Agriculture (see also Part III, Chapter 1).

2) International programs. The College of Agriculture traditionally consisted of the triad of Resident Instruction, the Station and Extension. The starting of International Programs in 1954 added a fourth dimension. Administratively, the Turkish program was for a time in the College of Agriculture, but later was taken over administratively directly by Chancellor Hardin. In 1970, international programs were returned administratively by President Soshnik to the College and Clyde C. Noyes was appointed acting director and associate dean of International Programs in the College of Agriculture. This expanded the College of Agriculture, organizationally, from the tra-
ditional triad to a tetrad (see also Part II, Chapter 5).

3) Major additions of lands and buildings. During the period 1960-74, it was extremely difficult to get state appropriated funds for major expansions of lands and buildings. Therefore, a great deal of effort was put forth to obtain needed lands and facilities through private gifts, and through transfers from the federal government of surplus military lands and buildings. The efforts were successful as shown by the following:

- a) Transfer of approximately 9500 acres of lands and buildings near Mead on April 12, 1962 and in subsequent conveyances, a portion of the former Nebraska Ordnance Plant to the Board of Regents, to be used for the University Field Laboratory at Mead.
- b) Transfers were made by the GSA to the USDA in 1964 and in 1966 of approximately 35,000 acres of lands and buildings previously used by the Naval Ammunition Depot at Hastings, making possible the establishment of the U.S. Meat Animal Research Center. Also the USDA made available to the University a section of land for establishment of the South Central Station at Clay Center.
- c) Gift in 1973 from the Scottsbluff-Gering Pay-roll Development Foundation of 204 acres of land and buildings, formerly used by the Hiram Scott College, to be used for the headquarters of the Panhandle Station, including office, laboratory and lands for research and extension.

4) The University of Nebraska School of Technical Agriculture at Curtis is established in 1965. The old University of Nebraska School of Agriculture (an agricultural high school) was phased out beginning in 1965 and replaced by the UNSTA (a post high school of technical agriculture, not of college level). The School proved to be successful in offering a quality two-year education but encountered severe opposition in 1986. Legislatively, it survived and was directed by the Board of Regents to attempt to establish coordination with community and state college. Its future at the time of this writing is unknown.

5) Enrollment in the College of Agriculture. Much emphasis was placed on attempting to increase the enrollment in the College of Agriculture. The attempt was reasonably successful, and enrollment increased especially during the period of agricultural prosperity in the latter 70's. However, the agricultural depression which started in 1980 and is still continuing has resulted in a drop in enrollment.

6) Establishment of the School (and subsequently the College) of Home Economics. The agricultural segment of the College of Agriculture was generally sympathetic to upgrading the status of Home Economics in the University. Frolik strongly supported Virginia Trotter and her colleagues in the establishment of the School of Home Economics in 1962 and, in turn, the College of Home Economics in 1970.

7) The Vietnam Era (War). Depending on criteria used in setting the date, the Vietnam Era (War) started sometime in the early 60's. For the U.S. it ended when the last U.S. troops departed the country in April 1973, and for Vietnam when the Saigon forces surrendered on April 30, 1975.

Contrary to the situation in the two World Wars, college student enrollment did not drop because for the most part men were deferred from military duty pending completion of a college education. There were some disturbances within the University, especially as the War dragged on (see Part VIII, Chapter 5). There were no serious shortages during this War, and few College of Agriculture faculty members participated in military duty.

Frolik went to Vietnam under AID auspices in 1970 to help provide technical assistance and to evaluate a possible University of Nebraska cooperative program in Vietnam, on a long term basis, jointly with the University of Hawaii. Subsequently Hawaii withdrew from consideration, and with opposition of a number of the College of Agriculture department chairmen, the University of Nebraska also withdrew. Frolik again went to Vietnam for AID in 1973.

8) Frolik leaves the UNL. Frolik left the University on October 1, 1973 to accept a position of technical assistance in Iran, with the Development and Resources Corporation of Sacramento, California, and New York City. After two years, the Froliks returned to their home in Lincoln, and from that time to the present, he has been involved in a series of short-term assignments, principally abroad with AID.

The Period of April 1, 1974 to June 30, 1974.

That the IANR would supersede the College of Agriculture in the University organizational structure was established when LB 149 was passed by the Legislature on May 25, 1973 (see Part III, Chapter 1). However, the IANR was not activated by the University administrators and the Board of Regents until April 1, 1974, at which time Duane C. Acker became the first Vice Chancellor of the Institute.

Acker, born and reared on an Iowa farm, received his BS and MS degrees from Iowa State University, and the PhD degree from Oklahoma State University, with a major in animal science. He came to the University from the position of dean of the College of Agriculture at South Dakota State University. He resigned as vice chancellor of the IANR effective June 30, 1975 to accept the presidency of Kansas State University. In June 1986 he resigned from that position and became director of the AID Food and Agriculture Division in Washington, D.C.
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Chapter 2. The College of Agriculture/Resident Instruction

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**Names of the Unit**

- College of Agriculture: 1872-1877
- Industrial College: 1877-1909
- College of Agriculture: 1909-1964
- College of Agriculture and Home Economics: 1964-1970
- College of Agriculture: 1970-present

Since the term “College of Agriculture” was used in two different senses until the establishment of the IANR on April 1, 1974, it has been necessary in some cases to use the term “College of Agriculture/RI” to differentiate the teaching division from the more inclusive term “College of Agriculture”. Since April 1, 1974 the term “College of Agriculture” has meant strictly the teaching division.

**Administrators**

(See Part II, Chapter 1, for names of principal administrators up to 1960).

- Franklin E. Eldridge, Director: 1960-1968
- Franklin E. Eldridge, Assoc. Dean & Director: 1968-1972
- Roy G. Arnold, Acting Assoc. Dean & Director: 1973
- T. E. Hartung, Dean: 1974-present

**Others**

- E. A. Burnett, Assoc. Dean in charge of Agric.: 1901-1908
- William W. Burr, Assoc. Dean: 1927-1928
- Ephriam Hixson, Assoc. Director: 1950-1954
- Franklin E. Eldridge, Assoc. Director: 1954-1960
- Stanley A. Matzke, Asst. Director: 1969-1972
- Earl F. Ellington, Assoc. Dean: 1984-present

**Headquarters Locations**

(See Part II, Chapter 1.)

**The First Students, Curricula, and Living Quarters (1872-1875)**

Crawford (1, p 21) stated that there were no regular students enrolled in the first year of existence of the College (1872-73), even though Samuel R. Thompson, first dean of the College, stated “A small number of students have entered for the regular course in Agriculture.” Thompson also stated that lectures on vegetable physiology with reference to tree growing, and a course in agricultural chemistry, were well attended. In reporting for the second year, Thompson (1, p 21), stated “but few students as yet have shown a disposition to take agricultural studies, and these only in the preparatory department.” Making some allowance for Thompson’s desire to reflect favorably on the College, one is drawn to the conclusion that there were no regular students enrolled in the College during the first two years of its existence. Interestingly enough, maintaining adequate enrollment in the College of Agriculture exists as a problem to this day.

Recently, there has been a movement underway to stiffen the University entrance requirements and to incorporate more of the liberal arts in colleges such as agriculture. Had the initial course requirements in the College of Agriculture been adhered to over the

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1The authors gratefully acknowledge the assistance of Franklin E. Eldridge in providing most of the material on majors, graduation requirements and curricula for the period 1925 to the present.

2Under Burnett and Burr as deans of the College of Agriculture, there was, for the most part, no other administrative position for resident instruction. The Deans were assisted by various faculty members in such duties as preparing catalog copy, advising and admitting students, and registration. These functions were largely combined and placed under one administrator, Ephriam Hixson, when he was appointed Associate Director of Resident Instruction in 1950.
years, there would be no need for making changes today. For example, according to the University catalog for 1874, the requirements for a four-year course in agriculture included mathematics through trigonometry, chemistry through analytical, English literature and rhetoric, one year of French or Latin, philosophy, physics, logic or Chaucer, zoology, anatomy, meteorology, geography, and astronomy. For students lacking sufficient background to handle the curriculum, there was a preparatory course of one year.

Charles L. Brainard, who holds the distinction of being the first enrollee in the College of Agriculture, stated six students were enrolled during the 1874-75 academic year (5). Actually he was the only student at the opening of the fall term, with the others matriculating at various times during the year. The group included Harvey Culbertson, who was an employee at the “Farm”, and who took some course work during the year. Crawford (l, p 43) wrote that Culbertson was “foreman of the garden” and the only “fourth year student in the College”. In the ensuing year there were nine students at the start of the fall term with six more added the following spring (5). Brainard also claimed to have been the first student to complete the full four-year course (he had started college at Peru Normal), although he stated that Harvey Culbertson was granted the degree of Bachelor of Agriculture at the end of the 1874-75 academic year so that he could be used as an instructor (5). Crawford (l, p 43) stated that Culbertson was the first graduate completing requirements in 1875 and that Brainard who received his baccalaureate degree in 1877, was the second graduate.

The main inducement for matriculating in the College of Agriculture appeared to have been the low cost of room and board, plus an opportunity for remunerative part-time work. The first building of consequence erected on the East Campus, after the University purchased the land, was a large frame house built in 1875 (torn down in 1923) (1, p 41). More students could be provided living quarters in this building than in the original residence. Attempts at recruitment can be noted in the catalog printed in 1875 as follows: “At the farm house he (a student) can find a pleasant home, far enough from the city to be out of the way of its temptations to idleness and worse, and yet near enough to enjoy all its literary and public advantages” (1, p 41).

Rooms were free and board was started at $3.00 per week, but later cut to $2.00. In 1882, Thompson (4) reported that the cost “... ranged from $1.90 to $2.40 per week, exclusive of fuel and light.” He also stated that students “... may be required to work two hours a day for five days a week, for which compensation will be made at a rate from 10 to 12 cents an hour, according to skill and fidelity”. Chancellor Benton stated that the enrollment would have been greater if there had been more room in the farm house.

The Period 1876-1889

The Industrial College Comes into Being

The Industrial College was created by an act of the Legislature in 1877 — just why is not entirely clear. It “... embraced agriculture, practical science, civil engineering, and the mechanic arts” (1, p 44). In 1869, the Legislature had provided for both a College of Agriculture and a College of Practical Science, Civil Engineering and Mechanics. The new legislation combined the two colleges — the former in a feeble condition, and the latter not yet operative.

Teaching Done on City Campus

Up to 1886, teaching in agriculture was done almost exclusively on the City Campus as no major instructional/research buildings had yet been constructed on the East Campus. The first building erected for the Industrial College was Nebraska Hall2, built in 1888-89 on the City Campus at a cost of $50,000. Initially it housed the museum and the departments of botany, zoology, agriculture, horticulture and physics (1, p 62).

Criticism of the Agricultural Program

There was a good deal of criticism of the agricultural program in the University. For example, in February 1882, the Omaha Bee labeled the agricultural course “an educational fraud and farce” (2, p 62). However, there were also supporters like the Nebraska Farmer which in June 1881 urged farmers to send at least one of their sons to the University to learn scientific agriculture (2, p 62).

The Curriculum

In the 1884-85 catalog (3), the requirements for the “Agricultural Course” in the Industrial College included: one year of German; one year of modern languages; one year of history and rhetoric; three years of chemistry; and one year of mathematics, zoology, botany, physics, geology, crystallography, and paleontology. Thus, it is apparent that the College of Agriculture could hardly be criticized for neglecting the “basics” during this period of its history.

Courses in agriculture included horticulture, entomology, veterinary science and “agriculture”. Agricultural chemistry could probably be classified either with the basics or with agriculture. No agricultural courses could be taken until the junior year.

Following the attempt of removal4 of 1885, the Regents directed Professor (Dean) Bessey “... to do what he could to reform the agricultural department” (2, p 103). Bessey’s response to the directive was reflected

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1Not to be confused with the present Nebraska Hall. The original Nebraska Hall has been demolished.
2An attempt, by legislation, to separate the agricultural college from the rest of the University (see also Part III, Chapter 1).
in the University Calendar for 1885-86 (3), as follows: "The agricultural course was 'radically changed' to place more emphasis on the scientific studies ... although the requirements for language and mathematics were 'insisted upon'..." (2, p 103).

The attempt of removal of 1889 had an even greater effect on the Industrial College. On April 10, 1889, the Regents ruled that "... the scientific course of study shall hereafter be a part of the Industrial College, and students pursuing such course shall be cataloged as students of the Industrial College." This shift resulted in the Industrial College offering the B. of Science degree along with those of Bachelor of Agriculture, and Bachelor of Civil Engineering. Although it amounted largely to a statistical maneuver, enrollment in the Industrial College jumped from 15 in 1887-88 to 57 in 1888-89.

The Period 1890-1909

The Industrial College during the period 1890-1909 grew into a fairly large institution, both in enrollment and breadth of course offerings. In 1904 it offered courses of specialization which led to the following bachelor of science degrees: science, per se; civil, electrical and mechanical engineering; agriculture; and forestry (1, p 84). The degree of bachelor of agriculture was replaced with the degree of bachelor of science in 1892 (1, p 83).

Enrollment data for agriculture for the latter period of the life of the Industrial College cannot be separated from those of the College as a whole. There is a record for the first year (1909-10) for the recreated College of Agriculture, which consisted of 116 men (all in agriculture), and 49 women (all in home economics). These data show that there had been considerable growth of enrollment in agriculture and home economics during the life of the Industrial College, from 1877 to 1909 (1, p 83). Other advancements also took place, which is evident in the following sections.

The Period 1910-1924

The College of Agriculture was not primarily a men's college as was often thought by those not connected with it. For example in 1922-23, 1923-24, and 1927-28, the number of women (home economics) exceeded the number of men (agriculture).

During the period 1910-24, students in the College of Agriculture took many classes on the City Campus in addition to classes on the East Campus. There were street car connections between the campuses. Walking between campuses was not uncommon and toward the end of the period, a few students were driving privately owned automobiles.

There was very little dormitory space available for either men or women. Students not residing in Lincoln or nearby, primarily lived in fraternities or sororities, in private boarding houses or in apartments (usually in homes). Those who lived in rooms ate "out" or took their meals in boarding houses near the Farm Campus. "Eating out" generally meant at the Home Ec Cafeteria or at one of the cafes just across Holdrege Street from the East Campus. Except for the fraternity/sorority members and Lincoln residents, student living was commonly rather austere.

The fact that there was no student union did not concern the students as they hardly knew such facilities were possible. Also there was little available in the way of university financial aids. Most students had to live on very tight budgets. Many worked on Campus, if possible, but often they worked wherever in the city employment was available. Off-campus employment for boys commonly consisted of doing odd jobs at people's homes. Many of the girls did domestic work for their room and board, living in with the families for whom they worked. Some of the boys roomed (and sometimes prepared their meals) in the livestock barns on campus.

There was no official setup in the University or the College to assist upcoming graduates in finding positions, a situation not uncommon in agricultural colleges at that time. Departments provided some assistance. However, to a considerable extent, except for graduates returning to their home farms and those planning to teach at the secondary level, the upcoming graduates were forced to fend for themselves. They were not in a position to be very selective, often taking the first job offered. Those first jobs might or might not have been in agriculture or home economics.

In 1920-21, the only majors were the "General Agricultural Group" and the "Agricultural Practice Group", along with requirements being spelled out for obtaining a "Teachers Certificate under the Smith-Hughes Act." In 1921-22, besides the above, requirements were shown for the following "groups": 1) agricultural education, 2) animal industry; 3) farm mechanics, 4) plant industry, and 5) rural economics. By 1923-24 the majors were shown as the 1) agricultural practice group, 2) the cooperative business group, 3) animal husbandry, 4) dairy husbandry, 5) farm mechanics, 6) plant industry, 7) poultry husbandry, 8) rural economics, and 9) vocational education.

The requirements for graduation in 1923-24 were: 1) agricultural courses - 50 credits, 2) English - 10 credits, 3) chemistry - 8 credits, 4) biology - 12 credits, 5) economics - 6 credits, 6) military science - 4 credits, and 7) electives - 35 credits, totaling 125 credits.

By 1923-24 the curricular pattern was working successfully. Many changes have been made in curricula since that time but the basic pattern of that day is still typical of the curricula today. Most of the major changes that have been made since the 1920's have been in the way that the groups of courses were named and presented in the catalogs. Probably the most radical changes have been made in the content of individual courses as the basic knowledge of nutrition, genetics, physiology, engineering, economic theory,
biochemistry, and other subjects, has been modified through research discoveries and widespread application. A student in the 1920's had a combination of science, humanities, social science and agricultural courses which would appear similar to the requirements for graduation in the 1980's, but the course content was vastly different from that of the 20's.

After 1924(3)

Groups (Majors) and Graduation Requirements

Changes in requirements for graduation continued. By 1932, required courses in agriculture had been dropped to 40. Total credits in economics had been increased to 12, and two credits in physical education had been added.

The “groups” (majors) carried in the 1934-35 catalog were similar to those for 1923-24 except that agricultural journalism had been added. These groups had been eliminated in the 1935-36 catalog, and even as late as 1942-43 graduation requirements were listed under four groups: 1) general agriculture, 2) agricultural teacher training, 3) technical science, and 4) agricultural economics.

By 1949-50, the number of groups (majors) had again been increased, this time to eight: 1) general agriculture, 2) agricultural extension, 3) agricultural journalism, 4) agricultural economics, 5) conservation, 6) technical science, 7) vocational education, and 8) pre-seminary.

Some of the groups like agricultural economics or vocational education were essentially departmental majors. However, some of the largest departments, such as Agronomy and Animal Science could not officially identify which students were their majors, since the students were classified only as General Agriculture or Technical Science.

The pre-seminary group was dropped in 1952-53. In 1956-57, extensive changes were made in the way graduation requirements (curricula) were presented in the College of Agriculture catalog. Two basic curricula were retained: 1) general agriculture for the majority of students interested in production agriculture or business associated with agriculture, and 2) technical science for students who had strong scientific interests and who thought they might take graduate work. The pre-veterinary curriculum was also retained.

Departmental majors were re-established so that most departments had at least one major based on general agriculture and one on technical science. This resulted in 20 departmental majors plus general agriculture for students with broad or unspecified interests. Physical education was dropped as a requirement.

The most obvious differences between the general

---

1Note that it was still not possible to major in the largest department on campus, Agronomy.

agriculture and technical science curricula were as follows:

<table>
<thead>
<tr>
<th></th>
<th>General Ag</th>
<th>Tech Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Chemistry</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Physics</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Mathematics</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Before the departmental major requirements were specified, the number of elective credits was 41 for general agriculture and 25 for technical science. After the departmental majors were specified the free electives remaining ranged from 4 to 37.

In 1958-59 Agricultural Economics added a business option to its major based on the general agriculture curriculum. In 1961-62 a major was added in food technology.

In 1962-63 a business option similar to the one in agricultural economics was added to agronomy, animal husbandry, dairy plant management, entomology, horticulture and poultry husbandry majors.

In 1964-65 a new basic curriculum was adopted as follows:

Agricultural courses: 30 hours, including one course each in: animal science, crop science and agricultural economics

Biology: 14 hours

Physical science and mathematics: 14-17 hours

Humanities: 13 hours

Social sciences: 12 hours

Within each departmental major three options were available — general, technical (later called specialized or scientific) and business. This resulted in a total of 17 majors and 39 options.

A College business option was in place during the period 1958-1964. As the departments were developing their own business options, the option was dropped from the College level in 1964. It was reinstated in 1973.

In 1968-69, the requirement of physical education or Reserve Officer Training Corps (ROTC) was dropped.

Dual majors within the College were defined and approved in 1971-72, and the requirements for the humanities and social sciences were combined. A communications option adopted in 1973 first appeared in the 1974-1976 catalog (3).

By 1976 the basic curriculum had been changed to only 25 hours in agriculture in three departments, a considerable liberalization when compared to 1923-24. The humanities and social sciences were combined and a general statement was added concerning business and communication options.

A six year program has also been added in agriculture and law, the first three years in agriculture and the last three in law.
In summary, a logical pattern has been followed as curricula have been developed. Agricultural practices are based on scientific discoveries, therefore, courses in basic sciences are essential, especially in biology and chemistry. Economics is also important. Finally humanities and social studies have been found to be necessary for complete and broad understanding.

The Honors Program

An honors program was started in 1962-63. This program was designed for the most capable students to develop programs of greater depth in areas in which they had specific interests. The students were required to prepare their own sets of graduation requirements, subject to the approval of the honors council, which was composed of all advisers of honors program students. The students were encouraged to omit some of the elementary courses and to take more advanced courses, with prerequisites occasionally being waived. Two specific courses designed for honors program students were Ag 90H to acquaint them with all fields of agriculture, and Ag 190H in which the students prepared and presented term papers. The honors programs tended to be similar to those of majors based on the technical science curriculum. Since the programs were highly individualized, some of them departed from standard programs, which led to some concern among the faculty. However, faculty from other universities who accepted University of Nebraska honors program graduates for further study were favorably impressed by their attitudes and capabilities to do graduate work. Many honors program graduates are now faculty members in other colleges of agriculture.

The honors program, with some modifications, was still active in 1986-87, having been continued for a longer period of time than similar programs in most other agricultural colleges over the nation. From its inception until the present time, some have expressed concern over the additional faculty time-cost of the program, and the attention given to this "elite" group. It was thought by these faculty members that the resources might better be spread over all students. The occasional departure from the standard graduation requirements led to the demand that all honors program students must meet the minimum requirements of the core curriculum.

Enrollment — a Historical Perspective

Data on undergraduate enrollment in the College of Agriculture for the period of 1909-10 through 1987-88 are shown in Table 1. Because the data were not kept on the same basis throughout this period, they are not entirely comparable. Data shown for the period 1909-10 through 1922-23 represent total enrollments for the respective years, without any duplication of individuals. Thus if there were 200 students registered in the first semester, and 190 in the second semester, with 20 dropouts and 10 new students registered in the second semester, the total shown would be 210. Furthermore, summer school enrollments may have been included in some of the years and not in others. This is not too important because undergraduate summer school enrollments in agriculture have traditionally been low.

Starting with 1923-24 to the present, enrollments shown are for the fall semester only.

It will be noted that there has been a gradual increase in enrollment in agriculture for the entire period (making allowance for small shifts in individual years) with the following exceptions: There were dips in enrollment at the time of WW I and during the depression of the early 30's, and there was a severe drop during WW II. There was a bulge in enrollment in the years immediately following WW II, which subsequently dropped and plateaued beginning about 1953-54. Beginning with 1963-64 one will note the beginning of a rather substantial annual increase in enrollment until 1970-71 at which time another plateau set in which remained until 1975-76 in spite of the fact that female enrollment in agriculture was increasing substantially during this period. Beginning with 1976-77 enrollment increased significantly almost every year until 1980-81. However, enrollment in agriculture, since that time, has been dropping.

Getting an adequate number of students to major in agriculture to meet the needs of the country has always been a problem — not only in Nebraska but over most of the rest of the country — this in spite of the fact the number of female majors in recent years has been significant. Salaries in agricultural professions off of the farm (in consonance with earnings in farming) have traditionally been relatively low but have increased significantly in recent years. Many people associated majoring in agriculture with the student returning to the farm, rather than including the broad field of agribusiness, research and educational opportunities. Agriculture has lacked the glamour of some other professions to persons deciding on the college to attend when they are seniors in high school (at which time the decision is typically made). However, it is not uncommon to talk to persons after they have passed the age of 25 or 30 who regret that they did not major in agriculture when in college. In most cases that is the point of no return.

Director Eldridge worked on recruitment even though the activity was not permitted under that name. He cooperated with the Knights of Ak-Sar-Ben in providing help in preparation and manning of a special section of a traveling exhibit on Extension, devoted to resident instruction. The exhibit was entitled "Opportunities for college of agriculture graduates". It was used for about three years during the mid-50's.

In about 1960 the Union Pacific Railroad included an exhibit entitled "atoms in agriculture" in a special agricultural railroad car shown at many towns and cities on the UP rail line. Hundreds of high school
### Table 1. Undergraduate enrollment in the UN College of Agriculture

<table>
<thead>
<tr>
<th>Year</th>
<th>Male Students</th>
<th>Female Students</th>
<th>Year</th>
<th>Male Students</th>
<th>Female Students</th>
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<tr>
<td>1909-10</td>
<td>116</td>
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<td>1911-12</td>
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<td>124</td>
<td>1913-14</td>
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<td>201</td>
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<tr>
<td>1912-13</td>
<td>224</td>
<td>148</td>
<td>1914-15</td>
<td>289</td>
<td>226</td>
</tr>
<tr>
<td>1913-14</td>
<td>267</td>
<td>201</td>
<td>1915-16</td>
<td>270</td>
<td>270</td>
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<tr>
<td>1914-15</td>
<td>289</td>
<td>226</td>
<td>(Enrollment recorded for the year)</td>
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<tr>
<td>1915-16</td>
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<td>270</td>
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<tr>
<td>1923-24</td>
<td>174</td>
<td>254</td>
<td>1943-44</td>
<td>48</td>
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<td>1924-25</td>
<td>227</td>
<td>184</td>
<td>1944-45</td>
<td>50</td>
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<tr>
<td>1925-26</td>
<td>191</td>
<td>173</td>
<td>1945-46</td>
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<td>1946-47</td>
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<tr>
<td>1927-28</td>
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<td>(N.A.)</td>
<td>1947-48</td>
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<td>1928-29</td>
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<td>255</td>
<td>1948-49</td>
<td>800</td>
<td>300</td>
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<tr>
<td>1929-30</td>
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<td>(N.A.)</td>
<td>1949-50</td>
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<td>357</td>
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<tr>
<td>1930-31</td>
<td>345</td>
<td>254</td>
<td>1950-51</td>
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<td>1931-32</td>
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<td>1933-34</td>
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<td>1934-35</td>
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<td>1954-55</td>
<td>631</td>
<td>317</td>
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<td>1935-36</td>
<td>317</td>
<td>282</td>
<td>1955-56</td>
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<td>1936-37</td>
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<td>1956-57</td>
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<td>341</td>
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<td>1937-38</td>
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<td>393</td>
<td>1957-58</td>
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<td>1939-40</td>
<td>494</td>
<td>551</td>
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<td>1940-41</td>
<td>547</td>
<td>434</td>
<td>1960-61</td>
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<td>1941-42</td>
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<td>1961-62</td>
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<td>359</td>
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<td>1942-43</td>
<td>395</td>
<td>314</td>
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<tr>
<th>Year</th>
<th>Men/Women Agric</th>
<th>Men/Women Home Ec</th>
<th>Year</th>
<th>Men/Women Agric</th>
</tr>
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<tr>
<td>1962-63</td>
<td>665</td>
<td>390</td>
<td>1975-76</td>
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<tr>
<td>1963-64</td>
<td>765</td>
<td>383</td>
<td>1976-77</td>
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<td>1964-65</td>
<td>808</td>
<td>424</td>
<td>1977-78</td>
<td>1800</td>
</tr>
<tr>
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<td>1872</td>
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<td>1967-68</td>
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<td>722</td>
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<td>1889</td>
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<tr>
<td>1968-69</td>
<td>1297</td>
<td>755</td>
<td>1981-82</td>
<td>1872</td>
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<td>1969-70</td>
<td>1367</td>
<td>881</td>
<td>1982-83</td>
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<td>1970-71</td>
<td>1409</td>
<td>1983-84</td>
<td>1719</td>
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</tr>
<tr>
<td>1971-72</td>
<td>1432</td>
<td>1984-85</td>
<td>1554</td>
<td></td>
</tr>
<tr>
<td>1972-73</td>
<td>1393</td>
<td>1985-86</td>
<td>1489</td>
<td></td>
</tr>
<tr>
<td>1973-74</td>
<td>1449</td>
<td>1986-87</td>
<td>1317</td>
<td></td>
</tr>
<tr>
<td>1974-75</td>
<td>1422</td>
<td>1987-88</td>
<td>1170</td>
<td></td>
</tr>
</tbody>
</table>

*Through 1961-62 the data are based on number of male and female students. Up to that time, the term "male students" was virtually synonymous with "agricultural students" and the term "female students" with "home economics students" since in the College of Agriculture only men took agriculture and only women took home economics.

Cleora Majors of Lexington enrolled in the College of Agriculture, registering for a course in animal husbandry. Upon learning of this, Dean W. W. Burr ruled that she must drop out of agriculture, including animal husbandry, and switch to home economics.

*Home Ec became a College, effective July 1, 1970; hence enrollment in Home Economics has not been included since that time.
students in physics, chemistry, and agricultural courses viewed the exhibit. Under arrangements worked out by Eldridge, many College faculty members participated in explaining the exhibit and, incidentally, in encouraging enrollment in the College.

During the 60's, Eldridge and other staff members visited high schools throughout the state to explain opportunities in agriculture.

It will be noted from Table 1 that during the 60's, when the above activities were being carried on, undergraduate enrollment in agriculture more than doubled. Chancellor Hardin, noting that the 1965-66 enrollment in agriculture for the first time in the history of the College exceeded 1,000 students, commended the staff on the accomplishment and referred to Eldridge as a "salesman for agriculture".

Dean T. E. Hartung, Associate Dean Earl F. Ellington, and other staff members are putting forth a major effort to bring the story of opportunities in agriculture to high school students, emphasizing the fact that there are many opportunities for graduates in agribusiness. It is hoped and expected that as the farm economy improves, enrollment in the College of Agriculture will increase. However, without such a reversal, majors in agriculture at the college level will likely continue to be somewhat restricted.

Funding

Federal (6, pp. 70-72)

Federal funding for instruction is handled somewhat differently for resident instruction than it is for the Station and Extension. For the former, federal funds are commingled with other University funds and subsequently there is one overall budget for the College of Agriculture/R1. Federal funds for the Station and Extension retain their identity throughout the budgeting and expending processes. Federal funds coming to the University for instruction in agriculture are received under the following acts passed by Congress:

The First Morrill Act. July 2, 1862. Provided 30,000 acres of land for each Senator and Representative in Congress. Required that funds be used "... without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture, and the mechanic arts...."

Second Morrill Act. August 30, 1890. Provided from the sale of public lands, $15,000 for the year ending June 30, 1890 and an increase of $1,000 a year additional for a period of ten years, and that the amount thereafter be $25,000. It further "provided that separate schools for colored and white persons might be maintained and an equal division of the funds made".

Nelson Amendment for the Further Endowing of Land Grant Colleges. March 4, 1907. Provided, along with the Appropriation Act passed for fiscal 1908, that land grant colleges established under the First and Second Morrill Acts, receive an additional $5,000, beginning in fiscal 1908, and $5,000 additional for each of the four years thereafter, with the total being $50,000 thereafter.

At present, the funds which accrued to the University of Nebraska under the Acts of 1862 and 1890 are maintained in a basic endowment, only the interest from which can be expended. Also in 1960, Nebraska still had 3,844 acres from the original land grant. The University still received annually $50,000 from the federal government under the Nelson Amendment of 1907 (commonly known as the Morrill-Nelson funds). These funds are administered by the U.S. Department of Agriculture.

The Federal Farm Act of 1977 (7, 8). This Act includes Title XIV which designates the USDA as the lead federal agency for higher education in food and agricultural sciences.

Through the Act the following services and financial support are provided to the Land Grant, 1890, and other approved universities:

1) Services such as assembling and summarizing annually data on enrollment in agriculture at the "member" institutions.

2) Funds for fellowships (graduate) in designated areas where shortages of personnel at the PhD level have been projected. The grants are made on a competitive basis. The stipends the students receive vary in amount from $12,000 to $15,000 per year. Presently (1986-87), UNL has four students in agricultural engineering and one in food science and technology receiving these fellowships. No funds are granted directly to the UNL under the Act of 1977.
Chapter 3. The Agricultural Experiment Station/ UN Agricultural Research Division

Section 1. General

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Names of the Division

Nebraska Agricultural Experiment Station, 1887-1984
University of Nebraska Agricultural Research Division, 1984-present

Administrators' and Administrative Structure

Principal Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Years Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles E. Bessey</td>
<td>Director</td>
<td>1887-1889</td>
</tr>
<tr>
<td>Lewis E. Hicks</td>
<td>Director</td>
<td>1889-1890</td>
</tr>
<tr>
<td>Hudson H. Nicholson</td>
<td>Director</td>
<td>1890-1892</td>
</tr>
<tr>
<td>C. L. Ingersoll</td>
<td>Director</td>
<td>1892-1895</td>
</tr>
</tbody>
</table>

As of July 28, 1984, the dean and associate dean titles refer to the UN Agricultural Research Division, while the director, associate director and assistant director titles refer to the Nebraska Agricultural Experiment Station.
### Administrative Structure

During the early years, the chief function of the College of Agriculture (and its successor, the Industrial College) was resident instruction, but from the start it also carried out research and extension-type activities. Research was formally recognized in the administrative structure with the establishment of the Nebraska Agricultural Experiment Station in 1887.

The original title lasted a long time, for 97 years to be exact. In 1984, the Board of Regents changed the name from the Nebraska Agricultural Experiment Station to the University of Nebraska Agricultural Research Division. The word “Station” had a double meaning — one, that of a physical entity, and the other that of an administrative unit. Not uncommonly, lay people, especially those outside of agriculture, thought that experiment station was analogous to something like a railroad station, and on many occasions an explanation was required to clarify the situation.

The position of the director during the first 14 years of the existence of the Station appears to have been more that of a committee chairman than a solid administrative position. During the period 1887 to 1901, eight different directors (Nicholson having been appointed at two different times) held the position. It was held by three different chancellors, and only in three cases was it held by the dean of the Industrial College (the nearest thing at the time to the position of dean of the College of Agriculture).

In those early days, Station funds were commonly used to supplement salaries and research operating costs for staff members principally outside of the Institutional Programs. At this time Kleis was devoting major attention to his position of Dean of International Programs.

Officially there is still a Nebraska Agricultural Experiment Station. It is that component of the Agricultural Research Division that pertains to State Agricultural Experiment Station System and USDA/Federal programs.

### Other Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. L. Lyon</td>
<td>Assoc. Director</td>
<td>10/1900-9/1906</td>
</tr>
<tr>
<td>W. W. Burr</td>
<td>Assoc. Director</td>
<td>1920-1927</td>
</tr>
<tr>
<td>Marvel L. Baker</td>
<td>Assoc. Director</td>
<td>1946-1947</td>
</tr>
<tr>
<td>Elvin F. Frolik</td>
<td>Assoc. Director</td>
<td>1955-1960</td>
</tr>
<tr>
<td>Robert W. Kleis</td>
<td>Assoc. Director</td>
<td>1967-1983</td>
</tr>
<tr>
<td>Warren W. Sahs</td>
<td>Assoc. Director</td>
<td>1970-present</td>
</tr>
<tr>
<td>Virginia Trotter</td>
<td>Assoc. Director (Home Economics)</td>
<td>1971-1972</td>
</tr>
<tr>
<td>Leslie F. Sheffield</td>
<td>Assoc. Director (Coord. Irrigation)</td>
<td>1971-1975</td>
</tr>
<tr>
<td>Patricia J. Sailor</td>
<td>Assoc. Director (Home Economics)</td>
<td>1973-1975</td>
</tr>
<tr>
<td>Millard W. Hall</td>
<td>Assoc. Director (Water Res. Center)</td>
<td>1975-1978</td>
</tr>
<tr>
<td>John C. Woodward</td>
<td>Assoc. Director (Home Economics)</td>
<td>1975-1986</td>
</tr>
<tr>
<td>Robert W. Kleis</td>
<td>Assoc. Director</td>
<td>1983-1985</td>
</tr>
<tr>
<td>Dale H. Vanderholm</td>
<td>Assoc. Dean &amp; Assoc. Director</td>
<td>1983-present</td>
</tr>
<tr>
<td>Karen E. Craig</td>
<td>Assoc. Director (Home Economics)</td>
<td>1986-present</td>
</tr>
</tbody>
</table>
dustrial College. Of the directors during the period 1887 to 1901, only Ingersoll, Lyon and Nicholson would have qualified as faculty members primarily of the Industrial College. At the time, they held appointments as professors of “agriculture”. Bessey’s initial appointment in the University was “professor of botany and horticulture”. He also gave considerable attention to plant diseases but was basically a botanist. Nicholson was a chemist who gradually became more and more interested in the study of sugar beets, in fact in 1902, near the close of his career with the University, he was appointed the first station chemist.

The first long-term appointment of a director came in 1901 when Edgar A. Burnett was made associate dean of the Industrial College, in charge of agriculture, and director of the Station. Burnett was appointed dean of the Industrial College in 1908 and of the newly reestablished College of Agriculture in 1909. Thus the deanship of the College and directorship of the Station were held by the same person from 1908 until 1960.

With Frolik’s appointment as dean in 1960, the positions were separated. That situation has remained until present, except that in March 1976 the title of the position was upgraded from director to dean and director.

During the period 1947 through 1960, Associate Director Baker, and later Associate Director Frolik, functioned largely as the directors. They had separate offices from those of the dean, carried on virtually all functions of a director, maintained all Station records, and were authorized to sign all official Station documents. Inclusion in the title of the word “associate” never caused any difficulty — Dean Lambert was an excellent administrator, and both Baker and Frolik were happy with their working relationships with him.

Location on Campus of Principal Administrators

<table>
<thead>
<tr>
<th>Years</th>
<th>Names of Buildings and Locations</th>
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<tbody>
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<td>Chemical Laboratory, City Campus</td>
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<tr>
<td>1889-1890</td>
<td>Nebraska Hall, City Campus</td>
</tr>
<tr>
<td>1890-1892</td>
<td>Chemical Laboratory, City Campus</td>
</tr>
<tr>
<td>1892-1895</td>
<td>Nebraska Hall, City Campus</td>
</tr>
<tr>
<td>1895-1899</td>
<td>University Hall, City Campus</td>
</tr>
<tr>
<td>1899-1908</td>
<td>Agricultural Experiment Station Building, East Campus</td>
</tr>
<tr>
<td>1908-present</td>
<td>Agricultural Hall, East Campus</td>
</tr>
</tbody>
</table>

Early History

1869-1886

The Nebraska Agricultural Experiment Station was officially established in 1887, but the concept of agricultural research at the University of Nebraska dates back to February 15, 1869 when the Legislature passed, and the governor signed, the bill establishing the University of Nebraska (2, pp 15 and 309-312). The Charter stated that the governor should reserve two sections of the agricultural college lands for a “model farm” (2, p 33). Approximately two sections of land were set aside for this purpose. The land consisted of at least two or three parcels, with the major portion being in the neighborhood of the present State Fairgrounds. According to the Charter this could be saline land and it probably was. Just how saline land was expected to provide the basis for a “model farm” is difficult to understand, but it must be recalled that the Charter was written in 1869 when much less was known about soils. Farming operations in 1873 were carried out with the assistance of donations by private companies and individuals, the gifts consisting of implements (outright gifts or reduction in prices), Poland China hogs, crop seed, including sugar beets, and publications.

The crops grown during that year were corn, oats, wheat, sugar beets and garden vegetables, in addition to “... small plots of two new kinds of oats, one of barley and one of wheat” (1 p 24, 25). In addition, with support from Governor Furnas, Professor Samuel R. Thompson distributed sugar beet seed to over 100 persons in 20 counties.

In his report for 1875, Thompson displayed genuine foresight when he raised the question of what kind of farm would be most beneficial. He stated:

“In planning our future work in the Agricultural College, the first question to be settled is, shall we aim to present a model farm ... or ... an experimental farm, where it shall be our main business to discover new agricultural truth, rather than to exhibit what is old. The model farm will make the best showing to the general public and will incur less expense, but in the long run, the latter will be of more real service to the State.”

The original “model” farm at the State Fairgrounds was replaced with the purchase (June 25, 1874) of the Moses M. Culver half-section of land (presently the East Campus) (3).

The experimental idea thrived and the model concept underwent a merciful death (the Charter not withstanding) when the Regents decided in 1879 that the “farm” should be devoted to agricultural experimentation (2, p 61).

As far as we have been able to determine, the first publication of experimental results was made by Harvey Culbertson in 1880 (1). The publication included a description of the “farm,” a statement of

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*Temporarily in Mechanic Arts Hall, City Campus, while awaiting completion of the Agricultural Experiment Station Building on the “Farm”, now the East Campus.

*Renamed a number of times since, it is presently the Agricultural Communications Building.

*Dean, Agricultural College, and Professor in Agricultural Department.

*Since this publication was issued prior to 1887, it does not appear in the official list of Station publications (5).
instruction offered in agriculture, and results of experimental work. The latter included work on pig feeding, sorghum for syrup, wheat, potatoes, sugar beets for feeding purposes, and a record of rainfall and temperatures. S. R. Thompson published a report on "... experiments at the College Farm" in 1882 (4).

Bessey, in 1884, outlined two types of experiments that could be conducted, namely popular or scientific (1, p 50-51). Today we still talk about two types of agricultural research — basic and applied. The experiments which Bessey listed would fall principally into the latter group, but the fact that he recognized the two types at that early stage of agricultural research development is significant indeed.

Five short press bulletins were issued by the Industrial College in 1885. They covered the subjects of fire blight in apples, premature dropping of plums, the College herd, the smut of "Indian" corn, and the Industrial College. In 1886, Bessey reported that experimental work had been undertaken in breeding and feeding of stock, grasses and other forage plants, cultural practices, meteorology, injurious fungi, and soils (1, p 51-52).

The words "experiment station" appeared in 1886, although the connotation of the term as it was used subsequently was probably not intended nor even recognized at that time. F. S. Billings was employed by the Board of Regents in 1886 to attempt to develop a remedy for hog cholera. He was headquartered on the City Campus. He had the distinction of being the first staff person in the Industrial College to devote full time to research. At the June 1886 meeting "... the Board provided for the establishment of an experiment station for the investigation of the diseases of domestic animals..." (1, p 52).

1887 to 1909

Federal legislation and the beginning of the Nebraska Agricultural Experiment Station. A notable year in the history of the Station was 1887 when, on March 2, Congress passed the Hatch Act, "an Act to establish Agricultural Experiment stations in connection with the Colleges established in the several states under the provisions of an Act approved 7-1-1862 and of the Acts supplementary thereto" (9).

It was also reported that the need for federal support had been recognized by Seaman A. Knapp, president of Iowa State College, and a colleague, Charles E. Bessey, who drafted a bill to secure that support. The bill remained in committee at the close of the Congressional session. Five years later (after Bessey had come to Nebraska) and with a succession of alternate proposals, the bill was passed as the Hatch Act (12).

The Act provided an annual appropriation of $15,000 to each state for conducting agricultural research, the results of which would be of value to both farmers and agricultural industry. Nebraska lost no time in taking advantage of the $15,000 available from the U.S. Treasury. By an act of the Nebraska Legislature passed on March 31, 1887, the provisions of the federal act were accepted by the state and the Nebraska Agricultural Experiment Station was, thereby, created.

Establishment of the Station set in motion a productive research program and one which has grown and been increasingly beneficial ever since. The first publication issued by the Station in 1887 (often cited as 1888) was Bulletin No. 1—Irrigation in Nebraska, by Lewis E. Hicks. Additional bulletins, published in 1888 and 1889, had to do with animal diseases, insects, meteorology, plant diseases, animal husbandry, field crops, the cottonwood, and fungi of economic interest (5, Feb 1, 1923).

On March 16, 1906 Congress passed the Adams Act which provided additional funds for the Station. The Act provided that the funds be expended strictly for original research and could not be used for general administration, for printing, or for farm demonstrations (5, 28th Report, pp vii, 190). The Act was intended to lead to the "discovery of original principles and solution of the more difficult and fundamental problems of agriculture." The Act allotted $5,000 for each experiment station in the U.S. for the first year, with $2,000 to be added each year until 1911, when the total would be $30,000 (9, p 39).

The first substation in the Station system (7). The first outlying station established as a part of the Station was the North Platte Substation, which by 1974 carried the name of the University of Nebraska North Platte Station. The 1903 session of the Nebraska Legislature passed a law providing for the establishment of a substation to be located west of the 100th meridian. In a competition of a number of towns for the substation, North Platte won out and the substation was established three miles south of that city.

Experimental work underway and publications. The 1908-09 Station annual report (5, 23rd Report, Feb 1, 1910) listed "a working staff" of 27 members (most of whom held joint teaching appointments). Research was being conducted over rather broad subject matter areas, including classical work by R. A. Emerson on heredity (Mendelism). The work is summarized in the early history portions of the departmental and outlying station sections in this book.

By June 30, 1909, the Station had published 22 annual reports, 113 bulletins, and 31 press bulletins. The annual reports of those days contained considerable information on research not yet completed (5, 23rd Report, Feb 1, 1910). The nature of publications varied from reports of scientific investigations to mere observations, with recommendations for farmers often based to varying degrees on information obtained elsewhere.
Cooperation with the USDA. Cooperation was underway with the United States Dept. of Agriculture, as follows: breeding for improved winter wheat with superior milling and baking qualities at Lincoln; and rotations, tillage, alkali resistant crops and growing forest trees at the North Platte Station. Also about 1908 a seed laboratory was started which was later transferred to the State Department of Agriculture.

The following experiments and demonstrations were being conducted cooperatively on farms: spraying commercial orchards, testing corn and winter barley varieties, trying sweet clover as a green manure crop, and applying commercial fertilizers.

The stationing of a USDA employee in a cooperative arrangement on the campus of the University probably first occurred in 1904-05. The Station report for that year (5, 19th Report, Feb 1, 1906) listed Alvin Keyser as “Asst. in Agriculture and detailed from the U.S. Dept. of Agriculture.” It also stated that Keyser was transferred from assistant in chemistry to assistant in agriculture. “Agriculture” at that time meant primarily Agronomy. In the next year’s report (5, Feb 1907) Keyser is listed with “soils” as his field, with no reference to USDA. Whether the USDA appointment continued is not known.

W. W. Burr may have been the second USDA employee stationed at the University. The Station report for 1909-10 (5, 24th Report, Feb 1, 1911) listed his title as “Asst. in Soils and Crops, North Platte; Asst. Agriculturist Office of Dry Land Agriculture, USDA.”

1910-1923.

The period 1910 to 1923 witnessed a broadening of the research areas. With one important exception, the research covered much the same subject matter areas as those of today with, of course, much less breadth, depth and sophistication. The exception was that there were no home economics publications listed, up to and including the February 1, 1924 report (5).

Addition of the Agronomy Farm. The 1917 Legislature appropriated $32,000 for establishment of an agronomy farm. The farm purchased was north of Adams Street, east of University Place, and described as the SW¼ of Section 10, Twp 10, Rge 7, E of the 6th principal meridian, Lancaster Co., NE. This farm first became the headquarters for field research for agronomy and later also for animal husbandry. As time went on considerably more land was added. Most of the original tract was sold, following establishment of the University Field Laboratory at Mead. The 160 acres is now a part of Lincoln, a portion having been developed for residences and businesses. Another portion is a part of the Mahoney City Park.

The Station annual report for 1919 (5, Feb 1, 1920) stated: “Sixteen and one-half acres of land has been added to this farm (agronomy) by the purchase of a plot of land lying north of the west half of the original farm between this farm and the C. R. I. and P. railroad.”

Additional substations and the Univ. Fruit Farm.

The Valentine Substation. The Nebraska Legislature on March 20, 1909 passed HR No. 114, which provided for the establishment of an experimental substation to be located west of the second guide meridian and north of the sixth standard parallel. The initial appropriation for the substation was $15,000, which made possible the establishment of the Valentine Substation in 1910. “The Substation was established for the purpose of determining the suitability of the sandhill country for general farming” (5, 23rd Report, pp xvii-xviii, Feb 1, 1910). (See also Part VI, Chapter 9).

The Panhandle Station. On April 3, 1909, the Legislature passed HR 18, which provided for establishing a substation to be located west of the 102nd meridian. The initial state appropriation for establishment of the substation was $5,000 (5, 23rd Report, pp xxiv-xxviii, Feb 1, 1910). In cooperation with the Bureau of Reclamation and the USDA, the Panhandle Station, with headquarters located five miles east of Mitchell, was activated on March 1, 1910. Although cooperative between the state and USDA, to begin with the operation was principally a federal one. (See Part VI, Chapter 4, for more details on the Panhandle Station.)

The Culbertson Substation (demonstration farm). Still another substation was provided for by the 1911 Legislature, with an appropriation of $15,000 and with Culbertson designated as the location. On April 13, 1912, the Regents purchased the Southeast ¼ of Section 9, Twp 3, Rge 31 west, consisting of 160 acres, for this purpose. The substation was located ¼ mile east of Culbertson. The land was all under a private irrigation ditch, but with no water rights (5, 25th Report, ppxxii and xxiii, Feb 1, 1912). Experimental work was conducted both on dry land and under irrigation. There is a question as to whether Culbertson was ever really a substation, as in subsequent Station annual reports it was called a “demonstration farm”. Also, Homer L. Nye was first listed as superintendent but subsequently as foreman. The substation was short-lived. The annual Station report dated February 1916 stated “This farm has been sold by the Regents in accordance with the instructions of the Legislature.”

The University Fruit Farm (8). The 1917 Legislature appropriated $10,000 for a demonstration fruit farm to be located in the fruit belt of Nebraska. That fall the University purchased 80 acres of land for this purpose, described as the W½ of the SW¼ of Section 36, Twp 10, Rge 13, Cass County, NE, for establishment of the University Fruit Farm. The operation was closed and the farm was sold by the University in 1961. (For details see Part V, Chapter 15).

Departmental relationships. A typed copy of a statement, dated December 17, 1919, entitled “Memorandum of Understanding in Departmental Rela-
tions in the Experiment Station” and shown as being approved by the “Station Council” is of interest primarily because it shows: 1) that there was a Station Council with authority to act, and 2) that there were some problems between the Department of Rural Economics on the one hand and some other departments on the other hand.

The Council ruled that “Problems involving methods of production shall belong to technical or subject matter departments . . . it may be necessary to complete the studies by marketing the crops or livestock produced . . . The Department of Rural Economics may conduct . . . studies . . . primarily in the field of rural science. Where a cost of production study or a marketing problem involves a comparison of methods, it shall be cooperative with the subject matter department concerned.”

It appears that the Council did not consider Rural Economics as a “technical or subject matter department”.

Research underway and publications. By 1923, the “working staff” was listed as numbering 35 (5, 37th Report, Feb 1, 1924). Research was being conducted by most of the agricultural departments of the College and by the three outlying Stations. The projects were documented in the annual Station reports of that time.

An overview of the research underway is gained by noting the results reported in the Station report (5, Feb 1, 1924, pp 7-39) which included the following topics:9

1) Agricultural Engineering: tractor testing, plow drafts, fuel saving devices for internal combustion engines, and poultry housing.

2) Animal diseases: Hemorrhagic septicemia; poultry diseases, tuberculosis of swine and poultry, and other animal diseases.

3) Dairy husbandry: weight of dairy cattle; and ice cream making.

4) National egg laying contest.

5) Field crops and soils: corn breeding, including hybrid production; water requirements of crops; small grains—breeding and cultural studies; forage crops, soil fertility at the Station and on farms; and nitrification in soils; and soil acidity.

6) Fruit production: winter injury; pruning; and strawberry breeding.

7) Insect control: cutworms, plains false wireworms; gadflies and syrphus flies; grasshoppers; and Hessian fly.

8) Livestock feeding: effect of age on rate and economy of gains in beef cattle; rations for fattening lambs and hogs; and sweet clover pasture as a feed for dairy cattle.

9) Milling and baking qualities of wheat.

10) Nutrition: influence of sunlight on the prevention and cure of rickets in chicks; efficiency of various proteins in poultry feeding; and variation in amount of fat soluble A in milk of four dairy breeds.

11) Plant diseases: stem rust in wheat; and potato diseases.

12) Potatoes: selection; and certification.

13) Rural economics: farm management; cost of producing beef cattle and farm crops; farm tenure; purchasing power of Nebraska grains; and land prices, farm mortgages and taxation (cooperative with the USDA).

14) North Platte Substation: hog feeds and pastures; dairy cattle - feeding silage; horticulture - apples, cherries, plums and forestry; and field crops - breeding and cultural practices (cooperative with USDA). A purebred Shorthorn herd had been started in 1920 and a Hereford herd in 1923.

15) Univ. Fruit Farm: practical phases of fruit production on a commercial basis.

16) Valentine Substation: variety testing of forage crops, grain crops, and annual legumes.

17) Scotts Bluff Substation: crop rotations; use of manure on perennial (cool season) grass pastures; comparison of sweet clover and native grass for pasture purposes; lamb and hog finishing rations; and use of self-feeders for hogs.

When the February 1, 1924 annual report was issued (5), the Station had published 198 bulletins, 25 research bulletins, 22 circulars, 48 press bulletins, and two articles in research journals. Some of the material published by the Station up to that time was of an observational, survey, and/or service nature. This is understandable in view of the fact that the Station staff had also, for a long time, been largely responsible for extension-type activities and that Extension was still a young organization. However, the situation was changing rapidly in that more and more of the service and nonclassroom educational functions were being performed by the Extension staff. Concomitantly, the publications of the Station were taking on more and more the nature of research reports. The demise of the “press bulletins” took place in 1915 (5). Much of the other published material continued, however, to be useful directly to the lay public.

From 1924

Financial Support

Sources and amounts of funds and expenditures for support of the Station are presented on an annual basis for the period of fiscal 1924 through fiscal 1986 (Appendix 2, Table 1). For the period of fiscal 1924 through fiscal 1958 available records provide only two categories, i.e., “federal formula”, and all others. However, beginning with fiscal 1959, as noted in the Appendix, non-federal formula sources are broken

9There was still no research in the Station reported by the Department of Home Economics.
down into the following categories: 1) state appropriations; 2) contracts, grants, and gifts; and 3) product sales. Beginning in fiscal 1973, “Agency Revolving Funds” were removed from “Product Sales”, and reported separately.

Total expenditures for fiscal 1984 were approximately 100 times those of 1934 (time of drought and depression). Even making allowances for the depreciation of the dollar by approximately 87 percent during this 50-year period, the actual support increased approximately tenfold. Unfortunately, records are not available back to 1934 on a basis which would show how much of the increase took place in the various categories other than federal formula funds. However, starting with 1959, the first year that such records are available, the category for contracts, grants and gifts increased from $346,312 to $6,877,282 in 1986. For the same period income generated from products sales increased from $894,234 to $4,418,118.

Traditionally, the state experiment station directors across the U.S. have expressed themselves rather forcibly to the USDA and to appropriate Congressional committees to the effect that federal formula funds have not kept pace with state appropriated funds. This is true, although the worst may be yet to come with the Gramm-Rudman-Hollings amendment in force and the cutting of federal expenditures in vogue. The following comparison shows the basis for the directors’ concern: In 1959, federal formula funds in Nebraska were at $521,321 and state appropriated funds were $1,031,991. In 1986, corresponding figures were $3,035,301 and $12,618,563. Thus the ratio of state appropriated to federal formula funds during this period has gone from approximately 2 to 1, to 4 to 1.

The total increase in financial support for the Station during the 50 years 1924 to 1974 is impressive, indeed. The total increased from $208,000 to $9,073,172, or roughly 45 times the support in 1974 of that in 1924. Starting in 1955 and ending in 1985, the financial support doubled on the average every seven and one-half years. Even allowing for the depreciating value of the dollar beginning in 1933, the support for the Station has increased dramatically. This does not mean, however, that operating and equipment funds are adequate, rather the opposite is true.

Another interesting observation is made by comparing the period 1974 to 1981 when farm income rose to a level never before attained in the U.S. and when net farm income for farm workers for the first time in history was equal to that of nonfarm workers. Total funds available to the Station rose from $9,073,172 in 1974 to $12,053,950 in 1975. One need go back only to 1959 (when the Station had been in existence for 72 years) to find the year when total funds available to the Station were slightly less than the increase of 1975. And financial support has more than doubled since that time.

Because the income generated by a number of segments of the Station was becoming so high and because the figures did not reflect actual expenditures for research, the Station director, beginning with fiscal 1973, removed certain items from the “product sales” category and placed them in a separate listing called “Agency Revolving Fund”. And, beginning with fiscal 1983, the “Agency Revolving Fund” is no longer included in the annual Station financial reports (5).

Agency Revolving Funds consisted of those generated by the USMARC (United States Meat Animal Research Center), the Foundation Seed Division, and Tractor Testing. Earlier the Basic Seed Potato Program was also included.

The University maintains ownership of the livestock and collects all income from all sales of the USMARC as a “trust” fund. The reason for this is that if the income were collected by the federal government, the funds would have to go to the United States Treasury. Under the University, all of the income is kept within the state and is used exclusively for expenditures by the USMARC in support of the research programs.

The Foundation Seed Division performs a service function, i.e. production and distribution of pure seed of superior crop varieties. This is necessary to make available, on a continuing basis, the germplasm of improved varieties developed by the Station and other public and private organizations. The Division makes annual financial grants to the Station from surplus funds generated through its operations. Tractor Testing, by law, is conducted on a self-supporting basis, including capital improvements, salaries, equipment, and operating expenses.

Funds shown as budgeted for and expended by the Station do not cover all of the costs involved in conducting research. Costs to the University but not shown under Station expenditures include major land acquisitions and construction of buildings; administration above the level of the dean (now vice chancellor of the IANR); services provided by the University Business and Finance Division, which cover many areas including custodial services, police functions, utilities (other than cost of telephone services) and upkeep of buildings and roads; and libraries. To ascertain the total cost of doing research, one would have to include the expenditures for the above items — just what this would amount to is difficult to determine, but one estimate that has been used is 25 percent of the total. Offhand the estimate may seem high but when one considers that the Animal Science Complex alone, now under construction, will cost an estimated $19 million, the 25 percent estimate may not be excessive, in fact it may even be on the low side.

Many of the staff feel (and correctly so), that the lack of sufficient funds for equipment, technical assistants and labor, and operating expenses limits their production. It is for this reason that the staff members have turned more and more to obtaining grant and contract funds to support their research efforts. In
many cases this source provides much needed operating funds. However, it also has the disadvantage in some cases of utilizing ongoing resources and may also interfere with carrying on the highest priority research.

In summary, it may be said that the Station "clientele" consisting primarily of farmers, ranchers, and agribusiness persons, along with home economics interests and other citizens of Nebraska, are pleased with the benefits they obtain from the Station as reflected by the degree of financial support they have been willing to provide. From all indications, it appears that financial support for the Station will continue to increase in the future. A dynamic and productive research program is being administered by Irvin T. Omtvedt, dean and director, and Dale H. Vanderholm, associate dean and director, and conducted by the staff.

Additions of Stations, Farms, Field Laboratories, and the "Southeast (SE) Extension Headquarters"

The additions of outstate stations, farms, and field laboratories, along with the establishment of the SE Extension Headquarters during the period 1924-87 are shown on the next page. Of the units acquired during the period 1924-74, the Legislature provided no funds for purchase of land, and none for leasing except for the Sandhills Agricultural Laboratory. The major portion of the land came to the University (or the land, and none for leasing except for the Sandhills USDA) through transfer by the United States Government. Other sources of land were private gifts, a county soil conservation district, transfer of state lands, and the use of existing quarters. One hastens to add that following acquisition of the various units, the Legislature has made substantial appropriations over the years for development of physical facilities and for the conduct of research and Extension activities. The acquisition of these units, along with getting the approval and subsequent funding through the Legislature, represents almost endless time and effort on the part of many persons, including College/IANR administrators, other staff members, UN administrators, members of the Board of Regents, and many good and effective friends of the College/IANR. The history of acquisition of the individual units is detailed in the respective write-ups of the units.

Research Programs and Publication of Research Results

As noted above, research in agriculture had grown substantially by the end of fiscal 1923. Research in home economics was first documented in fiscal 1925 (5, 39th Report, Feb 1, 1926, p 21), with the subject matter consisting of studies on amount of water used and labor expended in carrying water from the pump to the house and then carrying it out after usage; and studies on lamps in farm homes where electric or gas lights were not used. The topics were of prime interest to farm families, since very few farm homes had either modern plumbing or lighting systems.

Research in the Station grew in volume at a modest rate during the latter twenties, then dropped somewhat during the drought and depression of the early thirties, plateaued during WW II, and has grown steadily ever since. Further information on programs is found in the chapters on the respective departments and stations.

By the end of fiscal 1974, the number of Station officers had grown to six, and the technical staff to 275. A total of 231 research publications were underway.

The nature and type of publications changed rather completely during the period covered by this history. In 1952, Associate Director Baker and Agricultural Editor Ralston Graham established the Nebraska Experiment Station Quarterly to provide the public, in popularly written style, a running account of principal research findings. A concomitant action was to drop a summarization of the principal research findings from the annual Station reports.

Initially Station publications consisted of the annual reports, research bulletins, bulletins, circulars and press reports (discontinued in 1915). The beginning (as far as the annual Station reports show) of publishing technical papers in scientific journals occurred in fiscal 1921 (5, 35th Report, Feb 1, 1922, p 38) with the following two articles:


Two more journal articles were listed in fiscal 1923, one by T. A. Kiesselbach in the Journal of the American Society of Agronomy; and the other by C. W. Ackerson, M. J. Blish and F. E. Mussehl in Poultry Science (5, 37th Report, Feb 1, 1924, p 40). The number of technical papers published in scientific journals grew rapidly so that by fiscal 1926 there was a total of 25. A numbering system was started in fiscal 1927 (41st

19It must be borne in mind that this is a head count—many of those listed hold joint appointments with RI and/or Extension. Also joint appointments have become much more common than in earlier years so that a direct comparison in numbers of staff is not meaningful.

20Renamed successively since then Quarterly Serving Farm, Ranch and Home in the spring of 1973 (one issue only); Nebraska Farm, Ranch and Home Quarterly in the summer of 1973; and IANR Quarterly in the fall of 1985.

21Inclusion of research findings was partially restored beginning with the report for fiscal 1985 (5, 99th Report, p 9-21) with a presentation of "Research Highlights".

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<table>
<thead>
<tr>
<th>Year Started</th>
<th>Name of Unit</th>
<th>Location</th>
<th>Special Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929</td>
<td>Northwest Ag Lab</td>
<td>Alliance, NE</td>
<td>Initially named the Box Butte Experimental Farm</td>
</tr>
<tr>
<td>1944</td>
<td>Dalbey-Halleck Farm</td>
<td>Gage County (South of Virginia, NE)</td>
<td>Started as Dalbey Farm in 1944. Expanded and renamed Dalbey-Halleck in 1959.</td>
</tr>
<tr>
<td>1947</td>
<td>Rogers Memorial Farm</td>
<td>Lancaster County</td>
<td></td>
</tr>
<tr>
<td>1948</td>
<td>Ft. Rob Beef Cattle Research Station</td>
<td>Crawford, NE</td>
<td>Primarily USDA with the UN Station cooperating. Terminated in 1972.</td>
</tr>
<tr>
<td>1949</td>
<td>Genoa Foundation Seed Farm</td>
<td>Genoa, NE</td>
<td>South Farm (320 acres) disposed of; the last 160 acres sold in 1967, leaving 320 acres (North Farm).</td>
</tr>
<tr>
<td>1949</td>
<td>Horning Forestry Farm</td>
<td>Plattsmouth, NE</td>
<td></td>
</tr>
<tr>
<td>1951</td>
<td>Pierce Sandyland Farm</td>
<td>SW of Pierce, NE</td>
<td>This farm was leased by the Pierce Soil and Water Conservation District with operations starting in 1951 and being terminated in 1955.</td>
</tr>
<tr>
<td>1956</td>
<td>Northeast Station</td>
<td>Concord, NE</td>
<td>Presently known as the UN Northeast Res &amp; Ext Center.</td>
</tr>
<tr>
<td>1962</td>
<td>UN Field Laboratory</td>
<td>Mead, NE</td>
<td>Presently known as the UN Agric Res Development Center.</td>
</tr>
<tr>
<td>1964</td>
<td>US Meat Animal Research Center</td>
<td>Clay Center, NE</td>
<td>Primarily USDA with the UN Station cooperating. Approximately 35,000 acres.</td>
</tr>
<tr>
<td>1967</td>
<td>High Plains Ag Lab</td>
<td>Sidney, NE</td>
<td>Satellite of the Panhandle Station.</td>
</tr>
<tr>
<td>1968</td>
<td>South Central Station</td>
<td>Clay Center, NE</td>
<td>Located on USMARC land.</td>
</tr>
<tr>
<td>1969</td>
<td>SE Extension Headquarters</td>
<td>East Campus (Present name is the UN Southeast Research and Extension Center.)</td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>Gudmundsen Sandhills Laboratory</td>
<td>Grant, Hooker, and Cherry Co. (Address: Whitmore, NE)</td>
<td>12,810 acre ranch with carrying capacity of 650 cows/calves.</td>
</tr>
</tbody>
</table>

Report, Feb 1, 1928, pp 39-40 listing papers from number 26 through 42, obviously making allowance for the 25 papers listed the previous year but not for those listed prior to that time. Also for some unknown reason there were four technical papers listed without numbers.

By fiscal 1925 (5, 39th Report, Feb 1, 1926), the number of technical papers published or to be published in scientific journals exceeded the total number of station bulletins, research bulletins, and circulars published during that year. In time the use of Station circulars was discontinued (being replaced by Extension publications). The number of Station bulletins and research bulletins dropped rapidly as the staff preferred to publish their research findings in their respective professional journals.

The numbering system was dropped in fiscal 1926 but the technical papers (journal articles) continued to be listed until fiscal 1933 (5, 47th Report, Feb 1, 1934). The listing was discontinued in fiscal 1934 (5, 48th Report, Feb 1, 1935) with the following notation: "Because the technical papers published by Station workers are mentioned throughout this report, no list of them is included." This practice was continued for some years with the same notation appearing in each of the succeeding annual reports.

In fiscal 1943 (5, 57th Report, May 1944) a listing and numbering system of "Journal Series, Technical Articles and Papers" was restored. The first article on the list was numbered 328. Just how the number was arrived at is not clear.

The numbering system was still being used in fiscal 1974 when the total had reached 3,830 (5, 88th Report, May 1975, pp 24-60). Although little use of Station bulletins and research bulletins had been made.

15It was dropped again in fiscal 1985. In fiscal 1984 the number had reached 7,527.
by staff in publishing their results for a considerable period of time, the total number issued by the end of fiscal 1974 (during the entire history of the Station) consisted of 531 bulletins and 243 research bulletins. Other publications listed in the 88th Report included reprints (of bulletins and research bulletins); tractor test reports; outstate testing circulars; miscellaneous publications; Nebraska Farm, Ranch and Home Quarterly articles; and departmental reports.

The excellent progress made by the Station was well documented in its 100th Annual Report. This report for fiscal 1986 consisted of five major parts: 1) a list of the faculty with area of responsibility for each; 2) research highlights presented by Departments, and Research and Extension Centers; 3) a listing of research projects underway; 4) a listing of publications; and 5) a financial report.

Federal Legislation and Financial Support (9)

Federal formula funds have been received by the Station through a series of Congressional Acts as follows:

First Morrill Act - 1862. “An ACT donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and mechanic arts”.

Hatch Act - 1887. “An ACT to establish agricultural experiment stations in connection with the colleges established in the several states under the provisions of an act approved July 2, 1862, and of the acts supplementary thereto.”

Adams Act - 1906. “An ACT to provide for an increased annual appropriation for agricultural experiment stations and regulating the expenditure thereof”.

Purnell Act - 1925. “An ACT to authorize the more complete endowment of agricultural experiment stations, and for other purposes.

Bankhead-Jones Act - 1935. “An ACT to provide for research into basic laws and principles relating to agriculture and to provide for the further development of cooperative agricultural extension work and the more complete endowment and support of land grant colleges.”

Amendment of the Bankhead-Jones Act and the Agricultural Marketing Act of 1946. “An ACT to provide for further research into basic laws and principles relating to agriculture and to improve and facilitate the marketing and distribution of agricultural products.”

Under the above Act the funds appropriated under Title II “Agricultural Marketing Act of 1946” could be used only for “... research ... on processing, preparation for market, packaging, handling, transporting, storing, distributing, and marketing agricultural products...”. The funds so appropriated came to be known as “marketing” funds. Many directors over the country encountered difficulty in qualifying enough projects classified as “marketing” to take advantage of all available federal funds. However, the directors showed their typical resourcefulness by writing sufficient “marketing” aspects into enough projects to meet the classification requirement.

The second important feature of this ACT was that it provided funds for regional research. Specifically, it was stated: “Not more than 25 percent of the sums appropriated ... shall be allotted to the States for cooperative research in which two or more state agricultural experiment stations are cooperating to solve problems that concern the agriculture of more than one state. The funds available for such purposes shall be designated as the “Regional research fund, Office of Experiment Stations...”

Regional research has proven to be a valuable mechanism in helping to allay oft-expressed concerns of legislative bodies, both federal and state, about duplications of research programs. Secondly, it has made it possible for researchers to get together to exchange ideas and jointly plan their research programs, (approving travel expenses for researchers to hold conferences across state lines having typically been a serious problem).

Act of 1955 consolidating the Hatch Act and laws supplementary thereto. "AN ACT to consolidate the Hatch Act of 1887 and laws supplementary thereto relating to the appropriation of Federal funds for the support of agricultural experiment stations in the States, Alaska, Hawaii, and Puerto Rico."

This was a very important piece of legislation since by combining all previous acts into one, it greatly simplified accounting, and reporting of federally supported projects was greatly simplified. For the most part the legislation incorporated the important features of each of the previous Acts.

Part of the funds appropriated under the Consolidation Hatch Act of 1955 are divided equally among the states, a part are allocated on the basis of the ratio of the rural populations of each state to the rural population of the U.S., and a part on the basis of the ratio of the farm population of each state to the farm population of the U.S.

We have not attempted to show the dollar amounts accruing to the Station through the various federal acts, prior to the Consolidation Hatch Act of 1955. The totals for federal formula funds are shown on an annual basis beginning with 1924, in Appendix 2, Table 1. The total started with $15,000 in fiscal 1888, and increased to $30,000 in fiscal 1907 where it remained until fiscal 1926, as shown in the table.

The federal formula funds and the coordinating

10Presently called the CSRS (Cooperative States Research Service), a branch of the USDA, Washington, D. C., which administers federal formula funds and coordinates nationally federal projects for the state agricultural experiment stations.
and leadership provided nationally by the administering agency, i.e., the CSRS, have been of great value to the Station, as they have been in all other states, and American Samoa, District of Columbia, Guam, Micronesia, Puerto Rico and the Virgin Islands (all recipients of federal formula funds).

McIntire-Stennis Act - 1962. “In order to promote research in forestry, the Secretary of Agriculture is authorized to cooperate with the several States for the purpose of encouraging and assisting them in carrying out programs of forestry research” (10).

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Section 2. The Search for New Crops

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Nebraska’s Sugar Industry

Sugar beets were introduced in Nebraska well before the turn of the century, and the University has been closely linked with development of the crop ever since. In 1872 beets were grown on the Agricultural College farm for stock feeding and were analyzed for sugar content (2). Between 1890 and 1900, the Experiment Station published at least seven bulletins about experiments in sugar beet culture (3).

During this period, and for several years into the present century, a great deal of effort was put forth in various circles to encourage sugar beet production and processing. H. H. Nicholson, one of the authors of an 1890 bulletin about sugar beet culture, was active in promoting the industry. Bounties (subsidies) were provided by both the state and federal governments, which were also active in promoting the industry.

Sugar factories were established at Grand Island, 1890; Norfolk, 1891; and near Ames, Nebraska, 1898. The University conducted sugar beet experiments on the farm of the Standard Cattle Co. at Ames beginning about 1899 (30, pp 101-104).

One feature of the University program in support of developing a sugar industry was establishment of the Sugar School, which started operations in 1891-92. The school was open to “... young men sixteen years of age or over, who had the requisite training for carrying on the work.” The curriculum included courses in sugar beet production, irrigation engineering, and the technology of sugar manufacturing. The school reached its maximum enrollment in 1896 with 34 students. It was closed in April 1900 after enrollment dropped to two students in each of the two prior school terms (30).

The factories in Grand Island, Norfolk and Ames have long since been closed, and sugar beets are no longer grown in the areas they served. But it must be recalled that there was little field experience to go on in the 90’s. The University deserves much credit for its pioneering efforts.

The industry was gradually moved to the western part of the state where it continues to be a thriving and profitable enterprise with the University continuing to be of assistance to growers (30).

Major Crops Since 1900

Soybeans, grain sorghum and dry edible beans are major crops that have been widely adopted in Nebraska during this century. Soybean acreage in 1929 was less than 1,000 acres, grown mostly for hay. By 1985 soybeans were grown for grain on more than 21/2 million Nebraska acres. Not until 1932 was as much as 5,000 acres of grain sorghum harvested, compared with slightly more than 2 million acres in 1984.

Dry edible beans, a major crop in western Nebraska, were introduced during the 1920’s. In 1928, the first dry bean processing plant was built at Morrill, Nebraska (1).
Potatoes became an important commercial crop in Nebraska in the early 1900's. About 12,000 acres (2.7 million cwt) of potatoes were produced in the state in 1984 with a value of $14.5 million. The crop is marketed for processing as chipping potatoes (60%), certified seed (28%) and for fresh table potatoes (12%) (33, 7, p 13). (See also Part V, Chapter 15.)

The Attempt to Diversify

Since the early 1940's, Nebraska's business community, legislature, farmers and its University have sought to diversify the state's agriculture by introducing industrial crops. Most attempts have been frustrated by problems with crop adaptation, economic problems, plant diseases, insects, weather, or difficulties with cultural practices.

The Chemurgic Digest reported in its November 1956 issue that "In the 1940's, the University of Nebraska was one of the land-grant colleges that made an organized effort to discover and develop new farm crops and new uses for farm crops of Nebraska" (4).

In 1941, the State Legislature passed a bill (LB 462) that provided for establishment of a Chemurgy project in the University, to be administered directly under the Board of Regents. (See also Part V, Chapter 8.) The project was born at a time when research on industrial utilization of organic raw materials, especially from farm products, was popular in the state and, in fact, nationally. To a somewhat lesser extent, it still is.

The project was funded by an appropriation of $25,000 which became available on August 26, 1941. Active work started on September 1, 1941 (5).

World War II Spurs Research

World War II and acreage controls gave chemurgic crops research a substantial boost. In a talk prepared for Western Organized Agriculture, Carl E. Claassen, a Chemurgy Department agronomist, said that "because of the present world conflict, imports of many of the oil, rubber, medicinal, flavoring, insecticide, and fiber crops have been reduced, and more seriously, in some cases entirely eliminated. The rubber and oil crops are the most critical losses to our economy..."

He said that "Two rubber crops being investigated are Russian dandelion and guayule. Neither of these seems to be a source of rubber when grown in this

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state. However, investigation will continue . . . for at least one more year” (8).

The Chemurgy project also analyzed many native crops for rubber, such as rabbit brush, milkweed and gum weed. The rubber content of all these crops was less than one percent.

In another talk to Western Organized Agriculture in 1949, Claassen said that “During World War II and since that time the relatively high prices of farm products have contributed to more production than could be consumed at prices received by farmers. The present policy of our government is to maintain this high price level, but in order to do this it is necessary to have acreage control on certain basic crops. In this area the main crop affected is wheat.

“If you are a dryland farmer you probably have some summer fallowed land which you will need to plant to some crops other than wheat . . . .

“Our research has shown that safflower, a new oil-seed crop, is now ready for commercialization in this western area . . . . (and) . . . for the time being you might want to consider it as a replacement crop for wheat” (9).

In 1948, Claassen reported that “Since the Chemurgy project was organized, some 50 different new crops have been grown experimentally in Nebraska . . . . some were totally unsuited to climatic conditions in Nebraska; others were not well adapted to our conditions but could be grown in case of necessity; a few appeared to be of sufficient promise to be considered as potential crops . . . .

Crops listed by Claassen as having commercial possibilities in the state, all potential sources of edible or industrial oils and protein meal, included safflower, flax, castors, sesame, sunflowers, and mustard. “We still have much to learn regarding these crops and their possible application to Nebraska agriculture,” he said (10).

Other new crops were considered and tested by the Nebraska Agricultural Experiment Station long after the Chemurgy project was discontinued. During the 1950’s and 1960’s, promising crops included cape marigold, Indian ironweed, crambe, and fennel which yielded oils with unique characteristics for a variety of industrial uses; rape, which produces edible and industrial oil; perilla, which produces one of the best known drying oils; and guar, from which vegetable gum products are produced from the seed and used mainly in manufacturing paper, sizing textiles and thickenings for food products.

More than 70 other oilseed and fiber species were evaluated for agronomic potential during the 1950’s and 1960’s — some for as long as three years at one or more Nebraska locations. In 1957, as part of a cooperative effort with the USDA, ARS, New Crops Research Division, seed and plant parts of 108 plant species found growing in several areas of Nebraska were collected for analysis of oil and fatty acid content, protein and amino acid content, or for fiber potential (1).

Writing about potential new crops in the Nebraska Experiment Station Quarterly in 1961, James H. Williams explained that even though a crop had promise, its success would depend on processing plants, markets, adaptation, ease of harvest, and disease and insect resistance (11).

In 1969, the Department of Agronomy, which had taken over the agronomic work of the Chemurgy Department when it merged into the new Department of Biochemistry and Nutrition in 1953, closed out its industrial crops program in favor of an expanded program with soybeans. (See also Part V, Chapter 1.)

Problems for Industrial Crops

Safflower

Safflower was the most widely grown of any of the industrial crops that appeared to have a chance of gaining a foothold in Nebraska. Safflower production tests were conducted in the Nebraska Panhandle as early as 1928, but extensive cultural and breeding research with safflower began in 1942 in the Chemurgy project. It was the results of this research, higher oil varieties and improved cultural practices, that established the foundation for commercialization of safflower in the U.S. Commercial safflower plantings in Nebraska were first made in 1948, and by 1955 the crop was thought to be so promising that the USDA established a safflower research project at the Scotts Bluff Station (6).

Safflower growers contracted with the Pacific Oil Seed Company — primarily a seed company — which was established in California by Carl Claassen and Albert Hoffman after they left the Chemurgy Department. For processing safflower oil, the company had an arrangement with the Pacific Vegetable Oil Company.

The first safflower processing in Nebraska was done at the Plains Oil Mills, Inc. plant in Sidney, which used a screw press to extract the oil. The meal was marketed locally. The plant was established by Harry Robinson who had earlier processed soybeans in Kansas. As safflower acreage grew, the Pacific Oil Seed company bought out Robinson in 1957 and after the mill burned down in 1960, replaced the Sidney plant with a solvent extract plant (14).

In 1962, western Nebraska farmers planted a record 86,000 acres to safflower, but weather and disease problems brought lower yields in the next few years and the crop lost favor with farmers.

The 1965 safflower crop in Nebraska was 67 percent below the small 1964 crop and (until then) the lowest on record, according to the State-Federal Division of Agricultural Statistics. The 1965 crop was estimated at 1,120,000 pounds compared with 3,400,000 pounds produced in 1964; 10,440,000 pounds in 1963; 25,920,000 in 1962; and a record 36,960,000 pounds produced in 1961. (Both records
are quoted correctly — acres in 1962 and pounds in 1961.)

The small 1965 crop resulted from a sharp decline in acreage harvested and a low yield per acre. A number of adverse factors contributed to the low yield, including hail, Alternaria leaf spot, frost, and accidental damage from chemicals used on other crops. Dry weather prior to seeding time and low soil moisture reserves contributed to the cutback in acreage. Later, heavy rains washed fields and caused spotted stands (12).

Weeds were a major problem for safflower growers. As Alternaria weakened the plants, weeds competed severely with the safflower, contributing to low yields. Farmers would have to screen out the weed seed at harvest time, which was usually done in the field. They had large piles of pigweed seed in the safflower fields after harvest. The weeds drew moisture from the soil, which usually depressed wheat yields following safflower. Farmers decided safflower was hard on the ground. They also were concerned about the limited residue left on the soil, which sometimes resulted in wind erosion (13).

Castors

Early in the Chemurgy Project, small acreage trials were started with castors, and in the early 1960’s the South Central Nebraska and Industrial Corporation, a group of south central Nebraskans, became interested in castors as a way of promoting diversification. The University’s Department of Agronomy became interested in castors as an industrial crop, and developed production research and breeding programs. In a relatively short time, University research provided information on weed control, irrigation and other cultural practices critical to the success of the crop.

Commercial harvested acreage reached 8,500 acres in 1961, mostly in the Hastings area but also around Crofton. More than 6 million pounds were produced in Nebraska that year (15). Nebraska growers contracted with and sent their castor beans to the Baker Castor Oil Company in Bayonne, New Jersey and to a Baker plant at Plainview, Texas. Castors were also a contract crop with the Pacific Vegetable Oil Company.

But castor growers were faced with critical economic problems and this crop too lost favor in the state. Harvested acres in 1962 dropped to 4,837 and production to about four and one-half million pounds (clean basis weight). Castors were not subsidized, and had to compete on the world market. Among competitors were peasant farmers who grew small acreages of castors in Brazil and other countries where production costs were low. In this country, the military had stockpiled castor oil as a strategic oil, so a supply existed at the end of World War II and was marketed whenever prices were favorable.

Castors contain allergens and the bean is poisonous. A special process is required to detoxify the meal. Handling in transport was a problem because beans had to be kept separate from other crops in elevators.

There was a continued effort to improve harvesting equipment from the prototype developed by Milo Arms of the Department of Agricultural Engineering at the University of Nebraska. The John Deere Co. produced about 50 castor harvesters commonly used in Nebraska. Harvesting had to be done after a hard freeze, and this sometimes delayed harvest until weather became unfavorable (14).

Crambe

For a time University agronomists held some hope for crambe, high in erucic acid, as an oilseed crop for Nebraska. Cultural practices for crambe are similar to those for small grains. Conventional equipment can be used for planting and harvesting.

Crambe was first evaluated in Nebraska in 1953 and 1954. Production tests in the 1960’s at state experiment stations, including Nebraska, indicated that crambe had possibilities of becoming an additional crop in some of the test areas. However, Laren R. Robison and James H. Williams warned in a Farm, Ranch and Home Quarterly article (Fall 1966) that to be accepted, crambe had to compete with existing crops in the area where grown and local markets for seed must be available (16).

Production research and attempts to establish the crop continue in the United States today. Several improved varieties were considered for release as recently as 1985, and cultural practices are fairly well known, but commercialization of the crop has yet to be accomplished.

Sesame

Sesame — as an edible oil or condiment crop — was considered a possibility for Nebraska and University agronomists conducted research on it from 1941 to 1958. A major deterrent to adoption in Nebraska was shattering of the seed and length of growing season. The normal seed capsules shattered readily when mature, requiring extra labor and special harvesting precautions to avoid losing seed yield. The nonshattering types were low yielding and tended to be later maturing. Sesame is a long season crop and although progress was made in selecting earlier types, there was no progress with productive nonshattering types (18).

Hemp

Hemp is most commonly known as a source of fiber for making rope, twine and similar products and “considerable hemp was grown near Lincoln, Fremont and Laurel . . .” in the early 1900’s for this purpose. In 1935, approximately 4,000 acres of hemp were grown in Cedar County (17).

Hemp trials were conducted under irrigation in the North Platte valley near Scottsbluff in 1935 and 1936.
with some success. In 1943, trial plantings were made near Rulo, Falls City, Fremont and Beatrice (18).

Later University research, however, dealt with hemp as a possible source of pulp for making high grade paper. In 1958 and 1959, tests conducted in cooperation with the USDA to evaluate several potential crops as sources of pulp were planted at Lincoln and four other locations in the Midwest. Both hemp and kenaf, another promising fiber crop, were included (17). In these cooperative trials the hemp fiber from Nebraska was determined to be weaker with less tensile strength than hemp produced in Wisconsin and Iowa (18).

Agronomists were, of course, aware that hemp contains the drug marijuana. In a letter to Tom Aitken, Richardson County Agent in Falls City, in 1960, James H. Williams wrote that "one additional disadvantage of considering hemp as a crop should be mentioned... (It) cannot be grown without a permit from the Internal Revenue Service of the United States Treasury Department. This may be a factor in development of an industry using hemp; however, during the war years substantial acreages of hemp were grown with apparently little difficulty from this disadvantage."

The Marijuana Tax Act of 1937 (Public No. 238, 75th Congress) established laws and regulations on the production and marketing and other handling of hemp.

**Kenaf**

Proposed uses for pulp from kenaf were specialty papers, fine papers, structural boards and blends with wood pulps for several different kinds of papers. The crop was evaluated by the Nebraska Experiment Station from 1958 to 1963. In the Spring 1967 issue of the *Farm, Ranch and Home Quarterly*, Williams wrote that "Considerable research is (still) needed before kenaf will become a crop. Kenaf may be more promising in areas with a higher or less variable summer rainfall pattern than Nebraska" (19).

**Sunflowers**

The first significant commercial acreage of sunflower as an oil crop was in 1972 when reportedly (newspaper accounts) 25,000 acres were planted. Again in 1978 and 1979 sunflowers were planted on an estimated 50,000 acres scattered throughout Nebraska.

The potential for sunflowers in Nebraska is not considered so great as in North Dakota where it has become a major crop. Experiment Station agronomists point out that the climate is more stressful, water use efficiency is less, insect problems are serious hazards resulting in increased costs, local markets are lacking and returns have not been sufficient to compete with other major crops (18).

**Nebraska a Leader in Popcorn**

Popcorn has become an important "minor crop" for Nebraska. Statistics on popcorn production are limited but it was grown 50 or more years ago as a commercial crop. During the 1940's, popcorn acreage averaged about 10,000 acres with some variation in acreage ranging from 4,000 to 30,000 in 1945 (23).

Beginning in the 1930's and continuing until 1959, the Nebraska Agricultural Experiment Station conducted a popcorn improvement program. John Lonnquist developed several improved breeding populations and inbred lines that were released to the industry. This germplasm (together with sources from other state programs) materially improved yields and popping quality of Nebraska popcorn.

During the last three decades, the acreage of popcorn in Nebraska has increased so that by the late 1970's, Nebraska has consistently ranked among the top two or three states in popcorn production. In the five years 1977-1981, Nebraska and Indiana produced 55 percent of the U.S. crop (25). In 1984, Nebraska ranked first in popcorn production with 51,600 harvested acres (26) which represented about 25 percent of U.S. popcorn production.

In 1982 the Nebraska Experiment Station again initiated a popcorn improvement program with support of the popcorn industry and partially as a result of the industry recognizing the value of the breeding material developed in the Nebraska program during
Sacaline — a Fraudulent Promotion

Some crop promotion in Nebraska appears to have been fraudulent. In the early 1890’s, for example, a plant called sacaline — a relative of smartweed — was apparently promoted in the state as a forage plant.

Charles E. Bessey, Experiment Station botanist at the time, wrote in the Ninth Annual Report of the Station (29) that “The group of sacaline plants . . . on the University campus has been watched another season [1895] and notes made as to its behavior during a period of drought.” The plants did not exceed three feet in height, and the stems were half an inch thick, hard, and woody. The plants spread underground quite rapidly.

Bessey found nothing good about sacaline. “That the plant is useless for forage is now more evident than ever,” he wrote. “It is merely a coarse weed of little, if any, value for any purpose.” Letters and newspaper articles were sent out “warning people of the state not to waste their money in the purchase of seeds or roots of this fraudulent forage plant.”

Jerusalem Artichoke Lacks Market

Jerusalem artichoke has been promoted in Nebraska over a number of years but was never widely adopted and apparently was never recommended to farmers by the Nebraska Experiment Station.

According to the Experiment Station Annual Report for 1937 (20), “Jerusalem artichokes have been strongly promoted in this state in recent years by certain private interests for industrial utilization. Since no profitable industrial market exists and no such market is now in prospect, the crop cannot be encouraged under present conditions . . .”

In a Nebraska Extension Circular published in 1937 (22), T. A. Kiesseltbach wrote that “A Committee of the Agricultural Experiment Station staff appointed to consider the public interest with respect to artichokes has concluded that while this crop has potential possibilities for development at some later date under changing conditions, it cannot be especially recommended at the present time in the absence of an established profitable market.”

Interest in Jerusalem artichokes was again aroused in more recent years following promotion of the crop by a Marshall, Minnesota company called “American Energy Farming Systems, Inc.” An Associated Press news story datelined Scottsbluff and appearing in newspapers on March 5, 1982 said representatives of the company “have been in Scottsbluff four times in the last 4½ weeks asking farmers to grow Jerusalem artichokes for seed stock” (24).

Extension Agents James Novotny and Russell Lang of Dodge County suggested that “. . . farmers are advised to use extreme caution before planting even a few acres of this potential crop. Problems in marketing are of such magnitude that success in cultivation of Jerusalem artichoke is questioned” (27).

In March 1983, the Iowa attorney general’s office announced a multistate agreement with AEFS, Inc., of Marshall, Minnesota (formerly called American Energy Farming Systems). The settlement, filed jointly in Iowa and Minnesota courts, said AEFS failed to tell farmers no commercial market existed for the product.

Mark Starr, Nebraska Assistant Attorney General, said Nebraska farmers could benefit from the settlement, which would give farmers a chance to recover money they paid for seed stock.

Under the settlement, company officials agreed to give farmers a more realistic assessment of the crop’s virtually nonexistent market, and to offer them refunds from a $500,000 escrow account. Overwhelmed by requests, the company declared bankruptcy and refunds were tied up in court. However, by late July 1986, about one in four of the farmers (who had paid $1 a pound or more for seeds of Jerusalem artichoke) were getting refunds on their investment — at about 11 cents on the dollar.

Only five of the 480 farmers who were receiving refund checks the week of July 28 were from Nebraska, according to Gregg LeCuyer, an investigator in the Consumer Protection Division of the Minnesota Justice Department.

A story in the Lincoln Journal by Farm Editor Dan Looker quoted LeCuyer as saying the average refund payment to farmers was $1,300. American Energy Farming Systems contracted to sell farmers seed in $10,000 amounts, enough to plant 10 acres (31).

Sweet Corn for Direct Marketing

An estimated 2,000 acres of sweet corn were planted in Nebraska in 1984. The states “No. 1” crop grown for direct marketing is sweet corn, produced by 48 percent of the growers. Nine percent of the wholesale market growers produce sweet corn. High and consistent yields are obtained at numerous locations in Nebraska (7, p 14).

A Future for Onions?

Agriculture’s problems in the 1980’s gave renewed impetus to the search for new uses for land and crops. Onions, for example, were again seen as a possible

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2The scientific name was Polygonum sachalinense, the genus being the same as that of Pennsylvania smartweed and wild buckwheat. P. sachalinense occurs as a weed in the eastern part of the United States.

3Jerusalem artichoke is a member of the sunflower family, and not related to the Globe artichoke which is actually a thistle and a more popular vegetable plant, bearing its edible portion in a flower head above ground. A field of Jerusalem artichokes looks much like a field of common sunflowers. Although there is similarity above ground, the underground portions differ greatly in that the artichoke bears tubers somewhat resembling those of potatoes.
alternative cash crop for Nebraska farmers (32). Over 2,000 acres of onions were produced in Nebraska during the World War II years but production decreased to around 400 acres in 1970.

In 1986, onion growers and IANR horticulturists were optimistic about the vegetable crop’s future in Nebraska despite a mediocre growing season. However, the crop still had to prove itself to potential growers and, more importantly, to banks that had been reluctant to finance such ventures, according to Robert O’Keefe, professor of horticulture at the Panhandle Research and Extension Center in Scottsbluff (33).

Nebraska-grown onions have received favorable market acceptance in competition with other producing states. Yields range from 550 to 1,200 bags per acre and at this writing exceeded the national average of 596 bags. Some 1,200 acres of onions were planted in 1984 representing an increase of 150 percent since 1978 (7, p 14).

**Other Vegetable Crops**

Vegetables have been grown in home gardens in Nebraska since the days of the pioneers, but most listed here were not grown on a commercial basis until the last 15 to 20 years.

**Vine Crops**

Vine crops including watermelon, squash, cucumber and muskmelon were grown on some 900 acres in 1984. Cucumbers are grown for the fresh market and for processing as pickles by eight percent of the direct market and by nine percent of the wholesale market producers. They are generally grown on very small areas as a family project in northeastern Nebraska for pickling companies. A few larger operators grow 5 to 100 acres that are mechanically harvested.

Watermelons, squash and muskmelons are produced mostly for marketing through roadside stands or at farmers’ markets in various communities.

**Carrots**

A small number of direct and wholesale market growers produced carrots for the fresh and processing markets in 1984 on some 100 acres. In 1985, carrots were grown in the Scottsbluff area for individual quick frozen processing. Carrot yields in Nebraska range from 23 to 29 tons depending on carrot type and area of production (7, p 14).

**Tomatoes**

Direct market growers and wholesale market growers grew 16 and 32 acres respectively in 1984 (7, p 14).

**Cauliflower, Broccoli and Peppers**

Are used by frozen food processors in Nebraska but require a large amount of hand labor to harvest and prepare the raw product for processing.

**Asparagus and Sweet Potatoes**

These vegetables have been produced commercially in Nebraska for many years. Production has been concentrated in eastern counties along the Missouri River valley (7, p 16).

Asparagus has been and is now being grown successfully near Lincoln. For example, Ed Schwartzkopf, a former College of Agriculture student and a University Regent from 1967 to 1985, and Dave Breslow grew the crop on 160 acres at the southwest edge of the city near Middle Creek. They bought the land in 1956 from Richard Lilly who had previously established the asparagus stand. The crop was marketed in Lincoln, Omaha and other eastern Nebraska locations. The operation was discontinued in 1980 because of difficulty in getting labor for harvest (21).

Dr. Ben J. James II, a Lincoln dentist, and Bill McKinzie, a retired Soil Conservation Service soil scientist, planted 4,000 three-year-old asparagus crowns about 12 years ago northwest of Denton. James markets the asparagus in the Lincoln area (39).

**Hairy Vetch — It Wasn’t a Weed**

In the late forties, in connection with work on the Pierce Sandylan Farm, Charles Fenster, SCS, learned from Wayne Parks of Foster that Emmanuel Stonacek, farmer in Madison County, had an old field of hairy vetch. Stonacek reported that the vetch was on the farm when he bought it, that it always volunteered, and that it was difficult to separate the seed from rye. He thought it was a weed, but did note that the field “infested” with the vetch was the best producing on his farm. He ground the rye and vetch seed mixture for livestock feed, since he did not know the value of vetch seed nor was he aware that the mixture could be separated with appropriate equipment.

Fenster explained to Stonacek that what he considered a weed was, in fact, a valuable legume which added nitrogen to the soil, that it was an economic crop in some parts of the country, and that rye and vetch could both be grown in combination, if vetch seed was desired. Vetch is a vining crop and is difficult to harvest for seed unless supported by an upright growing crop such as rye. Both are fall annuals and both ripen at about the same time. The two types of seed can be easily separated with a spiral mill. Vetch seed was obtainable from such locations as Oregon and California, but the strain growing on Stonacek’s farm had the advantage of being superior in winter-hardiness (34).

The Stonacek vetch was tested by T. H. Goodding of the Agronomy Department. On his recommen-

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*Also known as sand vetch. Sand (hairy) vetch (Vicia villosa) was reported by Hopi (38) in 1915 not to be as beneficial as alfalfa or sweet clover in Nebraska, except for the Sandhills.*
Potential oilseed crop.

5. First Annual Report of the Nebraska Chemurgic Project, Univ of Nebr, Dec 30, 1942, p 1, Lincoln.
30. Crawford, Robert P. 1925. These Fifty Years. Circular 26, NE AES. UN Press, Lincoln, NE.
34. Fenster, Charles R. Feb 1986. Pierce Sandyland Farm. Special report to the Col of Agric History Project. UNL, IANR.
38. Hopt, Erwin. 1915. Unfamiliar crops of possible value in Nebraska. Corn Improvers meeting. Lincoln, NE.

Section 3. Livestock Waste Management

The problem of livestock waste management came into focus when the U.S. Congress created the Environmental Protection Agency. To conduct research to deal with this urgent problem, the USDA in 1965 transferred Thomas M. McCalla from his assignment on stubble mulch farming research to head up a team to study the livestock management problem. The team included Theodore Bond, Lloyd F. Elliott, James R. Ellis, Conrad B. Gilbertson, Lloyd W. Mielke, Gerald E. Schuman, and Norris P. Swanson. Some of the principal College cooperators (non-USDA) included Robert W. Kleis, Terry J. Klopfenstein, William E. Splinter, and Walter R. Woods.

During the same period, a major research program on this problem was being conducted by a USDA team at Colorado State University, Fort Collins. The work received major financial support from the EPA. The experiments were conducted in the laboratories, on fields and feedlots at the experiment stations, and cooperatively with farmers. Major studies were con-
ducted on the feedlots of Ted Reeves (former state senator), Central City; Howard Krambeck, Gretna; William Cockerill, Springfield, and the Otoe County National Bank and Trust Co., Nebraska City. 

Some of the principal findings were: 1) Study of the feedlot at Central City showed that on an active feedlot, nitrates did not leach into ground water that was only six feet below the surface because nitrates were reduced by bacteria to harmless gaseous nitrogen; 2) Mounding of animal waste or feedlots resulted in bacteria decomposing large amounts of the waste; 3) Runoff from feedlots allowed to go through a settling basin would remove most of the solids. The effluent could be applied to cropland. 

These findings, among others, developed the technology basic for the regulations enacted by EPA and used by the Soil Conservation Service and livestock producers over the U.S. in managing livestock waste. Animal waste research was terminated in 1975. Some USDA staff were assigned to other locations in the U.S. while McCalla and a few others were assigned back to stubble mulch farming research. This work in Nebraska received national and international recognition.

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**Chapter 4. The Cooperative Extension Service**

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<td>Nebr. Assoc. of County Extension Boards (NACEB) ...................</td>
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<td>Epsilon Sigma Phi - Natl Honorary Ext. Fraternity, Inc ......</td>
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**Names**

Agriculture Extension Department 1910-1911
Dept. of Agricultural Extension 1911-1914
Agricultural Extension Service, or Extension Service 1914-1931
Cooperative Extension Work in Agriculture and Home Economics 1931-1964 (1)
Nebraska Cooperative Extension Service 1964-present
In this book we have used the name Cooperative Extension Service. However, the name is not hard and fast. We have chosen to use it because in Nebraska it is the one being used presently. The original Smith-Lever Act of 1914 used the terms “agricultural extension” and “cooperative extension”. To be entirely accurate and complete, one would use the term “Cooperative Extension Work in Agriculture and Home Economics”.

**Administrators** (1, 5, 10, 12, 19, 47)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Period Served</th>
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</thead>
<tbody>
<tr>
<td>Charles W. Pugsley</td>
<td>Superintendent of Agricultural Extension</td>
<td>1911-1914</td>
</tr>
<tr>
<td></td>
<td>and Farm Management</td>
<td></td>
</tr>
<tr>
<td>Charles W. Pugsley</td>
<td>Director</td>
<td>1914-1918</td>
</tr>
<tr>
<td>C. E. Gunnels</td>
<td>Director</td>
<td>1918</td>
</tr>
<tr>
<td>W. H. Brokaw</td>
<td>Director</td>
<td>1918-1947</td>
</tr>
<tr>
<td>Harry G. Gould</td>
<td>Acting Director</td>
<td>1/48-2/49</td>
</tr>
<tr>
<td>W. V. Lambert</td>
<td>Director</td>
<td>3/49-1960</td>
</tr>
<tr>
<td>Edward W. Janike</td>
<td>Director</td>
<td>1960-1965</td>
</tr>
<tr>
<td>John L. Adams</td>
<td>Director</td>
<td>1965-1968</td>
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<tr>
<td>John L. Adams</td>
<td>Director and Associate Dean</td>
<td>1968-3/74</td>
</tr>
<tr>
<td>John L. Adams</td>
<td>Director</td>
<td>4/74-2/75</td>
</tr>
<tr>
<td>Agnes L. Arthaud</td>
<td>Acting Director</td>
<td>3/75-8/75</td>
</tr>
<tr>
<td>Leo E. Lucas</td>
<td>Dean and Director</td>
<td>9/75-present</td>
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<tr>
<td>L. T. Skinner</td>
<td>Assistant to the Director</td>
<td>1917-1918</td>
</tr>
<tr>
<td>L. T. Skinner</td>
<td>Secretary of the Extension Service</td>
<td>1918-1924</td>
</tr>
<tr>
<td>Harry G. Gould</td>
<td>Assistant Director</td>
<td>1936-1947</td>
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<tr>
<td>Harry G. Gould</td>
<td>Associate Director</td>
<td>3/49-3/50</td>
</tr>
<tr>
<td>Edward W. Janike</td>
<td>Acting Associate Director</td>
<td>1950-1951</td>
</tr>
<tr>
<td>Edward W. Janike</td>
<td>Associate Director</td>
<td>1951-1960</td>
</tr>
<tr>
<td>Clyde C. Noyes</td>
<td>Acting Associate Director</td>
<td>1963-1964</td>
</tr>
<tr>
<td>John L. Adams</td>
<td>Associate Director</td>
<td>1964-1965</td>
</tr>
<tr>
<td>Clyde C. Noyes</td>
<td>Assistant Director</td>
<td>1965-1969</td>
</tr>
<tr>
<td>Agnes L. Arthaud</td>
<td>Assistant Director (Home Ec.)</td>
<td>1965-1974</td>
</tr>
<tr>
<td>Earle S. Raun</td>
<td>Associate Director</td>
<td>1969-1974</td>
</tr>
<tr>
<td>Virginia Trotter</td>
<td>Associate Director</td>
<td>1971-1973</td>
</tr>
<tr>
<td>Leslie F. Sheffield</td>
<td>Assistant Director (Coord. Irrigation)</td>
<td>1971-1975</td>
</tr>
<tr>
<td>Agnes L. Arthaud</td>
<td>Associate Director (Ext. Adm.)</td>
<td>1974-3/76</td>
</tr>
<tr>
<td>Roberta E. Sward</td>
<td>Assistant Director (Home Ec.)</td>
<td>1975-present</td>
</tr>
<tr>
<td>Donald W. Swoboda</td>
<td>Assistant Director (Agric and Nat. Res.</td>
<td>1975-1979</td>
</tr>
<tr>
<td></td>
<td>Programs &amp; Ext. Reports)</td>
<td></td>
</tr>
<tr>
<td>William E. Caldwell</td>
<td>Assistant Director (4-H &amp; Youth)</td>
<td>1975-present</td>
</tr>
<tr>
<td>Agnes L. Arthaud</td>
<td>Associate Dean &amp; Associate Director</td>
<td>3/76-1979</td>
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<tr>
<td>Donald W. Swoboda</td>
<td>Associate Dean &amp; Associate Director</td>
<td>1979-1987</td>
</tr>
<tr>
<td>Ken Bolen</td>
<td>Assistant Director (Agriculture and Natural Resources)</td>
<td>1981-1985</td>
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<tr>
<td>Jim Bushnell</td>
<td>Assistant Director (Agriculture and Natural Resources)</td>
<td>1986-present</td>
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</table>

**Headquarters Location**

The administrative offices of Extension have always been in Agricultural Hall.

**The Purpose of the Cooperative Extension Service**

As stated in the Smith-Lever Act of 1914, the work of Extension “. . . shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications and otherwise . . .” (8, p 28).

In 1980, Extension (32) saw its purpose as providing “. . . continuing education programs for Nebraskans . . .”
in communities where they live. These programs based on research and study are designed to develop skill which will help people:

1) produce and market high quality food more efficiently.
2) conserve and use natural resources effectively.
3) raise the quality of living through wise resource management.
4) develop as individuals and as members of families and communities.
5) develop leadership abilities.”

Chauncey S. Boucher, chancellor of the UN from 1939 to 1946, defined the function of Extension as the passing on of new knowledge to practitioners” (27). He was quoted as stating: “We must watch carefully at all times to make sure we are serving in a strictly educational capacity, and not as propagandists” (28). The senior author also recalls Boucher saying in a speech before the College of Agriculture faculty: “The purpose of a university is research and education — any other type of activity is unbecoming to a university”. Though basically agreeing with Boucher’s precept, the authors of this book are of the opinion that it is not always easy to draw a sharp line between education and promotion.

**Pre-Extension**

**Farmers’ Institutes**

Early in 1873, Chancellor Allen R.Benton made the following proposal: “For the purpose of giving publicity to the work of the Agricultural College, and for promoting intelligence among the farming class, I would suggest the feasibility of holding institutes in various parts of the State during the winter season. As a beginning it might be profitable to have such an institute at the University building (2, p 36). In December 1873, the Regents at the behest of Chancellor Benton authorized Samuel R. Thompson to spend “... at least one-third of his time during the term attending Farmers Institutes, and working up the interests of Agricultural Education throughout the State” (2, p 36).

Four Farmers’ Institutes were held during the winter of 1873-74 at Dorchester, Saline Co.; Palmyra, Otoe Co.; Seward, Seward Co.; and Lowell, Kearney Co. Governor Furnas, Chancellor Benton, and other prominent Nebraskans appeared on the programs. Thompson reported that the institutes were very satisfactory and further that “We should not solely seek to discover a new agricultural truth and to fit young men for illustrating its value in the community, but we should make a special effort to disseminate agricultural knowledge through the community” (3).

Harvey Culbertson, working with farm leaders, ranged for an Institute to be held in Lincoln in February 1878. Topics discussed were horticulture, bee culture, hogs, sheep and horses. Later programs were added which were of interest to women, and others to youth. Institutes were held in Gibbon in 1879 and, again, in Lincoln in 1880. In 1881, the decision was made to discontinue one large Institute and to hold one-day Institutes wherever and whenever there was sufficient local interest (2, p 62).

Institutes were established in Nemaha County, February 7, 1882; in Johnson County, October 1882; and in Lancaster County, December 27, 1884 (1, p 65). In 1887, H. H. Wing stated “... at least four such institutes were held in 1887, entirely by the efforts of farmers in their several localities,” (1, p 65).

In 1896, the UN appointed F. W. Taylor superintendent of the Institutes. In the same year Taylor reported that the Legislature had made no provision for the Institutes, that they were sponsored by the University, State Board of Agriculture, State Horticultural Society, State Dairymen’s Assn., State Poultry Assn., Improved Livestock Breeders’ Assn., and State Bee Keepers’ Assn. The railroads provided free transportation for the speakers (1, p 113-114).

The first support from the Legislature came in 1897 with an appropriation of $3,000 for the biennium ending March 31, 1899 (4, Jan 31, 1899, p 55). By 1907, the appropriation had grown to $20,000 (1, p 114).

Manley (2, p 184) pointed out that in 1904, University officials, cooperating with four railroads, made plans for “instructional trains” across the state. These included various crops, and hog and beef “specials”. The lecturers lived on the trains. One report referred to these trains as “Farmers’ Institutes on wheels”.

As the years went on, the Institutes were broadened with respect to subject matter covered. Segments were devoted to matters of the home for women as well as agriculture for the men. Corn shows, crop exhibits, and displays of women’s domestic products were commonly included. The Institutes carried a holiday spirit and entertainment was not overlooked (1, p 115).

That the Institutes were held in high esteem is noted from the following statements made in 1903-04: The work of the Institutes “... will result in the boys staying on the farms. The brighter, more progressive boys and girls will find more satisfaction in the country than formerly, and will no longer seek the cities. The Farmers’ Institute ... is the leaven, the stimulating force, which is to work out for the farmer a better agricultural condition and a higher plane of industrial and social life” (34, p 15).

The annual Station report for 1907-08 included the following (5, Feb 1, 1909, p xviii) statement: “The Farmers’ Institute Department desires, in addition to carrying on the present institute work, to establish a number of short schools of agriculture which shall continue for one week at suitable points in the State ...”

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1Manley suggested Chancellor Benton may have gotten his idea from Iowa where the first farmers’ institutes in the country were held in 1871-72 (2, p 36, footnote).
In 1908-09 there were 150 Institutes. For 1909-10 there were 154 Institutes, 6 Farmers’ Institute Schools, and 38 Boys’ and Girls’ Contests (5, Feb 1, 1910, p xx).

With the cooperation of the State Department of Public Instruction (1, p 116) the boys’ and girls’ institutes came to be held in connection with a significant number of the Farmers’ Institutes. A 1909 report stated: “... they (boys and girls) realize that in the preparation of exhibits for the contest, the growing of the corn and potatoes, the cooking and sewing, they receive personal benefit.” During 1907-08 attendance of boys and girls at these youth institutes totaled 11,000 (5, Feb 1, 1909, p xix).

The following, in order chronologically, served as superintendents of the Institutes: F. W. Taylor, W. P. Snyder, E. A. Burnett, Val Keyser, C. W. Pugsley, (28, p 5), and Howard J. Gramlich.

According to the 24th Station report, (5, Feb 1, 1911, pp xxiii and xxiv), Farmers’ Institutes, including Extension schools, comprised most of the extension work at that time. A plea was made in the report for the law should be passed by the Legislature permitting the appropriation for extension work amount of money to be used in cooperation with the Extension Department in the University for conducting demonstrations in the several counties of the State.

Agricultural Extension Replaces the Institutes

The section on “Agricultural Extension” of the 25th Annual Station report, (5, Feb 4, 1912, p xxvi), included the following: “The department of Agricultural Extension has taken over the work formerly done by the department of Farmers’ Institutes”. It was also stated that: “The appropriation for extension work . . . should be very greatly increased, as the appropriation now available is only sufficient for carrying on the Farmers’ Institutes and the few Extension Schools . . .”.

As is often the case with educational programs, the Farmers’ Institutes gradually faded out of the picture, rather than experiencing a clear cut demise. They had reached their high water mark in the year ending June 30, 1913 when 224 Institutes were held (1 p 139). It was stated (5, Jan 31, 1914, p xix) “The Department of Agricultural Extension, during the year ending June 30, 1913, has conducted 224 Farmers’ Institutes, with 665 sessions, having an average attendance at each session of 186. It has conducted seven Senior Short Courses holding day and evening sessions for five days at each point, with an average attendance of 327 at each day session and with an average attendance of 417 at each evening session. Seven Junior Short Courses were held, of five days each, with an average attendance of from 120 to 180 at day sessions and from 100 to 350 at evening sessions”.

In calendar 1915, 153 Farmers’ Institutes were held with a total attendance of 57,445 (5, Feb 1, 1916, p xxxii). The following statement appeared in the annual Extension report for the year ending June 30, 1918: “Farmers’ Institutes have gradually been discontinued in Nebraska . . . A few institutes still survive in some parts of the state, but these are being encouraged to affiliate with the Farm Bureau and to turn their program into its program” (1, p 139).

The Genesis of Extension in the College of Agriculture

Although Extension dates its origin to 1914, as shown by the fact that the silver anniversary was observed in 1939 and the golden anniversary in 1964, there has been extension work underway in the College of Agriculture ever since Samuel R. Thompson was elected to the “chair of agriculture”, effective in the fall of 1872. Although the term “extension” does not appear in the College of Agriculture literature until 1899 (5, Feb 1, 1899, p viii), educational work outside of resident instruction commenced with Thompson and has been a hallmark of the College of Agriculture since. From the very start, faculty members of the College of Agriculture have given lectures at various meetings over the state, have answered correspondence from citizens having agricultural and home economics problems, have identified pests, and have counseled with visitors coming to their offices.

In the early years of the College, the personal conferences and correspondence of an extension nature were not generally reported. However, an example of such work is illustrated by the following: In the ninth annual Station report for 1894-95 (5, Jan 14, 1896, p xiv), Charles E. Bessey, botanist, stated: “Not a little of the work of the botanist consists in answering inquiries upon all kinds of subjects pertaining to plants. Nearly 150 letters and inquiries have been received during the year all of which were answered as soon as possible.”

From a genealogical standpoint, Extension traces its ancestry to the Station.

Beginning with the Annual Station report for 1897-98 (5, Feb 1, 1899, p viii), and continuing through the report for 1901-02 (5, Jan 31, 1903, p 10), there appeared a section entitled “Station Extension”. This portion had to do with educational work (other than resident instruction) conducted by the Station staff. It was not the beginning nor the end of such work but rather the beginning of the use of the term “Extension” for a heading in the reports.

Beginning with the Station report for 1902-03 (5, Feb 1, 1904, p 10), the word “extension” was dropped, the section on this type of work being entitled “Farmers’ Institutes”. The word “extension” did not appear again until 1909-10 (5, Feb 1, 1911, pp xxxiii, xxxiv) when the term “Extension Schools” was used in the

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The first faculty member of the College of Agriculture.
write-up on Farmers' Institutes. In September 1911, the name of the Farmers' Institute Department was changed to the Agricultural Extension Department, still with a superintendent in charge.

In the Station annual report dated Feb 1, 1912 (5, pp xxvi to xxviii), the sectional title "Agricultural Extension" had replaced the former title "Farmers' Institutes." It was stated "The Department of Agricultural Extension has taken over the work formerly done by the department of Farmers' Institutes." The Institutes, of course, were continuing. In the February 1, 1912 Station report the following appeared: "Professor C. W. Pugsley, in charge of soils agronomy, was transferred to the Department of Agricultural Extension as Superintendent of Agricultural Extension and Farm Management. He remains in charge of Farm Management Investigations" (5, p xxiii). In the financial report for the same year, the only appropriation shown for extension-type activities was that for Farmers' Institutes, which was a part of the Station budget.

The first reporting of Agricultural Extension under that title appeared in the February 1, 1912 Station annual report (5, p xxii to xxviii). The activity reported on consisted principally of holding of Farmers' Institutes. It was also stated that "Agricultural short courses are conducted for both men and women..." and mention was made of nine junior and five senior short courses to be held. Organized Agriculture was mentioned but not as a part of the Extension programs. It was also stated there would be a number of seed corn trains. Other than the above, the report consisted principally of an enumeration of "... programs which should be developed."

The following programs were planned for the ensuing year: 1) operation of a number of seed corn trains, and 2) conducting of two correspondence short courses in agriculture. An appropriation of $17,500 for extension was listed under the heading of "Farmers Institutes" (5, p xxxii).

Organized extension work began in the counties in 1912. County agents were at first known as county demonstrators. V. S. Culver who had been teaching agriculture in the Central City College (6, p 1) was the first county demonstrator in Nebraska. He started his work in Merrick County in 1912 without any federal, state or county tax money—his support coming from private funds.

The 1913 Legislature passed HR 524 which provided for the employment of county farm demonstrators to aid in the development of the best agricultural methods. This was an enabling act, requiring the signature of a petition by at least 10 percent of the land owners, requesting appointment of a county demonstrator. The law further stated that the county board "might" set aside the necessary funds, following submission of the petition (1, p 140). Beginning in 1913, county demonstrators were: Otto H. Liebers, Gage County, February 1, 1913; A. E. Anderson (not the state/federal statistician of a later period), March 1, 1913, Seward County; J. F. Coupe, May 1, 1913, Thurston County; A. H. Beckhoff, July 1, 1913, replaced Anderson in Seward County (Anderson returned to the state office in Lincoln); Val Kuska, March 10, 1914, Madison County; C. S. Hawk,
spring of 1914, Dawes County; George O. Unruh, July 1, 1914, Kimball County; and Hugh Raymond, 1914, Dakota County. (1, p 140-142).

In the spring of 1912, the seed corn trains, "... were run over railroads covering practically all the corn-belt territory of Nebraska ..." (5, Feb 1, 1913, p xxiv).

During the biennium which opened April 1, 1913, an appropriation of $50,000 was provided by the Legislature to care for the work of agricultural extension under the College of Agriculture (5, Feb 1, 1914, p xix). In the 1913 Extension report, the agricultural engineers devoted almost a page to irrigation, one short paragraph to drainage, and nothing to soil erosion. The battle against rodents — prairie dogs, gophers, and striped ground squirrels — continued. Poisoned bait with strychnine as the active ingredient was recommended in the campaign. The above are but two examples of the many projects carried on by Extension, which covered pretty much the entire field of agriculture of the state. In the year ending June 30, 1913, dairy special trains were run on two railroads, making 68 stops, with an average attendance of 397 people. A herd of dairy cows was carried on the trains (5, Feb 31, 1914, p xix).

The year 1914 is a very important one in the history of Extension, for it was in that year that the Smith-Lever Act was passed by Congress and signed by President Woodrow Wilson on May 8, (7, 8, pp 27-31 and 397-399).

What federal legislation, accompanied by financial support, had done to stimulate opening of the UN (1871) and the College of Agriculture (1872) both through the Morrill Act of 1862; and the establishment of the Station (1887) through the Hatch Act of 1887; the Smith-Lever Act did for Extension in 1914.

A second important milestone in 1914 was that Extension was emancipated from being a department under the Station, and became established as a coordinate unit, along with the College/Resident Instruction and the Station of the College of Agriculture. The name was changed to Agricultural Extension Work or the Extension Service of the College of Agriculture with a director in charge. (See also Part II, Chapter 1.)

The Period 1914-1923

The Situation in 1914

The Extension program had gained considerable strength and size by 1914 (10, 1914). The staff consisted of 25 full-time people, five part-time, and 15 for special lecture work, with a total of 45. These numbers included the county staffs.

The following lines of work were outlined in the report for 1914 (10): Farmers' Institutes; Extension schools; demonstration work; boys' and girls' clubs; home economics work; women's clubs; Extension News Service; county fair exhibits; correspondence courses, offered through the "University Extension Department"; and Extension bulletins and circulars. State specialists covered animal husbandry, agricultural engineering, dairy, hogs, hog cholera, farm management, agricultural botany, and horticulture. There were also persons in charge of farm demonstration work, boys' and girls' club work, home economics, women's club work, Extension Institute programs and dates, and short courses.

There were eight county demonstrators. They conducted large and varied programs, as the county agents now do. The term "County Agent" appeared in the 1914 report along with "Farm Demonstrator" (10, 1914, p 6). In 1914, seven of the eight county agents reported vaccinating 23,605 hogs for cholera. Another program, unique to the times, was the organizing of local or community clubs for the purpose of discussing farm subjects.

The total budget of $41,250 was derived from state appropriations - $25,000; USDA - $11,250; and Smith-Lever - $5,000 (1).

Names of staff members appearing for the first time in the 1914 Extension roster, who gained significant prominence in subsequent years included I. D. Wood, agricultural engineering; Mary Rokahr, home economics; H. C. Filley, farm management; O. H. Liebers, demonstrator, Gage County; Val Kuska, demonstrator, Madison County; and E. P. Brown, Davey, special lecturer (Farmers' Institutes) (10, 1914, p 3). S. R. McKelvie (later governor of Nebraska) was listed as a special lecturer in the 1915 report (10, Dec 31, 1915, p 5).

WW I, 1917-1918

The Extension Service played a major role in World War I, as shown by a statement in the 1917 annual report (10, p 4): "As soon as it became evident that the U.S. was to take part in the world's war for democracy, the Extension Service made the aid of the government its first concern. Wherever suggestions on food production or conservation could be obtained from the administration, steps were taken to put these suggestions into operation."

The annual reports were shifted from reporting on a calendar year basis for 1917 to a fiscal year basis for 1918 (10). The report for fiscal 1918 (10) contained the most material relating to the War.

Most of the work was carried on cooperatively with local organizations known as the "Family Farm Bureaus". It was also noted that "The Public school system is an effective cooperator in developing Extension work with boys and girls" (10, year ending June 30, 1918, p 10).

The War had the effect of a greatly enlarged Extension Service, both at the state and county levels. Congress, in August 1917, passed a bill entitled " Stimulating agriculture and facilitating the distribution of products". As a result of the stimulus of this legislation
and the accompanying additional federal funds, by July 1, 1918, there were “... 50 county agents, 11 district agents covering two or more counties, three assistant county agents, and 10 on the administrative and supervisory force” (10, for year ending June 30, 1918, p 13). The mushroom growth was similar to that which was to come in 1933 when, through federal legislation and funds, every county in the state was covered by a county or district agent in order to administer the Agricultural Adjustment Act of 1933.

Emphasis was placed, in addition to regular programs, on wheat flour substitutes, food preservation and conservation, and efficient labor utilization. Some interesting programs were sorghum cane growing and utilization of old sorghum mills to produce syrup as a sugar substitute; promoting growing of spring wheat in 1917 to substitute for the extensive loss of winter wheat due to winter-killing; rodent control campaign to preserve food; emphasis in home demonstration work placed on canning and drying of foods, and on wheat substitutes, in cooperation with the Food Administration and the State Council of Defense; and an emergency seed corn program in the spring of 1918 following the “soft corn” crop of 1917.

Formerly known as “Boys’ and Girls’ Club Work”, the youth work was reported in 1918 as “junior work” with such designations as junior projects, junior department, and Junior Extension Department” (10, year ending June 30, 1918, pp 22 and 23.) There were 24,000 boys and girls enrolled in the different clubs which covered the areas of gardens, corn growing, potatoes, pigs, raising chickens, making war bread, canning, drying by communities, and Junior Red Cross.

A significant development of this period was the formation of an Advisory Council (10, year ending June 30, 1918, p 4), composed of representatives from the “... bona fide state-wide farmers' organizations”, the latter consisting of Farmers’ Union, Grange, Farmers’ Congress, Nebraska State Livestock Breeders’ Assn., and the State Farm Bureau Association.

A total of $93,483.71 was shown as available for Extension (10, 1917 report, p 2) made up of $38,575.71 from Smith-Lever funds, $33,000 from state funds; and $21,908 from USDA. County funds were referred to but not quantified. Belatedly someone made a long-hand note at the end of the financial report stating: “Neither does it include any of the federal emergency money.” The following appeared in the 1918 report (10, p 4, 5): “County funds appropriated to County Farm Bureaus for the employment and expenses of County Agricultural and Home Demonstration Agents make a further addition ... Counties also made a considerable contribution to Extension work through the time which County Superintendents of Schools devote to ... Junior Extension work ... Local school districts make contributions in the form of time devoted to Junior Extension work by a regularly paid teacher ...”

The report for fiscal 1919 included the end of WW I on November 11, 1918. The report started as follows: “Extension work as conducted in Nebraska during the fiscal year ending June 30, 1919, has been of an intrenchment1 (sic) nature rather than expansion” (10, year ending June 30, 1919, p 1). It was reported that the loss was surprisingly small, in view of the fact that “... the organization was built on a war basis ...”. It was stated that 47 counties (the 1918 report showed 50) and one district (the 1918 report showed 11) maintained the work. Staff names or numbers were not given in the report.

That there were income tax problems as early as 1918 is evident from the annual report for fiscal 1919 (10, year ending June 30, 1919). An attempt was being made to get the Internal Revenue Service to recognize the use of farm inventories, as was being done in other businesses, in figuring the federal income tax. It was stated “... the income tax collectors in Nebraska have continually discriminated against farm inventories, either telling farmers that their inventories were 'no good', and could not be used under any conditions or else by laying down requirements for inventories that, they admitted, farmers could not possibly use.”

An example is given of a farmer having to pay $581 income tax in 1918 whereas his real income on an inventory basis was only $250. As a result, many farmers questioned the value of taking inventories and keeping accounts (10).

For agronomy, a section was devoted to wind erosion work which had been started two years previously. It was also stated, “A great many inquiries have been received ... relative to the value of different commercial fertilizers ... up to the present time the use of commercial fertilizers in Nebraska has not paid for its use ...” (10, year ending June 30, 1919).

The report further stated that Boys’ and Girls’ Club work (under the section entitled “Junior Extension Work”) “... will be conducted upon the Standard Club basis.” It was thought that this policy would result in lowered enrollment but in “... more effective and complete work ... Bread making, canning, sewing, pig, garden and poultry clubs were the most important features.”

Home demonstration work was concerned primarily with poultry; gardening; hard cheese making; food drying and meat canning; hot school lunches; health; labor-saving devices including homemade fireless cookers, iceless refrigerators, scrubbing chariots (sic), and fly-traps; the pressure cooker; and clothing.

The participation of Extension in state and county fairs was strongly emphasized.

Some Early Extension Experiences

In 1953 the Nebraska Farmer ran a series of articles on experiences of early Extension workers. Following

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1The writer likely meant "retrenchment".
are some of the happenings reported:

Ivan D. Wood, who started as agricultural engineering specialist in 1913, told about laying out drainage systems; adjusting binders and mowers; and conducting irrigation demonstrations. Travel in the early days was by train, often in the caboose of a freight train. Later Extension bought a Model T Ford which was driven over many miles of dry roads and hundreds of miles of muddy roads. For a time, the specialists had two motorcycles but these did not work out well because of motor troubles.

After a break for service in the U.S. Army Air Corps of WW I, Wood came back to Extension. Once when visiting a farm in the Sandhills, the farmer's small son lost the key to the car, and Wood spent his first night in a sod house. At another time when he and his wife were staying in a small hotel in northeast Nebraska, a snowstorm came up during the night and by morning there was a big snow drift over their bed. Wood liked to tell about Mrs. Wood's friends expressing regrets over the fact that her husband was gone so much of the time. Her retort to such talk was: "I would rather have a good man part of the time than a poor man all of the time".

Paul H. Stewart started his work with Extension in 1917 in Kimball County, moving to Buffalo County in 1918, and still later becoming Extension Agronomist. He told of his "...toughest customer in 20 years of working with farm folks", an incident which occurred in Saunders County. "I was showing some pictures of inbred plants", he related, "and explaining the principle of hybrid corn and telling what the prospects were, when I was most rudely interrupted by a farmer who I learned later was a member of the Legislature. He stood up and took over the meeting, saying: 'This man can't tell us anything about raising corn. I have seen those measly stunted corn plants and corn fields those professors grow. It's a lot of d— foolishness. Let's all go home. We won't learn anything here'. Then he and a couple of his friends stomped out".

"In about 1922", according to Stewart, "Ivan Wood and I started work on what we called soil erosion and we wrote the first bulletin on what everyone now calls soil conservation" (14).

Rather typical of the early days of Extension was Otoe County Agent A. H. DeLong's work on hog cholera. During his first year in the county, 1918, he gave demonstrations on vaccinating hogs. The serum was purchased and stocked in the county extension office. A total of 2,100 hogs were vaccinated that first year. Also 300 calves were vaccinated for blackleg, using government-supplied vaccine. Vaccinating hogs for cholera and stocking the vaccine was a common practice among the early county agents, a practice, which in some counties, continued for a considerable period.

J. H. Claybaugh who started his Extension career as Clay County agent on April 1, 1918, and later became extension poultry specialist, related the following: When the farmers of the North Platte Valley were starting to raise turkeys, the "... breeding flocks usually consisted of one tom and two or three hens. The mortality rate among toms was quite heavy. This left groups of turkey widows. D. H. Propps, located at the Mitchell Experiment Station, came to the rescue by fixing a crate in his little old Ford in which he hauled a turkey gobbler!" (15).

Sometimes farmers erected signs at the entrances to their farmsteads asking county agents to stay out. One man who encountered this was K. C. Fouts who joined Extension following service in WW I. He served as county agent first in York County and then Seward County before becoming animal husbandry specialist in Lincoln in 1946. He recalled taking an easterner...
(for farm labor) out to a family needing help. Going down a hill the ring gear went out on his Model T Ford with the resultant loss of power. This happened at an entrance to a farmstead with the sign “County Agent Keep Out”. The easterner took off across the fence and Fouts never saw or heard from him again. Fouts now had to talk to the farmer who was accompanied by his four sons, the oldest of whom was the spokesman. Fouts identified himself as the county agent, told of his dilemma and asked to use the telephone. One son answered: “You can use the phone but no county agent should stop here.” After using the telephone Fouts thanked his hosts, and said “What you may or may not think of the county agent is your privilege, but I want you to know that whenever you feel I might be of some help to you, let’s try it!” Fouts said a few days later the sign was gone (16).

After being honorably discharged from the U.S. Navy in 1919, Everett T. Winter accepted a position as Butler County agent, following which he spent 10 years as Thurston county agent. In both counties he helped conduct a campaign to eradicate tuberculosis in cattle. In Thurston County, a Mr. A sent word to the veterinarian making the tests that if he tried to test his cattle, he would be driven off the farm with a shotgun. When Winter and the veterinarian got to the farm, Mr. A begged them to go back to town. They refused and as they started towards the pasture where they could see the cattle, Mr. A stepped out and pointed a shotgun at them. The veterinarian talked sternly to the farmer, took the gun away from him and handed it to Winter. Winter took out the two shells and threw the gun down on the ground. It’s a question of who was most scared — the veterinarian asked Winter to drive back to town because he was too nervous to do so (17).

In Thurston County, Winter also encountered opposition to his campaign of promoting the growing of sweet clover. At his first meeting in the county, a farmer stated: “... it is an imposition on the taxpayers of the county that a young fellow should come into this county at the taxpayers’ expense and advocate the sowing of weed seeds (sweet clover)”. Ten years later when Winter was moving to another position, the same farmer gave him credit for firmly establishing the use of sweet clover in the farm economy of Thurston County (17).

The Post WW I Period, 1919-1921

The 1920 annual report was entitled “Cooperative Extension Report” which was the first time that the word “Cooperative” was used in the title of an annual report. No explanation was given for the change (10, 1920).

Retrenchment which started following the War continued. One county organized a farm bureau and shortly employed a county agent, while three counties dropped the work. It was also stated that two districts discontinued the work, but this is inconsistent with the 1919 (10) report which stated that there was only one district remaining at that time.

An important development was that the 1919 Nebraska Enabling Act, SF 172, making possible the creation of a Farm Bureau within a county, was declared constitutional by the District Court and, subsequently, upheld by the State Supreme Court. There was somewhat of a problem through the fact that the Nebraska Farm Bureau Federation beginning July 1, 1920, employed a secretary and started an active membership campaign. The county agents were employed jointly by the county Farm Bureaus and the Extension Service. It was further stated that “Relationships are gradually being worked out . . .”

The Nebraska Farmers Union was not entirely happy with the farm bureaus and the county agent programs (2, p 232). In April 1919, L. S. Herron wrote in the Union Paper that the responsibilities of the farm bureaus and the county agents were “… to deal with the problems of production and farm management. Cooperation, marketing activities, social life and the expression of sentiment on public questions should be left to such organizations as the Farmers Union.”

The 1920 Extension report indicated that no great changes were occurring in the Extension programs (10, 1920). It is noteworthy that in the agronomy section there was a discussion of inspection of fields for seed production—a precursor (though not so labeled) of field crops seed certification. In the same report in the horticulture section appeared the following statement: “Seed potato certification was started last year . . . Applications were received from 25 growers representing a total of 660 acres this season.”

Both agronomy and ag engineering contained sections on erosion. The principal areas of work in animal husbandry were meats, livestock organizations, sales pavilions, and promoting of livestock in general. It is obvious that animal husbandry was lagging in research to back up their Extension programs.

In 1921 (10, Dec 1, 1920-Nov 30, 1921), Extension continued without substantial changes from the previous year. The report stated that 46 organized counties were employing agents, with 8 having a second agent for home economics, and 5 with associate agents for boys’ and girls’ programs.

There appeared to be continued concern over the fact that people often assumed an exclusive relationship of Extension with the Farm Bureau Federation, whereas Extension also had assistance “… from the Grange, Farmers Union, Equity Union, Community clubs, Breeders Associations, etc.”

Interesting developments from the previous year included the fact that seed certification in agronomy was now known under that name. Crops certified were
wheat, oats, and rye. Responsibilities for (field crop) seed certification was taken over by the Nebraska Crop Growers' Association on September 8, 1921 (11, p 11). Ag engineering emphasized drainage, water supply systems, sewage systems, and soil saving dams (agronomy placed emphasis on brush dams). Horticulture worked principally on orchards and potatoes. Over 200,000 bushels of certified seed potatoes were produced. Other important programs had to do with purebred sires; insect and rodent control (rats had now been included in the control program); poultry culling, feeding and housing; and various aspects of farm management.

The principal aspects of home demonstration work included clothing, food and nutrition, home health and hygiene, and home management. Education in home millinery was started at this time, in addition to work on dress forms and the use of sewing machine attachments. Meat canning and soap making work were conducted in conjunction with home butchering.

There continued to be increasing emphasis on Extension's participation in the State Fair and county fairs. Included in the annual report for 1921 was a section of 18 pages on the state and county fairs, with an additional 8 pages on “county fair judging”, authored by J. F. Lawrence, assistant county agent leader. Lawrence was very detailed and rather profound in his reporting and analysis of the fairs.

Four hundred and eighty-six standard boys' and girls' clubs were organized with a total membership of 4,559. The largest attendance ever of 202 attended Club week, held the first week of June. There were 1,094 entries at the State Fair. Housing was provided for boys with a camp on the fairgrounds, and there was a similar camp for the girls on the “Agricultural College campus.”

Some idea of the dedication of Extension staff may be gained from J. F. Lawrence's statement (10, Dec 1, 1920 - Nov 30, 1921, p 40) that he spent 154 days in the field, 144 days in the office, 8 days on sick leave, and 1 day on vacation. He traveled 19,311 miles with a total expense account of $1,248.98.

The Agricultural Depression of the Early Twenties

The feature of the 1922 report (10) was the decline of farm prices during the summer of 1921 and the "... general depression which followed." Reference was made to the burden of heavy taxes. County commissioners were asking the Farm Bureau boards to cut their budgets, and in a few cases to close out the Extension programs. "New petitions were demanded, points of law raised and in some cases the point under controversy was carried into the courts. One case is still pending in the Nebraska Supreme Court" (10).

Two counties closed their offices and four county club agents and five home demonstration agents were dropped. Chief reduction came in women's work. Hope was expressed for an improvement in economic conditions so that a second agent (woman) could be employed in the one-agent counties to carry out "... the work with women and girls. The division of work on sex lines has met with general approval ..."

There were few major changes in Extension programs and there was considerable emphasis on community organization. Dairy husbandry reported organization of the Platte Valley Cow Testing Association, and the organization of a Saunders County cooperative bull (dairy) association. Emphasis was placed on serving hot lunches in rural schools. Horticulture was still emphasizing homegrown fruit but noted that the number of fruit trees on farms in Nebraska had dropped from 5,000,000 in 1910 to 1,500,000 in 1920. Much assistance was given to organization of farmer cooperatives, especially grain elevators. Subject matter specialists were devoting more time to boys' and girls' club work.

Back to Business as Usual, 1923

On occasion one is led to wonder if the persons who wrote some of the annual Extension reports made any reference to the previous years' reports when doing their writing. Thus, in making a review, one looked forward with considerable anticipation, after reading the 1922 report, to the 1923 report to see how the depression was going, especially as it affected Extension budgets, and what the Supreme Court decided on the Extension case (see 10, 1922 report). No reference was made to either in the 1923 report.

Attention was given in the 1923 report (10, undated but obviously 1923) to changes that had taken place in Extension since its inception. Demonstrational meetings and projects had largely replaced personal services. It was also stated that “The last two or three years has (sic) shown increased interest in a study of community, county, and state conditions ... Another mark of progress has been the recognition of all organizations and business interests that their welfare depends on the prosperity of farm people ... Cooperation of all educational forces on the common problem has been gratifying.”

Organizationally, there were three district supervisors, a leader or specialist in home economics, and a leader or specialist in club work. It was also stated “the term specialist, as used above and in connection with subject matter work, is gradually giving way to the term of state agent and will entirely displace it when all understand its significance” (10, 1923). The “understanding” must have come on rapidly because in the 1923-24 College of Agriculture catalog (12, p 6-13), the term “state Extension agent” had completely replaced “specialist.” In those days staff members responded rather rapidly to the “boss's” wishes.

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*One had to know “Jimmy” to appreciate his giving so much attention to an ancillary subject like county fairs.

*What the “significance” was is not clear.
Publications

By the end of 1923 (10) Extension had put out 586 publications. These covered a wide variety of subjects, as illustrated by the following: No. 104 Judging oats; No. 216 Tanning hides; No. 410 Uses for old clothes; No. 709 The sanitary privy; No. 1117 Soap making; and No. 1405 Confine the cockerel. Some of the publications were authored solely by Extension staff, some jointly with other College staff members, and still others solely by staff other than Extension. The weekly serial Extension Notes was being mailed regularly to county newspaper editors, to the College staff, and to Smith-Hughes (high school) teachers.

Staff Numbers and Financial Support

In 1922, the Extension academic staff consisted of 26 persons in the state office (12, p 61-63), and “. . . about fifty county agricultural agents and home demonstration agents . . .” (12, p 76) located in 44 counties (10, 1923, taken from colored map). Expenditures for the year ending June 30, 1922 were: Smith-Lever (federal) - $98,419.82; state - $83,662.82; county - $143,882.64; with a total of $325,965.28.

The Period of 1924 through the First Half of 1933

Normalcy Prevails During the Roaring Twenties

After 1922, during the roaring 20's, Extension moved along with fairly stable budgetary support. In 1924 work at the state level was reported (10, year ending Nov 30, 1925) under the following sections: agricultural engineering, agronomy, animal husbandry, poultry, dairy, farm management, horticulture, market organization, women's work (home demonstration agents, study clubs, mothers vacation camps), home economics (clothing, food and nutrition, home health, and home management), and boys and girls club work. It was stated that “... raising funds by membership in counties which were voted off the taxation basis has been a real problem . . .”

The "Wedding" of Extension and the Station

It will be recalled that Extension ceased to be a section of the Station in 1914. From that time until 1964, there was always a degree of separation, administratively and philosophically, between Extension staff on the one hand and the College (RI)/Station staff on the other8. That attempts were underway to integrate the organization and working relationships between the Station and Extension was demonstrated by a play presented at the Fall Faculty Party on October 20, 1925 (18). Title of the play was “The wedding of Miss E. X. Tension and Mr. X. Periment Station”. It was billed as “a nuptial travesty in one act”10 and dedicated to the county extension agents of Nebraska. Book and lyrics were by “Bugs” (Myron H. Swenk, chairman of the Entomology Department); and “Fungie” (George L. Peltier, chairman of the Plant Pathology Department). Decorations were by “Erosion” (Paul H. Stewart, extension agronomist).

A part of the cast was as follows:

- The bride ......................... Miss E. X. Tension
- The groom ....................... Mr. X. Periment Station
- The father of the bride ....... Mr. Farmers Institute Tension
- The flower girls .................. Miss Maizie Corn
- The ring bearer ................... Mr. X. Periment Station
- The bridesmaids ................... Miss Ima Hen"
- Miss Do Knut
- Miss Hessian Fly
- Miss Vita Min

The minister ..................... The Rev. Dino Saurus

The opening song “O harness me” was a parody on “Oh promise me”.

When asked by the minister if the bride's mother was dead, the father replied “Yes, practically. She lives now at Brookings, South Dakota” (a reference to Charles W. Pugsley, president, South Dakota State University).

The minister closed the ceremony with these words: “By this symbolic act you enter into this relation voluntarily and enthusiastically, and solemnly promise and engage in the presence of these many witnesses, to respect each other, to be just to and tolerant with each other, and to help each other, so long as you both shall live; therefore, in accordance with the laws of human brotherhood and common sense, I do hereby pronounce you as operating in the proper spirit of cooperation.”

When the best man and the ushers wanted to kiss the bride, the minister said “Just a moment. I'll first see if it's safe (kisses the bride). It's all right. Go to it! (There is a mad rush to kiss the bride).”

The above extractions from a play presented in 1925 demonstrate that people created much more of their humor in those days than today — there was no television and there were relatively few radios. The play also combined entertainment with a serious subject — the importance of cooperation between Extension and the Station. It is interesting to note that three dignified, highly capable professors, namely, Swenk, Peltier, and Stewart, were willing to poke fun at themselves in the interest of a good time for all. The cryptic gibe at South Dakota State University is not to be overlooked and no doubt brought forth much laughter from the audience.

In the 1926 annual Agricultural Extension Service report (10, for the year ending Nov 30, 1926), there appeared a glowing statement about the relationship

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8The degree of separation was well illustrated by W. W. Heuer- mann, extension farm management specialist, when he wrote in 1939: “Cooperation has always existed between the Rural Economics Department and the Extension Farm Management Department” (31).

10A sort of “gridiron” or “roast” of its day.
of the Extension Service to all of the departments of the College. It was also stated that “... department specialists, or state agents as we know them, have their desks within their own individual departments ...”

The Beginning of the Drought and Depression Years

Things began to change somewhat following the stock market crash of the fall of 1929 which was the start of the great depression. It was stated (10, year ending Nov 30, 1930) “In spite of the general depression which has existed during the past year Nebraska can still report progress in Extension work”. It was noted that six counties “came in on the petition basis” (i.e., gained tax support), while Cuming County was awaiting a court decision to determine the legality of its petition.

In the next year’s report (10, 1931) considerable emphasis was given to the drought-grasshopper near disaster in north central Nebraska. C. W. Watkins, extension forester, was placed in charge of assisting the farmers in that area. Carloads of apples, potatoes, feed stuffs, grain, and hay were made available, with the railroads doing the shipping without charge.

In the same year Extension considered itself lucky that it did not receive a cut in appropriations by the Legislature, and it did not expect to give up extension work in any of the counties already organized.

In 1932 the depression was on in full fury, and now Extension did not escape its effects. The question of county tax support for the county agent went to election in 11 counties and everyone lost. It was stated in the annual report (10, 1932, p 1) “There are enough supporters of Extension work in the counties affected to continue the work on a membership basis ...”.

Also in 1932, Extension helped secure federal feed and seed loans for farmers in the drought and grasshopper stricken areas.

The list of subject matter sections of Extension in 1933 (10, 1933) did not change much from those reported in 1925, except that forestry, entomology and community organization had been added. The number of various types of publications distributed during 1933 was reported as follows: Extension circulars - 227,696; Station bulletins - 29,219; Station circulars - 17,502; and Station research bulletins - 13,480, with a total of 287,897.

The first half of 1933 continued to be difficult for Extension. It was reported (10, 1933) that in the spring of 1933, the Nebraska State Legislature “… made drastic cuts in tax supported educational programs … result was a 22 percent cut in the salaries of extension workers as well as a liberal cut in maintenance funds … we have a new law (which) … requires only a petition of 20 percent of the farm operators to ask for a vote as to whether or not tax funds shall be used by the Farm Bureaus.”

Just as things looked very bleak for Extension, there came manna in the form of the federal Agricultural Adjustment Act of 1933. Suddenly there was a major assignment and influx of large amounts of federal funds for Extension to get the AAA program underway. For the time being “voting out” county agents and lack of legislative support became secondary considerations in the wake of the huge federal undertaking assigned to Extension.

The Agricultural Adjustment Act of 193311 (20)

Extension was cast into a new and exciting role with the passage of the Agricultural Adjustment Act of 1933, one of the numerous alphabetical agencies of the New Deal. The purpose of the program was to increase farm income by reducing production. The USDA, administering agency of the new legislation, called upon Extension in the states to set up a preliminary organization to administer each of the various commodity programs. Meanwhile, Paul H. Stewart, extension agronomist; Ralph H. Cole, extension economist; and Harold Hedges, rural economist, were called to Washington to assist with formulating policies and regulations in regard to the wheat reduction program (10, 1933).

In Nebraska, the first commodity worked with was wheat. The activity required the services of agents in the counties. Since there were at the time many counties without county agents, the federal government provided an emergency mechanism and the necessary funds for financing agents (known as “emergency agricultural assistants”) to cover counties not already having agents.

To help carry out the AAA assignment in Nebraska, some counties were combined into county agent districts, with one agent per district. The districts were composed of the following counties: 1) Arthur, McPherson and Logan; 2) Thomas, Blaine, Grant and Hooker; 3) Garfield, Loup and Wheeler; and 4) Brown, Rock and Keya Paha. When the organization was fully developed, there were four districts and 80 individual counties in Nebraska, each with at least one agent. Prior to the addition of agents provided with AAA funds, there were 43 county agents in Nebraska.

Passage of a Civil Service examination was necessary in order to be considered for appointment as an emergency agricultural assistant (agent), even though the initial appointment was for a period “… not to exceed 90 days”. Because of the depression, many people, even those with college degrees, were either unable to find any employment or were working for very low wages. So the response to the Civil Service announcement was heavy, indeed. Included in the group of applicants were Edward W. Janike and the senior author of this book, both 1930 UN graduates. Janike

11The administering agency has carried the following names since its inception (29):
   May 12, 1933 - Agricultural Adjustment Administration (AAA)
   August 20, 1945 - Production & Marketing Administration (PMA)
   November 2, 1953 - Commodity Stabilization Service (CSS)
   June 5, 1961 - Agricultural Stabilization & Conservation Service (ASCS)
was rejected because he was not yet 24 years of age (21). Frolik passed the exam with a low grade (because he lacked experience) but was accepted, received a Civil Service appointment effective July 24, 1933 and in early August went to Auburn as Nemaha County Emergency Agricultural Assistant. Meanwhile Janike was appointed by Extension on a non-Civil Service basis as district supervisor for the Panhandle.

The resources of the state Extension office were marshalled fully to get the AAA program activated. Although Director W. H. Brokaw was officially responsible for setting up a preliminary organization for the program, Elton Lux carried much of the load at the state level. Other state specialists also assisted in interpreting the law and regulations coming out of Washington. The state was divided into eight supervisory districts to carry out the program, with subject matter specialists and former extension workers being appointed supervisors (in addition to the two district supervisors already a part of the organization).

One of the requirements of the program was the establishment of temporary county committees, the appointment of committee members being made by the county agents or district supervisors. The county committeemen in turn selected precinct committeemen, two from each precinct. These committees were utilized to get the program initiated and to assist farmers in signing applications for participation. Later the temporary committees were replaced by "permanent" county committees to review applications and to make allotments for each grower. The program was voluntary. In Nebraska 75.5 percent of the average wheat acreage for 1930-32 was signed up (10, 1933, pp 142-146).

There were many problems as might be expected in starting such a large and complex program on very short notice. Directives from Washington were received frequently. Skeptics and outright opponents were numerous. Understandably, payment of salaries and reimbursements for operating expenses were extremely slow in coming out of Washington. In many cases competition for the county committee positions was spirited because the members received pay for days worked, and most needed the money badly. There was also the bright side—the money finally coming out of Washington for reducing first the wheat acreage, and subsequently the corn acreage and number of pigs, did much to improve the financial well-being and to raise the hopes of farmers.

A big setback to the program came on January 6, 1936 when the United States Supreme Court invalidated the Agricultural Adjustment Act. The announcement constituted a severe blow. Shock waves were felt all over the country. Persons being paid with AAA funds did not know if they had jobs or not. But Congress came to the rescue as rapidly as possible, and within weeks new legislation was passed and the program was resumed along lines similar to those before the Supreme Court decision.

As time went along the role of Extension in the programs diminished. The farmer-elected county committees became more active, as was the intent in the beginning. The USDA developed an organization at the federal, state, district and county levels of full-time Civil Service personnel to administer the program. Today the organization is known as the Agricultural Stabilization and Conservation Service and, in terms of appropriations, constitutes the largest agency of the USDA. Presently, Extension's role in the ASCS is that of education.

The Drought and Depression Continue, 1934-1941 (10) 12

Helping Farmers Cope with Adversity

The period 1934 through 1941 was characterized by slow and only partial recovery from the great depression, extreme drought gradually being replaced by moderate drought conditions, and the establishment of a number of New Deal agricultural agencies to help farmers.

The Drought

The drought of 1934 was the most devastating ever known in the state. Only four counties were not designated in the primary drought class, and these were designated as secondary. The feed situation was critical.

There was a serious grasshopper outbreak. Extension cooperated in a vigorous campaign to control the grasshoppers, principally in educating farmers on using poison bait furnished by the federal government. A similar program was carried on in the southeast counties to control chinch bugs with creosote barriers, the creosote also being furnished by the federal government.

Extension also cooperated in the federal cattle buying program, a relief measure to help farmers who were critically short of feed. In 1934 a total of 458,481 cattle were purchased in Nebraska. In 1935, 15,800 cattle were condemned and 465,882 were accepted with total payments to farmers of $6,599,734.

In 1936, it was reported that "... 1936 farmers in Nebraska are in a more deplorable condition, economically, than at any time since the depression started".

In 1937, it was reported "with complete crop failure for two years, and about a 75 percent failure for two other years since 1934, Nebraska farmers are in the most critical condition since the depression began." There was an outbreak of anthrax in seven north-eastern counties and the grasshopper plague continued. Some farmers had to depend on the Farm Security Administration, some had to accept relief funds administered by the Works Progress Administration and

12 Most of the material in this section was extracted from the annual Extension reports (10). Individual reports can be identified by the years given. A few firsthand recollections have also been included.
still others left the state.

Crop conditions were still not good in 1939. Problems with grasshoppers and chinch bugs continued. The best crop year since the drought started in 1934 was 1941, but even for that year it was reported that there was still not “normal” production of all crops.

During the period 1934 through 1941, Extension was much involved in attempting to help farmers coping with the depression, drought, low crop yields, insufficient feed for livestock, and the resulting severe economic conditions.

An added disaster was the Republican River flood, which occurred following three days of rain, in the Republican River watershed during the first three days of June 1935. The river was one and one-half miles wide through its 200 mile course in Nebraska. One hundred lives were lost. Livestock losses were heavy and crop and soil damage extensive. The county agents were in the front lines of providing assistance to the flood victims.

**Federal Farm Programs**

In its close affinity with the USDA, Extension continued to be called upon to do a great deal of educational work on the agricultural programs of the various federal agencies, most of which had been started during the 30’s. Chief among these were the general farm programs. The corn hog program was activated in 1934, with the format being much the same as that for the wheat program started in 1933. A program on sugar beets was added in 1935. One of the most pleasant outcomes of the AAA program was that farmers who had secured USDA/CCC non-recourse loans of 45 cents a bushel on their 1933 corn crop, when corn was selling for 20 to 35 cents a bushel, were able to get $1.00 a bushel if they held on long enough into 1934.

In October 1934, Ralph H. Cole who had been one of the principal Extension staff members involved in the corn hog program, took an educational leave of absence for one year, at which time the responsibility for the AAA programs was shifted to Elton Lux and George Hendrix. From this time forward, Elton Lux served as the principal Extension staff member working on the farm programs.

In 1936 it was stated that the AAA program “... has been a means of helping the farmer to get a little cash for taxes and bare necessities of life”. In 1937, the county agents served as secretaries for the AAA committees and district agents were still devoting considerable time to the programs. In 1938, the county agents were relieved of the secretariats of the county committees. Also in that year for the first time, the titles of the district supervisors no longer included any reference to the AAA programs. In 1941 the Extension role in the general farm programs consisted principally of education work.

**Cooperation with Other Federal Agencies**

As a segment of the USDA, Extension has been called upon to provide educational work for various federal agencies, especially for those newly created. These included the Resettlement Administration, later the Farm Security Administration, and still later the Farmers Home Administration; the Soil Erosion Service (later the Soil Conservation Service); the Rural Electric Administration; the Farm Credit Administration; the shelterbelt program of the U.S. Forest Service; the cotton mattress program of the AAA; and in 1941, the USDA State and County Defense Boards. Extension was much involved both at the state and county levels in the establishment of the Soil Conservation Districts — which in the early stages encountered considerable opposition.

Various Extension staff members were given leaves of absence to fill important positions in the newly created federal agencies. Examples were: in 1934 C. W. Watkins left to work on the shelterbelt program, and Ivan D. Wood became supervisor of the ECW camps; in 1935, Ivan D. Wood was made chief engineer of the shelterbelt project; Florence Atwood was loaned to the Resettlement Administration to take charge of the home economics work; and R. E. Holland was loaned to the WPA in Washington, D. C.

**Special Programs**

The pasture contest/pasture-forage-livestock program. The pasture contest was started by Paul H. Stewart, extension agronomist, in 1935 following the extreme drought of 1934 which resulted in extreme damage to millions of acres of pasture and range, with killing out of most of the bluegrass pastures in eastern Nebraska. Arthur W. Peterson conducted the program in 1935. Elvin F. Frolik replaced Peterson in January 1936. The program consisted of enrolling hundreds of farmers through the county agents in the contest to seek the best means of restoring the pastures. The Omaha Chamber of Commerce, with Val Kuska immediately in charge, cooperated in the program with the culmination in Omaha each fall consisting of an educational program with emphasis on lessons learned that year, and an evening banquet where awards were made. Attendance would typically consist of 500 to 600 persons from over the state.

By 1938, the program was considered so successful that it was broadened to become the pasture-forage-livestock program. Emphasis was now shifted to providing adequate feed through both permanent and temporary pastures, hay, silage and grain for a sound livestock program. Walter Tolman became the principal leader for the livestock phase of the program. By 1939 there were cooperators and recognition meetings in nearly every county, plus similar meetings on a district basis, and a continuation of the state recognition meeting in Omaha. In 1940 cooperation in the program involved the Omaha Chamber of
Commerce, the South Platte United Chambers of Commerce; a number of federal agricultural agencies; the State Bankers’ Assn.; the Nebraska Crop Growers’ Assn.; the Nebraska Livestock Breeders’ Assn; and the Nebraska State Dairymen’s Assn. Fifteen to 50 cooperators were enrolled in each county. The program was still actively underway in 1941.

Of all the Extension staff, George S. Round was the only person who had a major role in the program throughout its lifetime, i.e., from the beginning of the pasture contest in 1935 to the last year of the pasture-forage-livestock program which was in 1948. Although Round’s principal responsibility was in publicity, he played an active role in the planning and execution of the program, and was usually a member of the overall committee in charge. His contribution to its success was a major one.

Other Special Programs. R. E. Holland, upon his return to Lincoln in 1936 from his assignment with the WPA in Washington, D. C., was made supervisor of programs and information. It was announced: “The new project in charge of R. E. Holland is one which should have been inaugurated several years ago . . . It will . . . aid in publicizing the work of the Extension Service by radio, press, and through Extension and College publications.” Mr. Holland’s new role was cut short by his death on April 9, 1939.

Land use planning was first reported in 1938. Basically, it was a planning program by local people. A great deal of detailed work on resources went into the efforts of the program. A state planning committee was established, along with planning committees in all of the counties. By 1941 the program was reduced considerably due, it was stated, to the drastic reduction in USDA Bureau of Agricultural Economics funds which had been the chief source of financial support. Also it was stated in the 1941 report: “The defense program has made it necessary to shift much of the emphasis . . . to increasing production of foods needed in the defense program” (10).

In 1941, an Extension staff member served as secretary of the Nebraska USDA Defense Board. County boards were also established with county agents being members. Food for defense was emphasized in Extension programs throughout 1941.

County Tax Support for Extension

The period 1934 through 1940 (elections are held in even numbered years) was not a particularly favorable one with regard to county tax support for the county extension organizations.

In 1934, the question of county tax support for “farm bureau” work was on the ballot in five counties. The vote carried in Phelps, Red Willow and Valley counties; and lost in Gage and Webster counties.

The question was voted on in 27 counties and one district (consisting of 3 counties) in 1938. The vote carried in 15 individual counties and in two of the three counties in the county agent district. The losses included Pawnee and Saline counties which had been on the tax-support basis.

In 1939, Extension work was discontinued in Cass, Madison, and Sherman counties. Otherwise, all counties in the state continued to be served with county agents. Fifteen counties depended entirely on membership dues for county support.

As 1941 drew to a close there were subject matter programs covering all of the production departments, along with 4-H, agricultural economics, and home economics. Extension had managed to continue its traditional programs, along with all of the emergency and special programs it had carried out. Extension had also become rather heavily involved in defense programs, and now with the Pearl Harbor attack of December 7, 1941, the future programs to help in the WW II effort were obvious.

World War II, December 8, 1941-1945 (10)

Immediately following December 8, 1941 when the United States declared war on Japan, Extension began to rapidly step up its role in helping to win the War. The 1942 Annual Report stated that the major portion of the War effort was carried out principally through the following programs; 1) the victory home and garden program, with emphasis on home food supplies; 2) the pasture-forage-livestock program, with emphasis on production of meat, milk, eggs, grain, and fiber crops; and 3) 4-H programs.

In the P-F-L program there were 2,616 cooperators. Fall educational and recognition of achievement meetings were held on a district basis at seven locations, some county meetings were held, but there was no state finale, as had been customary since the inception of the pasture contest in 1935.

With the outbreak of the War, no leaves of absence for advanced study were granted, the policy being for staff members to stay on the job for the duration of the War. In the zeal of all of the agricultural agencies to do everything possible to increase food production, there occurred many duplications and overlapping assignments. The state USDA War Board, of which the Extension Director was a member, was very helpful in maintaining a coordination of activities of all USDA agencies.

Thirty-five Soil Conservation Districts had been established by the end of 1942. The land use planning program had been greatly curtailed because of a lack of federal funds but prior to that much information had been accumulated by the county land use planning committees.

Fortunately, in 1942 Nebraska had the best crop in nine years. The severe drought starting in 1934 seemed finally to have run its course.

In 1943 “The entire Extension staff turned its attention to Extension’s big job of furnishing the educational materials on the food production program for farmer, rancher, gardeners and their families”. Involved in the programs was nearly every phase of
the Extension Service, with work ranging from care and repair of farm machinery to nutrition and meeting health problems. “About mid-year the emergency farm labor program . . . was an additional duty given to the Extension Service to handle.” The major portion of the responsibility for this program fell upon the county agents.

Agnes L. Arthaud, who was the Fillmore County home extension agent at the time, recalls that during the summers of 1943 and 1944 when the county agricultural agent was temporarily absent from the office, she was responsible for the labor program. The County Extension office was the clearing house for custom combine operators and for farm labor in general. There was an extreme scarcity of people willing to work on farms. Arthaud even scoured “beer halls” in her search for workers.

Additional funds were provided by Congress in 1944 for carrying out the food production and labor programs. Travel was becoming more restricted (no new automobiles were available and tires and gasoline were rationed), hence Extension made increasing use of publications and the mass media to get information to farmers. Radio was particularly useful for spreading the word as emergencies arose.

The coming of V-E Day on May 8, 1945, and V-J Day on August 14, 1945, did not have a major effect on Extension programs. Even though the War was at an end, limitations on travel and the need for maximum food production continued. The big windup meeting in Omaha was reinstated for the pasture-forage-livestock program, with a reported attendance of 400. Increasing attention was being given to post-War adjustments. Most of the Extension workers who had been inducted into the armed forces were expected to return to Extension positions.

In 1945 a big breakthrough for Extension consisted of the staff becoming eligible to participate in the U.S. Civil Service retirement program. Meanwhile, other University staff members continued to participate in only the “transition retirement” program for another 10 years, at which time the University went under Social Security. It was not until 1961 that the University started participating in the TIAA/CREF program. Thus, starting in 1945 and for the next 25 to 30 years (when the UN had been under the TIAA/CREF long enough to make the retirement benefits fairly satisfactory), Extension staff members retired with considerably higher benefits than their University colleagues on comparable salaries. This was a significant factor in recruiting and retention of Extension staff.

It was also reported in 1945 that the Farm Bureau/Extension relationship needed more study. It was stated that “In Nebraska there is need for a vote on county tax support in five counties before the state is completely organized . . . There is demand for a greatly increased number of home extension workers in the counties”.

The Period of Mid-1945 to Mid-1960 (10)

Post WW II Adjustment

It took considerable time for Extension to get back to “business as usual” following cessation of hostilities in the spring and summer of 1945. In 1947 there were still restrictions on travel because of the limited number of new cars available; there was still need of maximum food production;13 and the farm labor program remained active. With respect to the latter, the county farm labor advisory committees which had been activated in 1943 were being continued, and Extension was still receiving special federal funds to conduct the labor program.

Change in Administration

W. H. Brokaw retired as director of Extension on December 31, 1947. He was replaced by Harry G. Gould as acting director January 1, 1948. Gould remained in this position until February 28, 1949, at which time W. V. Lambert was appointed director of Extension and Mr. Gould became associate director. The 1949 report (10) stated: “This did not result in any significant change in assignment of responsibilities.”

On April 1, 1950 Gould took a leave of absence to accept a position with USAID in Turkey. Edward W. Janike was then appointed “acting associate director” in 1950 and when Gould resigned in 1951, Janike was made associate director. Lambert remained director.

Cooperation with Other Agencies

Throughout this period Extension continued its role of providing education on the various federal farm programs. Membership was continued on the USDA Council as late as 1950. In 1946, it had been reported that “There is a feeling that each (USDA) agency is sparring for position and influence with people . . . It is unfortunate . . . There is need for elimination of duplication of activities among various governmental organizations”.

The Soil Conservation Service. Extension helped organized Soil Conservation Districts. By 1946, 74 Districts had been organized in Nebraska. Membership of the dean of the College and associate director of Extension on the State Soil Conservation Committee was first mentioned in the 1951 Annual Report (10) but was still continuing in 1974.

U.S. Public Law 1021 provided for establishment of the Great Plains Conservation Program in 60 counties in Nebraska. The purpose was to bring about better adjustment in the Great Plains by making land use changes and establishing conservation practices. The SCS was placed in charge of the administration of the program and Extension was given its customary

13The expected surpluses of farm commodities did not materialize as soon as had been expected.
role of being in charge of the educational aspects.

Throughout this period Extension provided more educational services for the SCS programs than it did for any other federal agency.

**Missouri River Basin Program.** This program was first mentioned in the 1946 (10) report as including Extension as a cooperating agency. In 1947, the following were emphasized in connection with the Missouri River Basin Program: encouragement of irrigation, drainage, flood control, health, and general agricultural development. By 1949, the greatest progress in the Missouri River Basin Program had been made in the Republican Valley. It was also reported that for 1952-53, funds were made available to complete the flood rehabilitation program along the Missouri River.

**Tennessee Valley Authority (TVA).** In 1948 (10) eight counties were included in unit test demonstrations through cooperation with the TVA. Two TVA staff members were stationed on the East Campus. With the retirement of John L. Bucy in October 1985, the TVA ceased to have offices on the Campus. However, there is a TVA office in Lincoln and the IANR continues to have close cooperation with the Agency.

**Bureau of Reclamation, Department of the Interior.** In 1949 the Bureau of Reclamation started to provide funds for hiring Extension engineers to assist farmers in developing irrigation in areas where the Bureau was bringing drylands under irrigation. The first such cooperative work was undertaken in the Republican Valley. Gradually it spread (largely shifted) to other areas undertaking irrigation under Bureau of Reclamation projects.

**Other federal agencies and programs** entailing Extension cooperation were the Farmers Home Administration, State Selective Service Appeal Board, State Mobilization Committee, Civil Defense organization, the ACP of the ASCS, as well as the ASCS overall. Extension also helped German prisoners of war who remained in the U.S. to get established in this country.

The Hoover reorganization program received some attention in 1948. Financial assistance from the REA was discontinued on June 30, 1953.

**Other agencies and organizations.** Extension continued its active cooperation with other state agencies such as the Nebraska Dept. of Agriculture, the State Fair, the State Safety committee and various others. Cooperation was also actively continued with the general farm organizations, the various farm commodity groups, chambers of commerce and others. Similar cooperation was carried out at the county level by the county extension agents.

Worthy of special mention is the Great Plains Council, in which Extension, along with the Station, has held membership from the date of the Council’s origin to the present. (See also Part XI, Chapter 4).

Special Extension Programs (Non-departmental or Cross-departmental)

The pasture-forage-livestock program which had been started as the pasture contest in 1935, was finally discontinued in 1948. It was reported to have been a very successful program. Included in the reported accomplishments was the fact that the widespread use of bromegrass had given Nebraska a “new look”, and that to a lesser extent crested wheatgrass had been planted in western Nebraska, where bromegrass is not as well adapted. It was also stated that a sequel to the P-F-L program would be the “grassland award” program to be initiated in 1949. Accomplishments in the livestock section of the program were not reported.

In 1958 Dean Lambert appointed a special College committee to “… explore possibilities of doing more research and extension work on pasture and range management”.

Farm and home development. The old land use planning program died during the WW II years. However, a series of programs which were somewhat similar subsequently evolved. In 1946 emphasis was placed on an overall Extension program through a “… unified farm and home planning program.”

In 1947, it was stated that “The overall farm and home planning program, or balanced farming program in Nebraska has continued to move forward rather slowly … greatest drawback … the personal service nature … of the program.”

In 1948 Agnes Arthaud was transferred from the Fillmore County Extension office to the state office to take charge of the balanced farming and family living program. Her assignment was to initiate the program in 15 counties. On July 1, 1949, she returned to her former position as home extension agent in Fillmore County.

The “unit approach” surfaced once again in August 1954 when Philip S. Sutton was appointed associate state leader in farm and home development. The program which had been developed by a committee was characterized as the new Extension approach. It called for additional, well-trained associate county agents, in 15 pilot counties to begin with, to work closely with a limited number of farm families who would be enrolled on a modest fee basis. Within one year (1955) 18 counties were involved at various stages in activating the program. Emphasis was placed on first finding out what the participating families were interested in. A team of three federal Extension Service staff members from Washington, D. C. made three visits to Nebraska in 1955 in the interest of the program.

By 1956, 23 counties were involved but progress was reported as being slow. The number of counties

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18Shades of the old P-F-L program.
19After a short stint back in Fillmore County, on Sep 1, 1950, Arthaud was transferred once again to the state office. In her new assignment she started as district supervisor.
participating then remained about the same through 1960 with some dropouts and additions as time went along. In 1958 it was reported that "Many of the more experienced Extension agents have had little or no interest in the FHD program". In 1960 it was stated that "FHD is proving to be an effective method of doing Extension work" (10).

**Rural Development** in Nebraska had its start with a state committee chaired by Clyde C. Noyes and consisting of representatives of various state and federal agencies. Late in 1957, Sherman County was selected as a pilot county for conducting a Rural Development program. By 1959, although most of the emphasis continued to be placed on Sherman County, the nearby counties of Buffalo, Custer, Dawson, Greeley, Howard, Valley and Boone had been added to the program. Dean Brown had been retained as the "Rural Development Specialist" at the state level. The program was continuing in 1960.

**Planning**

Extension has traditionally given a good deal of attention to planning and projecting programs, both at the state and county levels. In 1949, thought was being given to reaching more city people. In 1959 the State Program Committee consisted of 31 members, including members from both the state and county offices. In that same year Extension participated in the University-wide self-evaluation study. In 1960 the State Program Committee reported that its purpose was "... to review statewide program policies and activities to make recommendations in regard to same" (10).

A thorough review and discussion of the "Scope" report (22) was carried on at the annual Extension conference and at district meetings of the county agents. "Scope" was a 49-page report published in 1959, prepared by more than 80 Extension leaders from over the country. Increasing attention, both at the state level and nationally, was being given by Extension to broadening its role beyond the traditional programs in agriculture and home economics.

**County Support and Organization**

Elections held in 1946 to determine whether or not Extension would receive county tax support were favorable in Arthur and Clay counties, and negative in Deuel, Jefferson, Sherman and Stanton counties. Eighty counties and county districts, encompassing a total of 89 counties, were now cooperating on an organized basis with the State Extension Service.

In 1947, the Legislature "... amended the county Extension law" which increased the maximum county level tax support from 1/5 mill levy to 3/10 mill levy of the assessed valuation, with a dollar limit determined according to population.

In 1948, Sherman County (one of only three counties not having an organized county Extension program) voted favorably on the question of county tax support and accordingly was activated on July 1, 1949. Also in 1949, progress was made in eliminating commercial activities from some of the county Extension offices which were still conducting such services.

Ninety-one of the 93 counties were established on a county tax support basis by 1950. The exceptions were Deuel and Jefferson counties (10).

**The Farm Bureau Connection** (30)

Over the years there has been a great deal of misunderstanding nationally concerning the relationship of the Farm Bureau and Extension. Initially the farm bureaus were the sponsoring organizations for Extension in the counties in Nebraska. That is all that the term "Farm Bureau" implied or meant. By 1917 there were a number of county farm bureaus throughout the state. A. E. Anderson of Extension

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*Home extension agents study new fabrics for home furnishing at an in-service training meeting in about 1964. From left: Sally Bredenkamp, Sarpy County; Mary Jo Doyle, Northeast Area; and Helen Rohwer, Washington County.*
wanted to unite the various counties in the interest of developing a uniform agricultural program, which led to a small group of men meeting at the University Farm in Lincoln on January 8, 1917. On motion of J. F. Lawrence, representing farmers of Dawes County, the State Association of County Farm Bureaus was formed. This was the genesis of the Nebraska Farm Bureau Federation.

In 1922 (48), Director W. H. Brokaw attempted to clarify the relationship between the county Farm Bureaus and the Farm Bureau Federation as follows: “The county agents are in the nature of public officials and their services are open to all groups of farmers, regardless of how they are organized or whether they are organized at all. The Farm Bureau . . . is a more or less public service organization . . . its members may pay dues into Farmers’ Union, Farm Bureau Federations, and any other organization they see fit. He endeavored to point out the distinction between the local betterment work carried on by the county agents and the larger federations, state and national, that have the same name, but which do not have any public funds available for their work.”

Understandably, the close affinity between Extension and the Nebraska Farm Bureau Federation led to opposition from other farm organizations. The official separation which was bound to come occurred in 1939 with the passage of LB 212. This law gave farmers the option of whether or not they wished to call the county sponsoring agency the county farm bureau, and it also provided for Extension to be independent of any specific farm group.

By 1953 (10) the organization of county sponsoring groups had been completed, the organizations now being known as the County Extension Services. The separation of Extension and the Farm Bureau Federation was now complete, in name as well as in fact. Today the support of the Nebraska Farm Bureau Federation for Extension continues undiminished. This wholehearted support is also provided by the other general farm organizations.

Staff Training and Education

During the period 1945 to 1960, Extension strengthened staff education and in-service training. By 1949 three College courses in Extension were being taught by Ethel Saxton and Elton Lux. These courses were designed primarily to help prepare college students for careers in Extension. In the second semester of 1949-50, Lux and Marvel Baker taught a new course, covering principles of both Extension and the Station (12).

Increasingly, Extension staff were taking postgraduate courses at the UNL, and special summer courses at a number of other universities. A limited number were taking leaves of absence to do graduate work. The tempo of added education and training increased throughout the period 1945 to 1960 (10).

End of an Era

Effective June 30, 1960, Dean W. V. Lambert resigned as dean and director of the three major divisions of the College of Agriculture to accept a position (funded by USAID) with the University of Illinois in India. With his departure, the organizational structure of the College was changed in that the associate director positions were changed to directors. Accordingly, Edward W. Janike became director of Extension on July 1, 1960, which had been the title of the position until Lambert had it changed to associate director early in 1949.

The Period July 1, 1960 to June 30, 1974 (10)

The 1962-63 Annual Extension report stated that the major responsibility of the Extension Service would continue to be diffusion of useful information on agriculture and home economics to the people of the state.

The main points of emphasis during this period were on program planning, organization, strengthening District organizations, closer integration with the Station, training and education, and coordination with general Extension and the Nebraska Center for Continuing Education.

Planning and Program Projection

In 1960 a steering committee was in charge of program projection, a concept which had been introduced in 1955. In 1961 the steering committee established three additional committees — a concept committee, a training committee, and a background committee. Subsequent reports showed that a good deal of time and effort went into program planning at both the state and county levels — and still later also at the district level.

In 1962-63 it was decided to establish an advisory group made up of County Extension Board members and key staff people to review and counsel on Extension programs and procedures.

Farm and Home Development (FHD)

There were still 21 counties carrying on the Farm and Home Development program in 1961, but the number of farm families participating had decreased. Philip S. Sutton, state leader for the program, was assigned some additional Extension duties which indicated a diminution of emphasis on the FHD program. The 1963-64 report stated: “FHD work will be continued in those counties that desire to carry on this management work.” However, the program was virtually discontinued in 1962 and Sutton was assigned full time as associate leader of reports.

Rural Area Development (RAD)

The name of the Rural Development program was changed to the Rural Area Development (RAD) pro-
gram in 1961. The state committee was reorganized and expanded to become the State RAD Committee, with Clyde C. Noyes as Extension representative and Sutton as the executive secretary. Twelve Nebraska counties and the Omaha-Winnebago Indian Reservation were designated as RAD counties and a RAD area, respectively.

The 1963-64 report stated: “Leadership in the establishment of county or area RAD committees will be provided in accordance with needs of Nebraska citizens . . . A close relationship with the State RAD Committee will be maintained. Extension Service will continue to provide the Executive Secretary for the committee. Cooperation with the RAD Technical Action Panel (TAP) will be carried out on state, area, and county levels.” By the end of 1963, 18 county RAD committees had been established.

Irrigation Development

In the early 70's President Durward B. “Woody” Varner became an able and eloquent spokesman for water resource development.

In a talk he prepared for a water resources seminar at the Nebraska Center in 1972 (50, p C-1)16, Varner wrote that “Nebraska’s great ‘secret weapon’ is its water resources, including both our surface and underground waters. We have enough water in this state to increase by more than four times the number of acres that we now have under irrigation.”

He cited records on Nebraska’s rivers and streams showing that “about one million acre feet of water enters the state, but between seven and eight million acre feet leave the state each year.” “Much of this water”, Varner said, “is not utilized nearly as effectively as it could be for irrigation, recreation, fish and wildlife habitats. There was organized opposition to the placement of a first seminar held in 1972 developed an annual “Nebraska Water Conference” coordinated by Sheffield and planned by a “Water Conference Committee” representing both public agencies and private interests. Many of the “conferences” have taken the form of tours led by Sheffield to major irrigated areas of the United States. On one tour Nebraskans studied irrigation in China.

Varner was not far off the mark in suggesting that Nebraska’s irrigated acreage might double in the 70’s. By 1982, approximately 7.8 million acres of land were under irrigation — a vital stabilizing influence during the years of drought such as occurred in the mid-1970’s, 1980, and again in 1983 (53).

There was not complete agreement with the Irrigation Development Program. One of the major concerns, which arose from environmental groups and interests, was that the focus on irrigation might be at the expense of stream flows, and fish and wildlife habitats. There was organized opposition17, for example, to Bureau of Reclamation irrigation projects such as building the Norden dam on the Niobrara River (54).

Another concern, expressed in the late 1970's and 80's, regarded the rapid pace of development — especially by outside absentee owners — of irrigation of the fragile soils of the Sandhills region. This worry proved valid as many of the extensive irrigation development projects in the Sandhills have either failed or brought about severe financial problems (54). There were also many examples of rolling to rough “hard” lands being broken out of grass and cleared of trees to make possible the installation of center pivot irrigation systems, with resultant severe soil erosion. Also there were “rough” lands already under cultivation, where the erosion problem was exacerbated by installation of center pivot irrigation systems. As a part of the educational program, however, Sheffield continually cautioned against overdevelopment, particularly with respect to fragile lands.

The Irrigation Development Program was phased out in 1977 and Sheffield was transferred to the Department of Agricultural Economics to work with other economists to find ways of making irrigation more efficient. At that time, he said “We have no problem getting people to develop irrigation in Nebraska. The problem is getting them to do a better job of managing..."
water and energy while irrigating” (52).

In 1984, Sheffield told the Nebraska Water Conference that he believed “the people of Nebraska have benefited greatly from the various water resource development projects which have been constructed, including most private development based on ground and well irrigation. While there are valid concerns and cannot be ... the vast economic impacts ... cannot be denied” (53).

International Programs

Foreign visitors, principally scheduled in Nebraska by AID, and others, were being handled by Extension. In 1963-64 a three-week workshop was conducted by Nebraska Extension on “Supervision for Latin American Workers”.

Peace Corps. In August 1963 the University entered into a contract with AID to train Peace Corps volunteers for Colombia. The training was administered by Extension. Fifty trainees arrived in Nebraska on September 1, and 43 were graduated on November 15, 1963.

Civil Defense Program

In 1963-64 a Civil Defense program was carried out under the leadership of Rollin D. Schnieder, extension safety specialist. The program involved the services of both the state and county staff members. It was cooperative with the USDA Defense Board, the ASCS, SCS, FHA, ARS, and the FS (now the FHA).

Staff Training and Education

During the 60's there was increased emphasis on staff training and education. When John L. Adams became director in 1965, he placed strong emphasis on county staff members earning a master’s degree if they did not already have one. By 1974, a doctorate degree was a virtual requirement for appointment to district and state staff positions. In-service training and graduate training were also still being strongly emphasized.

Cooperation with Other Agencies

Director Janike was named a charter member of Governor Frank Morrison's Committee on Public Relations for Agriculture when it was established in 196218. Since the latter part of the 60's, the position of secretary of the organization has been held by an Extension staff member, the first one being Ralph H. Cole (23). In 1962 Extension was also represented on the Nebraska State Agricultural Stabilization and Conser-

18The word "coordinate" was used by design. It was intended that Janike would attempt to develop greater cooperation between the two “Extensions”, but administratively the Cooperative Extension Service remained in the College of Agriculture.

Communications

During the 60's, largely through the instigation of Director Adams, two-way radios were installed in offices and cars, and the WATS telephone arrangement (both inward and outward calls) was established.

Administrative and Structural Changes

The period July 1, 1960 through June 30, 1974 was characterized by a number of important administrative and structural changes and attempted changes. Each of these is discussed in the sections which follow:

Edward W. Janike Becomes Dean of Extension

On June 30, 1963, K. O. Broady, who had been director of the Extension Division since 1941 and director of the Nebraska Center for Continuing Education since its beginning in June 1961, relinquished his administrative duties because of enforced retirement at age 65 from administration (in accordance with University regulations). He returned to his former duties as a staff member of the Teachers College. On July 1, 1963, Edward W. Janike was appointed dean of University of Nebraska Extension.

With Janike’s appointment it was announced that he “... will coordinate the activities of the University Extension Division, the Agricultural Extension Service, and the NCCE” (24). Dean Frolik (25) stated: “As dean of Extension, Janike will be in a position to bring about a closer coordination of all Extension activities in the University. It is hoped that under this arrangement the total program of the UN will be more generally available to people in the state. Although we have always looked upon the county agent as the representative of the entire University in his county, we are anticipating increased emphasis on this point. Trial approaches underway ... are aimed at developing ways that Agricultural Extension personnel can cooperate in furthering University programs outside the fields of agriculture and home economics, as well as within” (25).

Janike also remained director of the Cooperative Extension Service until 1965 when he was replaced by John L. Adams.
More Complete Integration of Extension into the College of Agriculture.

In spite of the “marriage” of Extension and the Station in 1925 (see an earlier section of this Chapter) the extension subject matter specialists were administratively not a part of the departments. It was not uncommon among Extension administrators to refer to “Extension and the Departments”. Departmental chairmen filled out budget sheets for resident instruction and the Experiment Station, but not for Extension, i.e., they had no control over Extension expenditures. Cooperation between extension specialists and department chairmen was largely on an unofficial and informal basis. In 1964, at the instigation of Chancellor Hardin, a new arrangement was established. The organizational change made “... departmental chairmen responsible for the extension program development and staff supervision within their departments... (The plan) provided for more coordination with applied research. They (the chairmen) will become responsible to the Extension director for the Extension work of their staff members” (10, 1963-64 Report). Not so stated in the report, but also involved in the change was the fact that from 1964 on, the department chairmen made the initial recommendations on salary adjustments and had control of the operating budgets for the Extension staff members within their respective departments.

During the 60’s, there were a limited number of area extension agents in agriculture, usually covering anywhere from two to five counties. Under a program administered by Agnes Arthaud, most of the counties were combined into areas of two or more counties for the purpose of providing Extension work in home economics. Today in agriculture only one area extension agent remains — Duane Kantor, agronomist, who works in Butler, Colfax, Platte and Polk counties. Although some of the former area agent positions in home economics have been dropped, a number are still in existence (37, Jan 1986).

As of July 1, 1960, most Extension administrators and subject matter specialists were headquartered on the East Campus in Lincoln. Exceptions were 1) Chester I. Walters, district supervisor; Clifford L. Ashburn, agricultural economics; and Lloyd Andersen, entomology, all at the Panhandle Station; 2) John F. Decker, agricultural engineering, at McCook; 3) Charles R. Fenster, agronomy, at the Box Butte Experiment Station; 4) H. Robert Mulliner, agricultural engineering, at Hastings; 5) Donald F. Burzlaff, agronomy, at the Fort Robinson Beef Cattle Research Station; 6) Richard J. Gavit, farm forestry, at Pierce; and 7) Joseph E. Range, farm forestry, at Grand Island. These nine persons can be thought of as having been district extension staff members. Of those listed above, only five were located at outstate experiment stations (37, July 1, 1960).

The number of district extension staff members was greatly expanded during the 60’s. The thinking back of this development was that with rapid technological progress, it became more and more difficult for the county agent to be an authority on all segments of agriculture. Therefore some of the resources that would formerly have been used to support the county offices, plus some new funds, were channeled into establishment of a grid system of district extension specialists headquartered at the Research and Extension Centers in addition to the state specialists located on the East Campus. These staff members have served as a strong subject matter backup for the county agents. The state specialists are as important or more important than ever in this organization, but the district specialists have the advantage, because of geography, of being more readily available, and also they become more familiar with the ecological conditions of their respective geographical districts than is possible on a state basis.

By 1974, all five Extension Districts were staffed with a total of 55 Extension administrators and specialists. These staff members were headquartered at the four outstate stations, and in the Southeast District headquarters in Miller Hall on the East Campus. Of the 53 Extension staff members, 30 held joint appointments in the Station (37, Feb 1, 1974).

Trial Runs on Channeling All UN Extension Work Outstate Through Cooperative Extension Service.

According to the 1962-63 Annual Extension Report (10), “During 1963 pilot areas were established to try out the feasibility of channeling all Extension work of the UN through our (Cooperative Extension Service) staff”.

One of the pilot areas was established at Alliance. In preparation for the proposed program, Clifford O. Quick spent the second semester of 1962-63 in Lincoln, contacting administrators in various colleges of the UN, and exploring various types of extension activities that might be carried on. He then returned to Alliance to become representative for all University extension work in northwestern Nebraska, along with carrying out his usual duties as the Box Butte County extension agent. The 1963-64 Annual Extension Report (10) stated that “... he will be working closely with agents in other counties, public schools, and state and junior colleges in western Nebraska”.

Quick (26), in the interest of the program, made contact with public schools in the area, with Chadron State College, with county agents in northwestern Nebraska, and with others. He had the full support of the UN administration, Chancellor Hardin and Dean Janike making a trip to Alliance to provide counsel and encouragement. However, the reception to the general idea locally was not equally enthusiastic. The public schools and Chadron State College agreed with the need for more extension work but already had their own adult education programs underway. They welcomed Quick’s assistance in expanding and
strengthening their own programs, but not in bringing more UN Extension programs, per se, to the area.

Quick succeeded in getting a UN Extension Division course taught at Alliance. The instructor was Ramey Whitney of Chappell, former staff member of the UN Department of Economics.

One Box Butte County Commissioner objected to the concept because he thought it would mean more expense to the County. The traditional Extension clientele offered some resistance because they felt that their county agent was gone too much of the time in the interest of the added responsibility, an objection that was only partially solved in time with the addition of an assistant county agent.

In October 1964, Quick resigned his University position to enter private employment in Alliance. With his leaving Extension, the pilot project ended. He had succeeded in strengthening and expanding adult education in northwestern Nebraska, but not very much through the UN. In his special assignment he also contributed to the program of utilizing extension specialists on a district basis. He had been chosen to head up the pilot program because he was an outstanding county agent, and no one could have done more to try to make the program succeed.

A second pilot project was established in northeastern Nebraska with the opening of a Cooperative Extension Service area office at Wayne, on July 1, 1963. Denzil O. Clegg was appointed supervisor of a five-county area consisting of Wayne, Cedar, Dakota, Dixon and Thurston Counties. The Wayne location was temporary, the headquarters being moved to the Northeast Nebraska Station at Concord as soon as the new office/laboratory building was ready for occupancy. In addition to Clegg, the headquarters was staffed with one area farm management agent, one dairy agent, and three home economists.

The superimposing of the five-county area organization onto the existing Extension organization had two purposes: 1) to make Clegg an Extension representative for the entire University, and 2) to provide an area staff which would assist the county agents in developing and implementing their programs.

Anna Marie (Kreifels) White was one of the three home economists, on the five-county area staff, being transferred to that position in December 1963. She does not recall that any UN Extension Division courses were added in the five-county area as a result of her efforts, but she was successful in helping to get adult classes in home economics taught in the public school in South Sioux City, Wakefield and Wayne. These classes were established by the schools in cooperation with the Northeast Technical Community College at Norfolk. White helped by identifying persons to teach the courses, and by implementing, organizing and publicizing the courses. A number of the persons she recommended for teaching the classes had participated in the 4-H club programs and Extension adult home economics programs. White feels that significant progress was and is being made in furthering the two principal goals of Extension — education and leadership development (33).

The effort to provide a district staff to assist the county agents proved successful. The staff in northeastern Nebraska pioneered in developing an organizational structure which in time was adopted over the entire state.

**County Agent Counties and Districts**

Care must be taken not to confuse county agent districts with Extension districts or areas. The former have been established to provide county agent services in districts consisting of two or more counties, primarily where it would be difficult, for financial reasons, to maintain single county extension organizations.

With the coming of the federal AAA wheat program in 1933 and the corn-hog program in 1934, emergency federal funds made it possible to provide county agent services for the first time in every county in the state. The broadened organization encompassed 80 individual counties and four county agent districts (see earlier section of this chapter).

In 1955 Arthur County was removed from the old Arthur, Logan, McPherson District and combined with Keith County, with the one office being located in Ogallala. Banner County was combined with Kimball County in 1946, and the office was located in Kimball. The Thomas, Blaine, Grant and Hooker District remained intact, and a second office was set up at Mullen in 1955, (in addition to the original headquarters office which was and remains at Thedford).

Over the years some counties had dropped organized extension work. It was not until 1953 when the county extension organization was reactivated in Jafferson County that every county in the state was once again provided with county agent service. That situation holds to this day.

Director John L. Adams worked hard to effect further combinations of counties into county agent districts. He pointed out to the clientele that times had changed since the "horse and buggy days" when the 93 counties had been established in Nebraska, and that fewer county agent offices could serve the people more effectively and more economically than was possible with the single county organizations. He met with a great deal of opposition — generally the clientele strongly opposed losing the county agent from their individual counties. As a result very few combinations were effected during Adams’ tenure — the only ones being Boone-Nance and Phelps-Gosper, both in 1967. Initially Boone-Nance and Phelps-Gosper had an office only at Albion, but in 1971 the office in Fullerton was reopened, even though the combined county organization was retained. In the case of Phelps-Gosper, offices at Holdrege and Elwood have remained open from the start. The main office is at Holdrege, with each of the three agents spending one day a week at Elwood. The Elwood office has a full time secretary. People in Gosper
County also have the additional advantage that County Agent Chair Roland Cooksley lives in Elwood, hence he is often contacted by clientele at his home during nonoffice hours.

**Legislation**

**Federal (8, 9, 19)**

**Smith-Lever Act.** This Act was passed by Congress and signed by President Woodrow Wilson in 1914. It provided "... there may be inaugurated in connection with the college or colleges in each State now receiving, or which may hereafter receive the benefits of the Act of Congress approved July 2, 1862 ... and ... the Act approved Aug. 30, 1890, agricultural extension work which shall be carried on in cooperation with the USDA" (8).

The legislation provided for administration of funds made available to the states through the land grant universities, and also placed part of the responsibility and funds with the USDA in Washington, D.C. The latter resulted in a close working relationship between State Extension Services and the USDA, which still continues. Additionally, full recognition was given to home economics in the Smith-Lever Act. Still another feature of the Smith-Lever Act was that it carried a requirement of matching funds "... provided by state, county, college, local authority, or individual contributions from within the state ..." (8, 9).

The Act provided $10,000 for each state plus a remainder of federal funds distributed among the states on the basis of rural population (22).

In order to be entitled to funds under the Smith-Lever Act, the state had to enact enabling legislation and to enter into a “Memorandum of Understanding” with the USDA.

**WW I Emergency Food Act, 1917-20.** This Act provided funds for appointment of “emergency food agents” and additional staff to increase food production, conserve food, and increase and improve food processing and preservation.

**Capper-Ketchum Act, 1928** provided for expansion of Extension with $1.5 million in additional federal funds.

**Bankhead-Jones Act, 1935** provided for further expansion with $8 million in 1936 and $1 million additional for each of the next four years. Distribution based on farm population rather than on rural population.

**WW II emergency funds, 1943-47.** Special funds for additional staff for WW II emergency programs.

**Bankhead-Flannagan Act, 1945** was for further expansion and included allocation for federal administration. Distribution to states was on the basis of farm population.

**Amendment to the Smith-Lever Act, 1955** consolidated nine existing Acts. Provided that subsequent increases would be allocated on the basis of 4 percent for special need, 48 percent based on rural population, and 48 percent on the basis of farm population, all being subject to matching by states. One section of the bill also provided appropriations for USDA Federal Extension.

**Smith-Lever Amendment, 1955** set aside special funds outside the formula to be used for the benefit of disadvantaged farmers and awarded on basis of proposals from states.

**Resource and Community Development, 1961, section 3(d) added to appropriations to provide $700,000 for resource and community development.** Other special (3d) programs initiated up to 1980 have included farm safety, urban gardening, pest management, pesticide impact assessment, energy demonstration, and nonpoint pollution.

**Smith-Lever Amendment, 1962,** froze current federal funds to each state. Subsequent increases to be 4 percent to the Federal Service; and of the remainder, 20 percent in equal proportions to all states, and 40 percent each according to rural and farm population.

**Appalachia, 1965,** section 3(d) was used to provide pesticide chemical programs in Appalachia.

**Formula funding, 1968.** Congress shifted all 3(d) special funds back to formula funding except for $1.6 million in agricultural marketing.

**Extension Food and Nutrition Expanded Program (EFNEP), 1969,** was established under section 3(d) and by 1975 had expanded to federal support of $60.5 million.

**Rural Development Act, 1972,** authorized expanded work in rural communities in nonagricultural as well as in agricultural fields. In 1981, the funds were transferred into Smith-Lever formula appropriations.

**Appropriation Act of 1972.** 1890 Land-Grant colleges received earmarked funds.

**Earmarked funds, 1973.** Congress provided earmarked funds for 4-H work in urban areas and for 4-H rural community development.
### State Legislation

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
<th>Content</th>
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</thead>
<tbody>
<tr>
<td>1913</td>
<td>House Roll 524</td>
<td>For an Act to provide for the employment of County Farm Demonstrators to aid in the development of the best agriculture methods and to increase in production of wealth in the several counties of the State (35, p 862).</td>
</tr>
<tr>
<td>1915</td>
<td>Senate File 40</td>
<td><strong>(Acceptance of Smith-Lever Act)</strong> An Act assenting on behalf of the State of Nebraska to the grants, purposes, terms and conditions of an Act of the Congress of the United States approved May 8, 1914, entitled: “An Act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an Act of Congress approved July second, eighteen hundred and sixty-two, and of Acts supplementary thereto, and the United States Department of Agriculture” (36, 1915, p 535).</td>
</tr>
<tr>
<td>1919</td>
<td>Senate File 172</td>
<td>To provide for county farm bureaus, for the improvement of agricultural methods and production and for cooperation with the State and Federal agencies therein (36, 1919).</td>
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<tr>
<td></td>
<td></td>
<td><strong>NOTE:</strong> Opponents brought action against the legislation on constitutional grounds. Action taken by the District Court upheld the law. The decision was appealed and in July of 1920 a decision was handed down by the Supreme Court upholding the law and, thereby, creating the Farm Bureau within a county according to statute (3).</td>
</tr>
<tr>
<td>1923</td>
<td>Senate File 9</td>
<td>To repeal Sections 69, 70, 71, 72 and 73, compiled Statutes of Nebraska for 1922, and to provide for County Farm Bureaus for the improvement of agricultural methods and production, for conservation of the soil, and for cooperation with the state and federal agencies therein, and providing for remonstrances thereto, and for submitting the question to a vote of the electors of the county (36, 1923, p 9).</td>
</tr>
<tr>
<td></td>
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<td><strong>NOTE:</strong> The Extension Report for 1924 included the following: “The law made provision for an opposition to Extension work within the county.” Reference is made to Senator W. B. Banning, at that time a member of the Legislature, as follows: “Senator Banning has been a friend of Extension throughout, and was successful in holding the law in such a shape that it is no worse than it is” (10, Nov. 30, 1924).</td>
</tr>
<tr>
<td>1933</td>
<td>Senate File 309</td>
<td>Requires only a petition of 20% of the farm operators to ask for a vote as to whether or not tax funds shall be used by the Farm Bureau (36, 1933, pp 56-59).</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NOTE:</strong> The introduction of this Bill was brought about by opponents of the Farm Bureau.</td>
</tr>
<tr>
<td>1939</td>
<td>Legislative Bill 212</td>
<td>Relating to agriculture; to provide for the conduct of Agricultural Extension Work in the several counties of the state of Nebraska; to provide for cooperation with state and federal agencies in said work; to provide procedure for creating or abolishing the appropriations of county funds for the administration of said activity . . . .” (36, 1939, pp 53-56).</td>
</tr>
</tbody>
</table>
1947 Legislative Bill 405

1949 Legislative Bill 282

1951 Legislative Bill 64

1957 Legislative Bill 78

1961 Legislative Bill 144

1967 Legislative Bill 228

To amend section 2-1604, Revised Statutes of Nebraska, 1943, relating to county extension work; to provide the maximum sums that the county board may set aside in the general fund of the county to the county extension budget . . . (36, 1947, pp 57-59).

An Act relating to the University of Nebraska; to establish the United States Agricultural Extension Fund; to provide for the source and use of such fund; and to declare an emergency (36, 1949, p 1026).

To amend Section 2-1604, Revised Statutes Supplement, 1949. Bill states "to change method of arriving at the maximum amount that may be set aside in the general fund of the county for county extension work" (36, 1951).

To amend Section 2-1604, Revised Statutes of Nebraska, 1943. Bill states "to change method of arriving at the maximum amount that may be set aside in the general fund of the county for county extension work" (36, 1957).

To amend Section 2-1604, Revised Statutes of Nebraska, 1943. Bill states "to change method of arriving at the maximum amount that may be set aside in the general fund of the county for county extension work" (36, 1961).

To amend Section 2-1604 . . . (same as above). (36, 1967).

Finances

CES expenditures and the means of funding for same are shown in Appendix 3, Table 1, reflecting the growth of Extension activity. In addition to these expenditures, the individual counties incur costs directly for their share of the program. Table 2 shows the Clark-McNary Forestry program expenditures since 1972. Prior to that time, such costs are included in Table 1.

An example of expenditures by major program areas of work for 1978-79 was:

Agriculture and natural resources .......... 46.0%
Home economics/family living............... 19.5%
4-H youth development.................... 31.0%
Community and resource development.... 3.5%

Examples of sources of funds for Extension are shown in the opposite column.

<table>
<thead>
<tr>
<th>Source</th>
<th>Approximate % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>State general tax fund</td>
<td>40%</td>
</tr>
<tr>
<td>Federal tax funds</td>
<td>31%</td>
</tr>
<tr>
<td>County tax funds</td>
<td>26%</td>
</tr>
<tr>
<td>Non-tax funds (grants from business and industry)</td>
<td>3%</td>
</tr>
</tbody>
</table>

1985-86

State tax appropriation                        53%
Smith-Lever (federal formula)                  22%
Sales and service income                       2%
Grants and contracts (mostly federal)          23%

TOTAL                                           100%

Statistical Summary of Programs Conducted and Publications Issued During 1979 (32):

"Presented information at 23,143 public educational meetings and workshops.
Conducted 3,131 training meetings for volunteer leaders".

"Volunteers play an important part in the total extension program. They serve as leaders of 4-H Clubs, teach lessons at home extension club meetings and assist in many other ways" (32).
Made 15,099 presentations for radio and 1,272 television appearances.
Wrote 19,293 news articles.
Prepared 8,288 items for newsletters.
Authored 117 Extension publications containing information needed by farmers, ranchers, homemakers, homeowners, businessmen and youth.
Assisted adults and youth through more than 1.5 million personal contacts involving public meetings, office calls, telephone calls, personal letters and visits to the home or place of business.”

Ancillary Organizations

Nebraska Cooperative Extension Association, Inc. (NCEA)

The Nebraska Association of County Agricultural Extension Agents was organized in 1920 and adopted its constitution on October 17, 1938. Membership was limited to agricultural agents and assistant agents. It had as its purpose “...mutual helpfulness among its members and the advancement of agriculture” (38). Annual dues provided for membership in the National Association of County Agricultural Extension Agents. The home agents formed an analogous association in the early 30’s, with membership in the corresponding national organization.

On November 9, 1967, the two associations of county agents became part of the newly formed organization known as the Nebraska Cooperative Extension Association (39). The new organization provided for a broader base of membership, including state, district and area specialists as well as county extension agents. It did not and does not include administrators. Retirees are automatically considered honorary members. Objectives include promotion of professional improvement, high standards of extension work, fulfillment of the purpose of Extension, fellowship among extension workers, Extension work as a professional career, an inspirational climate for all of its members, and the welfare of all its members (39, 40).

The NCEA is an active and effective organization.

Extension Advisory Council/Extension Director’s Advisory Committee

The Extension Advisory Council was started in the middle 60’s by Director John L. Adams. The membership consisting of 12 to 15 lay people was appointed by the director. As the name indicates, the purpose of the Council was to provide advice to Extension.

Shortly after Leo Lucas became dean and director of Extension in 1975, he reorganized and renamed the Council the “Extension Director’s Advisory Committee”.

The current Committee represents approximately 30 Nebraskans who meet annually to review, react and give advice to the director and staff relative to specific aspects of the Extension organization and program.

Each year an agenda is proposed for discussion, which may include broad general program areas, specific project programs, or some aspect of the Extension organization/administration. In addition, members of the advisory committee may bring to the director any questions and/or concerns that they have relative to input to any aspect of Extension.

Approximately 20 members are appointed by the director from recommendations made by the district directors in each of the five Research and Extension Districts. These appointed members serve approximately four to five years and are then replaced by other appointees. The remaining committee members serve annual terms based on their capacity as officers in various associations, commodity groups and/or organizations throughout the state.

This group does not serve in an official or unofficial lobbying capacity for Extension but rather is a reaction, input and advisory group to the director of the Cooperative Extension Service (46).

Nebraska Association of County Extension Boards, Inc. (NACEB)

On September 9, 1966, Adams pointed out that since Extension did not have the power to lobby, an independent organization was needed to carry out this function (45). After considerable deliberation and some opposition, the members of the Nebraska County Extension Boards organized themselves into NACEB, Inc. (42).

Rich Wiese, president (1986-87), stated that the purpose of the organization “...is to have a group of Extension people work closely with the University. Our goals are to benefit the people of Nebraska in an unbiased education for agriculture and home living” (41).

NACEB functions as a guardian of the welfare of Extension, particularly at the county level. It also lobbies vigorously as the needs arise at the state level primarily for Extension but also for the University as a whole. It strongly supports adequate budgets primarily for Extension both at the federal and state levels.

Epsilon Sigma Phi — the National Honorary Extension Fraternity, Inc.

Epsilon Sigma Phi is a national organization which was incorporated in the District of Columbia on May 22, 1930. Alpha Epsilon Chapter at the UNL is one of 48 chapters constituting the national organization. It was organized April 18, 1931. Present at the organizational meeting were W. H. Brokaw, director; R. E. Holland and H. G. Gould, extension leaders; J. L. Thomas, routes and routing; L. I. Frisbie, boys and girls clubs; Mary Ellen Brown, women’s work; J. F. Lawrence, market organization; Ivan D. Wood, engineering; and Florence J. Atwood, foods and nutrition. Brokaw was elected chief, Atwood, secretary-
treauser, and Ivan D. Wood, analyst. Members of the House of Pioneers (Extension staff members employed on or before May 8, 1914) would have (along with the officers) automatically served on the Executive Board. However, none of those present qualified (44).

The purpose of the fraternity is "... maintaining the standards and ideals, preserving the traditions and upholding the morale, prestige and respect of Extension; and to developing an effective working relationship and a spirit of fraternal fellowship among the present and past employees of Extension." Membership is by election and consists of faculty, professional, and administrative staff who have held an Extension position for five or more years, and who meet certain professional standards and work accomplishments".

The fraternity makes the following recognition awards: national distinguished service ruby award, regional distinguished service award, international service award, national friend of Extension, state distinguished service award, state friend of Extension, and certificate of meritorious service (43).

High Honors Received by County Extension Agents

USDA Superior Service Award
Leon Barnell, Dundy County 1956
Cyril Bish, Lancaster County 1963
Harold M. Stevens, Dawson County 1970
H. Harrison "Harry" Hecht, York County 1974
Robert N. Klein, Red Willow County 1977

UNL Distinguished Educational Service Award
Don D. Miller, Lancaster County 1985
J. C. Cranfill, Hamilton County 1986

References
5. Annual reports of the AES. Col of Agric, UN, Lincoln.
7. Twenty-five years of progress. April 1958. CES, Col of Agric, UN, Lincoln.
10. Annual reports of the CES. Col of Agric, UN, Lincoln.
12. UN Col of Agric Catalogs.

22Honors received by Extension administrators and specialists are listed in their respective Departments or Centers.

17. Winter, Everett T. June 20, 1953. Pioneer Extension work was fun! Nebraska Farmer 95:38. Lincoln, NE.
18. Swenk, Myron H., George L. Peltier, and Paul H. Stewart. October 20, 1925. The wedding of Miss E. X. Tension and Mr. X. Periment Station. A mutual travesty in one act. Col of Agric, UN, Lincoln.
34. Agriculture. Col of Agric, UN, Lincoln.
36. Laws of Nebraska. Agriculture. Lincoln, NE.
41. NE CES Fact Sheet. Feb 1980. (Mimeo). IANR, CES, UNL.
43. Constitution and Bylaws of the Nebraska Association of County Agricultural Agents. Adopted Oct 17, 1938. UNL, CES.
45. Constitution and Bylaws. Jan 1978. NCEA. Lincoln, NE.
47. Articles of Incorporation of the Nebraska Association of County Extension Boards, Inc.
49. Atwood, Florence J. Apr 18, 1951. Minutes of the organizational meeting of the Nebraska chapter of Epsilon Sigma Phi fraternity. CES, Col of Agric, UN, Lincoln.
51. Swofford, Donald W. Jan 5, 1987. Personal communication. CES, IANR, UNL.
52. Minutes of The Board of Regents of the UN, Lincoln.
Chapter 5. International Programs

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Section 1. General

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Early History

Involvement of the College of Agriculture staff working abroad goes back to the 19th century. In 1897, the services of Lawrence Bruner, Department of Entomology and Ornithology, were obtained by the Merchants’ Locust Investigation Commission of Buenos Aires, to conduct “... a study of the insect (locust) so as to assist the Government in framing suitable laws and the people in finding the most practical means for the destruction of the locusts” (5, p. iii). Leaving Lincoln on April 17, 1897, Bruner arrived in Buenos Aires on June 1. On June 3, Chancellor of the University George E. MacLean, received a cablegram from Bruner which stated simply “Well” (7). Bruner departed Buenos Aires for home on February 27, 1898.

Bruner published two bulletins on his findings (5, 6), the first containing 102 pages, and the second, 80 pages. The first bulletin (5) contained a page of pictures, in color, of seven different locust species. An explanatory note accompanying the “colored plate” was as follows: “Drawn on stone and colored from original specimens by Federico Burmeister of the ‘Musco Nacional’, Buenos Aires, Argentine Republic, S. A.”

1Bruner stated in his first report (5, p. iv) that he had to sail from Argentina on February 27, 1898 in order to get back to Nebraska within the limits of his leave from the University.

Organization and Administration

With the beginning of the program in Colombia, the University established, although rather informally, a Division of International Programs. Chancellor Hardin in 1966 recommended to the Board of Regents that Vice Chancellor and Dean of Faculties A. Adam C. Breckenridge be appointed vice chancellor for the Division. The recommendation was accepted and to this day the rank of vice chancellor is the highest ever held by the principal administrator of International Programs in the University at Lincoln.

With the establishment of the new overall organization of International Programs, Jason S. Webster, as campus coordinator for the Turkish Program, reported administratively to Breckenridge.

When William E. Colwell replaced Breckenridge as the chief administrator of International Programs at the University at Lincoln in 1968, the title of the position was changed from vice chancellor to dean. With the appointment of Clyde C. Noyes in 1970, the title was changed once more, this time to (acting) director of International Programs and associate dean. Administratively, the position came more under the dean of the College of Agriculture; hence it was logical to give the administrator of International Programs a title parallel with the chief administrators of the other three divisions of the College — Station, Extension, and the College/RI.

When Noyes announced in 1973 that he planned to retire from the UNL, Frolik prevailed upon Elvis A. Dickason to succeed Noyes on a part-time basis (along with his, Dickason’s, position as chairman of the Department of Entomology). Dickason had proven to be an able administrator, had been chairman of the task force that made a study of and a detailed report on the future of International Programs in the College of Agriculture. He had spent a year on an assignment in Brazil (while on the staff at Oregon State University). The paper work on the appointment was completed after Frolik had left the University on a two-year assignment in Iran. The appointment showed

1Second most important administrative position in the UN at that time.
Administrators

Principal Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Period Served</th>
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<tr>
<td>Adam C. Breckenridge</td>
<td>Vice Chancellor for International Programs</td>
<td>4/1/66 - 7/31/68</td>
</tr>
<tr>
<td>William E. Colwell</td>
<td>Dean, International Programs</td>
<td>8/1/68 - 6/30/70</td>
</tr>
<tr>
<td>Clyde C. Noyes</td>
<td>Acting Director of International Programs and Associate Dean</td>
<td>7/1/70 - 10/1/72</td>
</tr>
<tr>
<td>Clyde C. Noyes</td>
<td>Director of International Programs and Assoc. Dean</td>
<td>10/1/72 - 12/14/73</td>
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<tr>
<td>Elvis A. Dickason</td>
<td>Director of International Programs</td>
<td>12/15/73 - 6/30/75</td>
</tr>
<tr>
<td>Leslie F. Sheffield</td>
<td>Asst. to Vice Chancellor, IANR (in charge of International Programs)</td>
<td>7/1/75 - 6/30/76</td>
</tr>
<tr>
<td>Robert W. Kleis³</td>
<td>Dean &amp; Director, International Programs</td>
<td>7/1/76 - 9/30/85</td>
</tr>
<tr>
<td>Glen J. Vollmar</td>
<td>Acting Dean &amp; Director, International Programs</td>
<td>10/1/85 - 7/31/87</td>
</tr>
<tr>
<td>Glen J. Vollmar</td>
<td>Dean and Director, International Programs</td>
<td>8/1/87 - present</td>
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Other Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Period Served</th>
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</thead>
<tbody>
<tr>
<td>Clyde C. Noyes</td>
<td>Assistant to the Dean of International Programs</td>
<td>9/1/69 - 6/30/70</td>
</tr>
<tr>
<td>Norman E. Tooker</td>
<td>Assistant Director</td>
<td>8/15/78 - 1987</td>
</tr>
<tr>
<td>Glen J. Vollmar</td>
<td>Associate Dean &amp; Director</td>
<td>7/1/85 - 10/1/85</td>
</tr>
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the title as “Director^4 of International Programs” which it remained until June 30, 1975. At that time Dickason, at his request, returned full time to his position in entomology.

When Dickason left the International Programs position, Leslie F. Sheffield was assigned the responsibility for the programs, continuing with his title as Assistant to Vice Chancellor, IANR. The assignment constituted an additional duty, without any provision for extra time to carry out the responsibility. Obviously International Programs in the IANR had reached a low ebb.

This continued until Robert W. Kleis was appointed dean and director, International Programs, effective July 1, 1976. For some years, thereafter, the position was on a part-time basis, Kleis also continuing as associate director of the Station.

Headquarters Location at Lincoln

The headquarters location of the principal administrator of College of Agriculture/IANR International Programs, starting with Adam C. Breckenridge on April 1, 1966 and to the present, has always been Agricultural Hall on the East Campus.

Status of International Programs in 1974

Although by the end of fiscal 1974 the College of Agriculture was no longer involved in any contract with AID to conduct assistance programs abroad, a number of important programs were underway conducted with funding from outside agencies for the purpose of supporting programs abroad, directly or indirectly. These were (3, 4):

**Improvement of Nutritional Quality of Wheat**

This program was initiated at the College on July 1, 1966, with funding provided by USAID. This was a large program, e.g., the funding from AID for the year ending March 30, 1973 totaled $294,730. The purpose was to develop information and germplasm which would lead to better nutritional qualities of wheat grown in the less developed countries (LDC’s).

**Sorghum Research.**

The Rockefeller Foundation provided the College $1,307,060 for a ten-year period, 1966-1976. USAID started supporting sorghum research at Nebraska in 1971 and still continues today (1987). The principal interest of the donors was to develop information and germplasm which would be helpful in the production of sorghum in the LDC’s, worldwide.

**Corn Breeding and Genetic Research.**

The Rockefeller Foundation supported corn breeding and genetic research at the College. This project dealt with the utilization of exotic germplasm. It was cooperative with CIMMYT and the University of Coahuila in Mexico.

**Short Course for Japanese Agricultural Trainees.**

In May 1966, an agreement was entered into between the Japanese Agricultural Training Council in Tokyo and the National 4-H Club Foundation in Washington, D. C. to establish a work/study program.
for selected Japanese farm youth for a two-year period in the U.S. Classes were to start annually. The College accepted responsibility for a three-month training period on the East Campus. The program has been successful and is still being continued.

Foreign Student Training in Agriculture.

An important activity in the College of Agriculture has been training, both degree and nondegree, provided to foreign students (in addition to the Turkish and Colombian program participants). The program, commonly with support funds provided by AID or FAO, has been underway since shortly after WW II. For the most part it has involved: 1) foreign students registered for degrees, primarily graduate but also some undergraduate; and 2) people coming to the Campus for conferences, short-courses, and/or tours without respect to degrees, the period of involvement varying anywhere from one day to twelve months. The number of foreign nationals coming to the College of Agriculture for such purposes, has exceeded 100 per year for many years . . . For example, during 1971-72 9 undergraduate and 67 graduate foreign students were registered in the College, along with 99 different nonacademic foreign trainees.

Much of the work involved in these courses and conferences has been handled by the staff of the departments. However, the “logistics” were handled directly by the dean’s/vice chancellor’s office from the inception of the program in the forties until 1978 when the responsibility was transferred to the Division of International Programs. Staff persons in charge of these duties until 1978 were chronologically as follows: H. P. Davis, David P. McGill, Leslie F. Sheffield, Gary L. Whiteley, and, again, David P. McGill. With the exception of Davis, these staff members were at the time assistants to the dean/vice chancellor on a part-time basis.

Other Programs.

Other international programs in the College of Agriculture were: 1) the IFYE program (discussed in Part V, Chapter 13); 2) the International Open House sponsored by Extension; and 3) a credit course offered during the semester break which involved a two-week trip to Israel and subsequently to Latin America.

The College of Agriculture and the College of Home Economics Look to the Future

In discussing the future of international programs at the College of Agriculture in 1972, Dean Frolik (3) noted that federal appropriations for AID had dropped to approximately 1/3 of what they had been at the “high water mark”. With less money available, competition among the universities for AID funds had increased markedly. In spite of this, Frolik encouraged continued involvement of the College of Agriculture in foreign technical assistance programs. He suggested that the Mid-America State Universities Association universities with colleges of agriculture, i.e., the UNL, Iowa State, Missouri, Kansas State and Oklahoma State, plus Colorado State, would “…constitute a logical group of universities for a consortium for handling international programs”. He noted also that all of these universities except Nebraska had colleges of veterinary medicine (usually included in agricultural programs abroad). All had been involved jointly with the UNL in the Nebraska Mission in Colombia. Frolik’s suggested organization was to be patterned after the Midwest Universities Consortium for International Activities, Inc., headquartered at Michigan State University.

In 1972 Frolik appointed an ad hoc task force to make recommendations on the future involvement of the College of Agriculture and of the College of Home Economics in international programs. The group of 11 staff members, chaired by Elvis A. Dickason and including Dean Hazel M. Anthony of the College of Home Economics, submitted a 20-page report (4) on May 24, 1973. The essence of the report was that the group was foursquare in favor of a broadened in-
volvedment of both colleges in international programs.

In spite of the task force report which represented genuine interest on the part of the faculty participating in international programs, there set in a lowered activity in the College/IANR in this general area. Reduced availability of AID contracts was no doubt a contributing factor. Also, it is likely that the rapid turnover of top administrators of the College of Agriculture/IANR was also a factor. By the time Sheffield was given responsibility for international programs on July 1, 1975, the assignment consisted of little more than a chore.

After 1974

A major piece of federal legislation, which placed land grant and sea grant universities in a new and much more important role in AID funded programs of foreign assistance, was Public Law 94-161, known as the International Development and Food Assistance Act of 1975. Title XII of the Act included the statement "... to provide program support for long-term collaborative university research on food production, distribution, storage, marketing and consumption" (1).

Whereas prior to the passage of the 1975 federal legislation, the land grant universities were utilized by AID largely as the agency saw fit, now Congress had assigned the universities a direct and active role in federal foreign assistance programs. The universities were (and are) represented by a Board for International Food and Agricultural Development, with offices and a staff in AID, Washington, D. C. The net effect was a sharp increase in the involvement of the universities.

Today international programs occupy a significant segment of the IANR programs, with the financing provided largely by AID. Thus, as the Morrill Act of 1862 helped establish the University, including the College of Agriculture; the Hatch Act of 1887, the Station; and the Smith-Lever Act of 1914, Extension; the International Development and Food Assistance Act of 1975 helped resuscitate International Programs in the IANR.

The universities were those included under the provisions of the First Morrill Act of 1862, the Second Morrill Act of 1890, and the National Sea Grant College and Program Act of 1966.

The International Development Cooperation Act of 1979 amended this provision by inserting "in the developing countries themselves to the maximum extent practicable" immediately after "university research" (2).

Robert W. Kleis is presently on leave from the University, serving as Executive Director of the Board.

Much credit for renewed interest in and reactivation of international programs also belongs to Martin A. Massengale who became vice chancellor of the IANR, UNL on March 22, 1976.

References
7. Hill, Roscoe E. June 13, 1986. Personal communication based on correspondence between Bruner and his wife who remained in Lincoln while Bruner was in Argentina. IANR, UNL.

Section 2. The Nebraska Mission in Colombia

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Events Leading to the Signing of the Contract

Beginning in 1962, the UN College of Agriculture was asked by AID to consider conducting technical assistance programs in a number of different LDC countries in Africa and Asia. Some of these were rather attractive, but for various reasons, including the fact that Chancellor Hardin thought that the University should concentrate its efforts in the Western Hemisphere, none was accepted.

At the time, Hardin was a member of the Board of Trustees of the Rockefeller Foundation headquartered in New York City. The Foundation was an important and successful donor and operator of assistance programs in agriculture in various LDC countries. The Board membership brought Hardin in contact with high level officials of other donor agencies, both in the U.S. and overseas, as well as with high level government officials of many LDC countries.

In the 60's U.S. universities did not have the official standing in AID that they received in 1975 with the passage by Congress of the International Development and Food Assistance Act. Competition among
Administrators at Lincoln

The Nebraska Mission in Colombia was administered at the UNL East Campus by the International Programs Division. With the appointment of Adam C. Breckenridge, vice chancellor for International Programs, effective April 1, 1966, both the Colombian and Turkish programs came under his purview. He was succeeded first by William E. Colwell and then by Clyde C. Noyes.

Administrators in Bogota, Colombia

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Period Served</th>
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<tbody>
<tr>
<td>William E. Colwell</td>
<td>Chief of Party &amp; Director</td>
<td>12/65-6/30/68</td>
</tr>
<tr>
<td>C. R. Elder</td>
<td>Chief of Party &amp; Director</td>
<td>7/1/68-11/30/68</td>
</tr>
<tr>
<td>Clayton K. Yeutter</td>
<td>Chief of Party &amp; Director</td>
<td>12/1/68-10/3/70</td>
</tr>
<tr>
<td>Theodore Vera</td>
<td>Acting Director</td>
<td>10/5/70-12/6/70</td>
</tr>
<tr>
<td>Thomas W. Dowe</td>
<td>Director</td>
<td>12/7/70-7/31/72</td>
</tr>
<tr>
<td>J. Wallace Hawkins</td>
<td>Director</td>
<td>8/1/72-6/30/73</td>
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Other Administrators in Bogota

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<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Period Served</th>
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<tbody>
<tr>
<td>C. R. Elder</td>
<td>Assistant Director</td>
<td>6/67-6/30/68</td>
</tr>
<tr>
<td>Albert D. (Dale) Flowerday</td>
<td>Asst. to Chief of Party and Asst. Director</td>
<td>7/1/68-8/4/69</td>
</tr>
</tbody>
</table>

the universities to conduct foreign assistance programs to be financed principally by AID, but in some cases also to a lesser extent by private foundations and other organizations, was very keen.

As early as 1964, high level government officials in Colombia were casting about for financial donors and a university to help conduct a major program in agricultural research, teaching and extension. The Rockefeller Foundation had had a program underway in Colombia for some years, and Rockefeller in-country representatives were very helpful in developing preliminary plans for the much larger program envisioned for Colombia. Among the LDC countries seeking help at the time, Colombia was considered a highly desirable one in which to provide technical assistance. The reasons for this were: 1) the opportunities for making progress were good as there was already in place an ongoing system of agricultural research and education, and the Colombians were very receptive to new ideas; 2) the Spanish language was easier for English speaking people to learn than most languages in Africa and Asia, and vice versa; 3) housing in Colombia for foreigners who were adequately financed was excellent; 4) the climate at the higher elevations where the agricultural institutions were located, for the most part, was pleasant the year-round; 5) there was no jet lag discomfort as was the case in traveling to countries of much different meridians; and 6) the distance from the U.S. to Colombia was much less than to African and Asiatic countries.

It is no exaggeration to say that Hardin working with AID, the Kellogg Foundation, the Ford Foundation, Colombian high level public officials, and others, almost single-handedly succeeded in getting Nebraska designated as the University to conduct the program.

At this point it is necessary to explain briefly the organizational structure in Colombia with which the Nebraska Mission would be working. With assistance provided principally by the Rockefeller, Kellogg and Ford Foundations, the Government of Colombia had established, in 1962, the Colombian Institute of Agriculture (ICA) as a public establishment to stimulate, coordinate, and carry out agricultural research, teaching, and extension. It was agreed that ICA would have the overall responsibility for coordination of the Colombian efforts in the area of agricultural education and for developing the agricultural faculty of the National University. In May 1965, ICA submitted a five year development plan which was accepted by the Government of Colombia officials. The plan was endorsed in New York by potential donors (investors) including Rockefeller, Ford and Kellogg Foundations; IBRD, University of Nebraska, and AID (1, Dec 1966, pp 3 & 4).

The first exchange of Colombia/UN visits took place in the late spring of 1964 when Dr. Rafael Samper, a prominent surgeon in Bogota and a member of the Board of Directors of ICA (Instituto Colombiano Agropecuario), and Dr. Fernando Penaranda, director-general of the Agency, visited the UN at Lincoln. After conferring with various University administra-

1Jason S. Webster, campus coordinator for the Turkish program, henceforth reported administratively to Breckenridge.

2The acronym ICA is not to be confused with the same letters used earlier to designate International Cooperation Administration - now AID.

3The International Bank for Reconstruction and Development.
tors and other staff, and inspecting the College of Agriculture facilities, the Colombians expressed their continued desire to have the University administer the proposed program.

The first official visit to Colombia was made in the spring of 1965 by Chancellor Hardin, and former Gov. Val Peterson, who at the time was president of the Board of Regents of the University of Nebraska. They were well received and upon their return to Lincoln reported favorably on proceeding with the program.

In July 1965, Dean Frolik, at the request of Chancellor Hardin, made a trip to Colombia to assess, in greater detail, the organizational structure and programs in agricultural research, teaching and extension. He obtained a better understanding of what was needed to strengthen the Colombian programs, and generally gained knowledge of the overall situation which would help the University to chart its course of action if the program materialized.

During a portion of the time in Colombia, Frolik was accompanied by Dr. Russell Mawby of the Kellogg Foundation, Battle Creek, Michigan. Invaluable assistance was received from U. J. Grant, head of the Rockefeller team in Colombia, who had spent years in the country, spoke Spanish fluently, and had an excellent reputation with the Colombians. Together Frolik, Grant and, part of the time, Mawby visited the research stations that were to be involved in the proposed program, and conferred with officials of the National University, the colleges of agriculture at Bogota, Medellin, and Palmira, and other donor (investor) agencies such as the Ford Foundation, IBRD, the United Nations and FAO. They also conferred with other members of the ICA staff, located principally at Tibaitata (not far from Bogota).

Frolik returned to Lincoln expressing strong support for accepting the contract and submitting a list of procedural recommendations.

The Contract Is Signed and Other Agencies Agree to Cooperate

The contract and the project agreement (between the University and AID) were signed in Bogota on March 7, 1966, in the presence of the President of Colombia.

The scope of the contract was as follows: "The contractor agrees to render technical advice and assistance to Colombia for the purpose of assisting ICA in carrying out a program of agricultural development ... the contractor will utilize its own personnel and facilities of member institutions of the Mid-American State Universities Association."

4Including a pickpocket who stole Peterson's billfold at the Bogota airport as Hardin and he were leaving for home. It turned out that this was not an uncommon experience which foreigners encountered in Bogota — there appeared to be an organized ring of pickpockets who plied their trade with extreme skill.

5Food and Agriculture Organization of the United Nations.

“This program is designed to improve the quality of the educational system in the agricultural field on the campuses of the National University located at Bogota, Medellin and Palmira, and to keep ICA as an effective institution for the integration of agriculture and livestock education, research and extension" (1, Dec 1966).

Complementing the AID project, the Ford Foundation made a grant for the agricultural socio-economic sector of the program, also to be administered by the University of Nebraska. Also the Kellogg Foundation made a grant directly to ICA to assist in developing the program in agricultural information and extension. It was hoped that additional support would be secured from the United Nations Special Fund for support of the veterinary program and that IBRD assistance would also be forthcoming (1, Dec 1966, p 4).

The Program Gets Underway

The program moved forward even before a University contract with AID had been completed. William E. Colwell, former assistant director of the North Carolina Agricultural Experiment Station, and at the time owner and operator of the Pepper Creek Ranch at Hay Springs, Nebraska, accepted the position of chief of the University Mission in Colombia.

Beginning in January 1966, the following spent five weeks in Colombia in preparing basic direction and staffing guidelines for the program: John Adams, Howard Ottoson, and Marvin Twiehaus from the University of Nebraska College of Agriculture; and Durwood Baker from the College of Veterinary Medicine at Iowa State University. They were joined in the last week of the assignment by Joseph Soshnik, president of UNL campuses and outstate activities (1, Dec 1966, p 15) and by Frolik.

Although the University served as the prime contractor, close cooperation was established informally whereby assistance would be provided by the following land grant university members of MASUA: Colorado State, Iowa State, Kansas State, Oklahoma State and Missouri (3, p 4).

On May 8 and 9, 1966, an important meeting, involving a field trip, was held at Lincoln at which time MASUA representatives had an opportunity to discuss the program with the following from Colombia: Dr. Jose Mejia Salazar, minister of agriculture; Dr. Fernando Penaranda, director-general, ICA; Dr. A. Restrepo and Dr. Enrique Vargas, National University of Colombia; Dr. Alvaro Gartner, director of education, ICA; Dr. Miguel Hernandez, dean, Faculty of Agronomy, Medellin; Dr. Rafael Samper, Board of Directors, ICA; and Dr. U. J Grant, Rockefeller Foundation, Bogota. Following this meeting Adam C. Breckenridge, newly appointed vice chancellor for International Programs, and Colwell conducted formal

6Mid-American State Universities Association.
seminars at all of the cooperating MASUA universities to explain the Colombian program (1, Dec 1966, pp 1, 2).

Although there was still some negative reaction on the part of the Nebraska College of Agriculture staff to the Colombian program, attitudes were improving compared to the early days of the program in Turkey. Involving the department chairmen early on helped to gain acceptance. By the end of 1966, most of the directors and chairmen of departments in the UNL College of Agriculture who were to be principally involved, along with administrators from some of the other MASUA universities, had made official trips to Colombia.

The first contingent of the Nebraska group to be stationed in Colombia consisted of William E. Colwell, chief of party, and Ben B. Norman, veterinarian. By the end of 1966, the Mission consisted of eight staff people. All were stationed at Bogota except Dean M. Manbeck, agricultural engineer, who was located at Medellin. Plans were developing rapidly for strengthening: 1) the instructional programs in agriculture of the Universidad Nacional campuses at Bogota, Medellin and Palmira; 2) the research programs principally at ICA experiment stations at Tibaitata, Palmira, Tulio Ospina and to a lesser extent at La Libertad in the Llanos; and 3) extension generally (1, Dec 1966).

Full Strength Is Reached in 1967

The first six months of 1967 were referred to by Colwell (1, June 1967) as the “settling in” period. Good understandings on operating procedures had been reached with AID, the Ford Foundation, and the Kellogg Foundation. Colwell expressed some frustration resulting from inadequate transportation facilities, unusable office and laboratory space under construction or remodeling, and deficient levels of language competence. Otherwise, he was pleased with progress being made (1, June 1967, p 4).

Among important developments, Colwell noted that in February 1967 classes were started in the newly formed ICA/National University graduate school, with 11 students enrolling for the master’s degree. In May a formal agreement was reached between the Government of Colombia and the Rockefeller Foundation to establish CIAT (Centro Internacional Agropecuario Tropical). The Nebraska group which had grown to 15 (12 at Bogota and 3 at Medellin), was participating actively in undergraduate teaching (1, June 1967).

By the end of 1967, the Nebraska staff in Colombia had grown to 30, with 23 headquartered at Bogota, three at Medellin and four at Cali/Palmira. C. R. Elder had been appointed assistant to chief of party and assistant director, and Gary Whiteley, administrative assistant. In addition to the two administrators, disciplines represented and the number of Nebraska staff in each were as follows: agricultural economics - 5; agricultural engineering - 4; agronomy - 3; animal science - 4; extension - 3; information - 2; poultry...
science - 1; rural sociology - 2; and veterinary science - 4. Colwell also listed a total of 65 Colombian counterpart personnel (1, Dec 1967).

Sixteen Colombian participants arrived in the U.S. during 1967, all but one to work on advanced degrees, 13 on MS degrees and two on PhD degrees. Only two of the 16 enrolled at Nebraska. The remainder were located at nine other universities scattered over the U.S. from coast to coast. The Colombian students were, from the start and continued to be, of a very high caliber. In addition to the customary financial support provided for students sponsored under various technical assistance programs, students coming to the U.S. under sponsorship of the Nebraska program in Colombia were given financial support for the travel and living expenses of spouses and children. This arrangement proved beneficial with respect to the well-being of the Colombian students and no doubt contributed to their doing such excellent academic work (1, Dec 1967).

Colwell also reported: “It was during this period that many of the aggravations and irritations to the staff were removed ... equipment began to arrive in appreciable amounts ... the language barrier became less formidable to many” (1, Dec 1967, p 16).

During 1967 the Colombian Extension Service was transferred from the Ministry of Agriculture to ICA. Colwell reported, “Thus ICA truly became an institution for the integration of education in agriculture, embracing education, research and extension. This experiment is being closely watched by all Latin American countries” (1, Dec 1967, p 17).

**Continued Progress During 1968 and 1969**

On August 1, 1968 Colwell replaced Breckenridge as top administrator of International Programs at the University in Lincoln. C. R. Elder served as chief of party and director at Bogota until Clayton K. Yeutter arrived on the scene and took over the position on December 1, 1968. Effective July 1, 1968, Albert D. Flowerday served as assistant to chief of party and assistant director in Bogota. Besides Colwell, three other staff members who had started their assignments in Colombia in 1966 completed their contracts and returned to the U.S. (1, Dec 1968).

By December 1968, the participant (fellowship) program was ahead of schedule, with a total of 54 Colombian students having been sent abroad to pursue advanced training compared to the projected number of 42 (1, Dec 1968, p 28).

In 1963, and again in 1969, the Board of Regents entered into contracts with the Peace Corps to train volunteers in agriculture and home economics for assignment in Colombia (8). Under this program a group of recruits left Lincoln upon graduation in June 1969 for Escondido, California for intensive training in the Spanish language. Following this training, the Peace Corps volunteers were assigned to Colombia where their services were utilized by the Nebraska Mission. This proved to be a very successful program for the Peace Corps, the Mission (3), and Colombia.

A statement included rather casually in the report (1, Dec 1968, p 18) was to the effect that in the future, the principal source of funds for the entire program would be on the basis of a loan from AID to the Government of Colombia. Heretofore, the funding by AID had been provided on a grant basis. The first year of operation under “loan/financing” was completed on December 31, 1969 (1, 1969, p ii). Colwell, now dean of International Programs at Lincoln, reported: “By following the same AID and UN policy guidelines that prevailed on grant funds of the previous contract between Nebraska and USAID, there was no significant change in day to day operations” (1, 1969, p ii). The Ford and Kellogg Foundations continued supporting the program on a grant basis (1, 1969, Section IV).

A significant development during 1969 was that for the first time a home economist was added to the Nebraska staff in Bogota. She was Jean Audrey Wright with an assignment of “national responsibility” (1, 1969, p 8). A study team composed of Virginia Y. Trotter, University of Nebraska, chairman; Anita Dickson, Purdue University; and Doretta Hoffman, Kansas State University, assessed the home economics situation in Colombia, and in a report issued in June 1969, made recommendations for improvement. They stated: “a broadened program of support for home economics is imperative to meet the needs of the country. The School of Home Economics at the University of Caldas should be further developed as rapidly as possible so that it can assume the leadership for higher education in home economics in Colombia” (1, 1969, pp 155, 161).

Both Colwell at Lincoln and Yeutter at Bogota reported very favorably on progress made during 1969. They were optimistic about the future (1, 1969).

**1970 - A Banner Year**

In many respects 1970 was the banner year of the Colombian program. The first five-year plan expired with the end of 1970, and during that year the Nebraska Mission and ICA had jointly prepared a new five-year plan for the period 1971 through 1975. The plan consisted of 397 single-spaced, typewritten pages. It was transmitted to Marvin Weissman, director of USAID in Colombia, by Clayton Yeutter, director of the Nebraska Mission in Colombia, and by Jorge Ortiz Mendez, director general of ICA. A statement in the letter of transmittal was: “This plan has been in preparation for nearly a year. It represents a major endeavor, on a cooperative basis, between Mission personnel and their ICA and National University colleagues” (4).

The number of Nebraska staff in Colombia had plateaued and remained at a high level with a fairly large number departing upon the completion of their assignments and others taking their places. Also, 19
short-term consultants took part in the Colombian program during 1970. These included Virginia Trotter, for the second year in a row, and Rosa Stefani, dean of Home Economics at the University of Puerto Rico. Stefani was especially valuable because of her fluency in the Spanish language. In addition, Hazel Anthony, associate dean of the College of Home Economics and Hazel Fox, chairman of the Department of Foods and Nutrition at the University of Nebraska, made a trip to Colombia and provided valuable counsel on the home economics programs. Chief attention was being given to strengthening home economics at the University of Caldas at Manizales.

Thirty-eight participants who had pursued advanced studies abroad returned to Colombia in 1970. All had studied at various U.S. universities except one who had been at Chapingo, Mexico. Nine had received the PhD degree and most of the others the MS degree. During the same year, 40 participants departed Colombia to study abroad, all in the U.S. except for two, one of whom went to Chapingo, Mexico and the other to IICA, Costa Rica.

A highlight of the program during 1970 was an address given in Lincoln on June 15 by John A. Hannah, administrator, AID, Washington, D. C. He was invited especially to come to Nebraska to participate in the premier showing of a 19-minute film produced professionally to help educate the public on the Nebraska Mission in Colombia. Hannah spoke of the program in glowing terms. He stated “The Nebraska-ICA project is noteworthy for being something of a textbook example of how to do technical assistance . . . The most effective part of this partnership has been the strong leadership and administrative back-up which the Nebraska-led group has provided from the start and the confidence which AID consequently has had in Nebraska’s ability to do the job . . .” (1, 1970, pp 1-5).

In early December 1970, the Colombia program appeared to be moving along very well. Thomas W. Dowe, a one-time staff member in the Nebraska Department of Animal Science, who had gone to Vermont as dean of the College of Agriculture, was made chief of the Mission in Colombia, effective December 7, 1970. He arrived in Bogota on December 11 (1, 1970, p iii). Dowe, in addition to his other qualifications, had the advantage of being fluent in the Spanish language1. So with Dowe’s arrival in Bogota, everything seemed to be going along very well, indeed.

The Contract Is Terminated by Colombia

On Friday, December 11, 1970, the day Dowe arrived in Colombia, the Office of International Programs on the East Campus, received a telex from Bogota which read: “Ministry of Agriculture and National Planning Organization in meeting today with ICA firmly decided to phase out Nebraska contract in time period not to exceed 18 months . . . This decision taken in accord with recent national policy statement by GOC (Government of Colombia) not to use loan funds for technical assistance . . .” (10). Since the ICA/Nebraska program was under an AID loan, the fate of the program was sealed, and thus began the phase out (1, 1970, p iii).

Understandably, receipt of the telex was disturbing to UNL President Joseph Soshnik, Dean Frolik and Director Noyes. The three spent much of the weekend trying to determine how to meet commitments with Nebraska staff in Colombia and with Colombian participants studying abroad, and how generally to bring the program to an orderly close in 18 months. Funding was a major concern because with the contract then in effect, funding was to expire December 31, 1970.

On Monday, December 14, Soshnik received authorization from the Board of Regents to negotiate a contract amendment providing for the phase out in 18 months, with sufficient funds to protect the interests of the Nebraska staff in Colombia and the Colombian participants studying abroad (10). On December 18, Frolik was able to report with respect to Soshnik’s negotiations: “At the moment things look somewhat better than a week ago. Time will tell” (11).

Why was the program terminated when plans were well along for a five-year extension? Among other reasons was the fact that a spirited political campaign had been conducted in the course of electing a new President in Colombia. As is sometimes true in the U.S., charges and countercharges are made by the candidates and their supporters which are often critical of the opposition. Unfortunately, some damaging criticisms of the Nebraska program found their way into the press. Also, ICA had failed to gain the financial support and responsibilities originally envisioned.

The overriding difficulty was that because of a cut in appropriations, AID had been forced to shift financing from a grant basis to a loan arrangement. Granted the loans were made on a long-term basis at a low rate of interest, the Colombians came to feel, and rightly so, that it was their money that was financing much of the program (meanwhile, the Ford and Kellogg Foundations continuing to provide support on a grant basis). The problem of the Nebraska staff drawing salaries much above those of their Colombian counterparts and living in homes more nearly comparable to those of the wealthy than to those of college personnel was accentuated when the Colombians, in effect, took over the financing. Some Colombians came to feel that the Nebraska program was more expensive than Colombia could afford. Also, CIAT had come into the picture and probably had more appeal to the Colombians generally than the ICA/Nebraska program.

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1Dowe had lived near the U.S./Mexican border as a boy, where he had used the Spanish and English languages interchangeably.
The Phase Out - January 1, 1971 to June 30, 1973

As it turned out, the problem of termination was not as serious as it first appeared. The termination decree stood but arrangements were made whereby the phase out was accomplished in an orderly manner over a two and one-half year period with a terminal date of June 30, 1973. In all cases Nebraska staff appointees were able to complete their contractual arrangements in Colombia.

During 1971, three new Nebraska staff members began their work in Colombia. During the same year 19 completed their assignments and returned to the U.S. Eleven more departed in 1972, with the remaining four terminating on June 30, 1973 (1, 1971-73). It is to the credit of both the Nebraska group and their Colombian counterparts that morale remained high and that there was no letup in work conducted by the technical staffs of both countries during the phase out period.

Most of the participants had completed their advanced training by June 30, 1973, with arrangements being made to take care of the 30 still abroad at that time (1, 1971-73). The last participant completed his work in 1976 (5).

By June 30, all of the equipment which had been procured under the program was turned over to ICA and to the National University.

Summary

Cost (5)

Total funding for The Nebraska Mission in Colombia over the seven and one-half year period was as follows:

- AID contract .................. $2,020,686.28
- ICA (AID loan) .................. 3,656,844.75
- Ford Foundation
  (for agricultural economics) ........ 926,000.00
- Kellogg Foundation
  (for information and extension) ... 1,276,140.00
- Kellogg Foundation (second grant) .... 360,939.47
- TOTAL ........................................ $8,240,610.50

The Programs

1) The programs provided technical assistance to Colombia in agriculture, veterinary science, and to a lesser extent in home economics over a seven and one-half year period with a total of 64 UN/MASUA staff members each of whom resided in Colombia for an average of more than two years. The purpose was to strengthen programs in agricultural teaching, research, and extension principally in ICA and the Universidad de Colombia, but also in home economics at Caldas Universidad.

2) In addition to 1) above, there were approximately 95 short-term visits made to Colombia by University of Nebraska and other MASUA staff members, principally to provide additional technical capability to the resident staff — both U.S. and Colombian (1).

3) Advanced training was provided abroad (mostly in the U.S.) for 251 Colombian participants. Of this number, 54 earned the doctoral degree and 149 the Masters degree. The remaining 48 were sent to various universities and centers to get specialized training without respect to earning degrees. The time spent abroad by this latter group varied from one to 12 months (1, 1971-73, p 155).

4) Besides gaining professionally, the Nebraska staff in Colombia learned or, in a few cases, improved their knowledge of the Spanish language and made professional friendships, many of which have been maintained to this day. Likewise the Colombian participants, in addition to advancing their technical capabilities, learned or improved their English language capabilities and they, too, made many lasting friendships in the U.S. Both groups as a result of living in the others' countries broadened their perspectives and, thereby, became better citizens of the Americas.

Evaluations Through Surveys

In 1980 the USDA Office of International Cooperation and Development (OICD) made a grant to the University of Nebraska, with Oklahoma State University collaborating, for a three-year scientific linkage program with ICA. Basically, this was a follow-up of the earlier Nebraska Mission in Colombia program. The purpose of the grant was to make two survey studies as follows: 1) to assess the reactions of the Nebraska Mission staff members who had been involved in a long-term assignment in Colombia, and 2) to get similar type of information from Colombians who had been participants (advanced training abroad) under the program. Some of the findings are shown in the sections which follow.

Responses of the Former Nebraska Mission Staff Members (6)9

Effect on Colombian agriculture. Agriculture in Colombia has been influenced by many factors — including government programs, other international programs, and the private sector. Results are so compounded that it would be impossible to measure the impact of the Nebraska Mission program.

The responses were strongly on the positive side with respect to the effect of the program on Colombian agriculture. In Caldas Universidad

9We apologize to authors Dickason and Kleis for utilizing their report for evaluation purposes. They emphasized that the report was not intended for this purpose. Unfortunately, we did not have access to any other evaluation, hence this action.
Colombia has a great potential for extension. Some of the infrastructure that had been developed has survived. The Mission developed a positive attitude towards extension in Colombia.

Overall, the respondents felt that "...there is a lack of a critical mass of trained MS and PhD individuals. The program was criticized because of its premature termination, failure to influence policy, and Mission administrators not dealing effectively with people or institutions ... A better language facility (Spanish) was needed by U.S. staff ... the program should have included a mechanism for subsequent short-term assignments in Colombia".

Responses of the Colombian Staff and Participants

ICA and the Universidad Nacional de Colombia benefited from procurement of equipment and supplies, and from the technical assistance provided by the Mission.

In 1974 there were 517 professionals doing research and in 1984 there were only 328 in the entire country.

"The most relevant positive aspects of the Mission were, in order of importance, the strengthening of professional development, the learning of skills and techniques and the development of group work disciplines." The learning of English was given a fairly low priority. It was stated that the Mission personnel spoke only in Spanish (as was required) except when they were among themselves. Thus the Colombians had little opportunity to practice English with Mission personnel.

Joint work with the Missions's staff in planning and developing projects, joint teaching in the ICA-National University graduate program, and the professional exchange were the most important activities contributing to Colombian professional development.

More than two-thirds of the respondents expressed satisfaction with the impact of the Nebraska Mission.

Negative aspects mentioned were as follows: a) The better financial status of Mission staff making it difficult to establish professional and social relationships (most important negative aspect); b) inadequate and deficient selection of the Mission's personnel; c) bureaucratic barriers in ICA; d) communication problems due both to the language barrier and lack of a proper attitude to communicate; e) premature termination of the Mission; f) lack of intensity on the job; and g) one respondent expressed a concern as follows: "Unfavorable image of the Mission's personnel especially as seen by the students, who never believed in the ability of its members and always questioned its basic objectives."

Conclusion

On balance the Nebraska Mission in Colombia was successful. It would be impossible to conduct any technical assistance program in a LDC without some negative aspects developing. However, in spite of the good accomplished, the program never attained the degree of success initially envisioned. It was from the start a very ambitious, very large, and very complex program.

AID, the University of Nebraska and the other universities which were involved, the Kellogg Foundation, the Ford Foundation, ICA and the Universidad Nacional in Colombia, all gave the program their best. The program would have come closer to attaining the success originally envisioned if it had not been for the shift by AID (on January 1, 1969), from providing funds on a grant basis to making the funds available through loans. The Colombian President's decree in December 1970 that no technical assistance programs would be supported with loan funds spelled the beginning of the end of the Mission. Thus, instead of a full-fledged program continuing for at least another five years as planned in 1970, phasing out started on January 1, 1971.

In spite of the premature termination, the technical assistance program is having a great, highly favorable, and long lasting impact on the agricultural (and to a lesser extent home economics) programs in research, teaching, and extension in Colombia. In turn, the U.S. personnel involved also benefited much from the contacts with the Colombians — we United States nationals gained a new respect and a sincere feeling of friendliness for our fellow Americans who live in the delightful country of Colombia.

References

1. Official reports of the University of Nebraska Mission in Colombia, 1966-1973. UN/UNL.
2. Frolik, Elvin F. July 1965. Notes on trip to Colombia in the interest of a proposed UN program in that country. Files of the Dean of the College of Agriculture. UN, Lincoln.

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As with some other negative factors, student strikes were not mentioned in the annual reports of the administrators.
Section 3. University of Nebraska Technical Assistance Program in Turkey

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In Turkey

Chief UN Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Period Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marvel L. Baker</td>
<td>Dean and Chief of Staff</td>
<td>4/55-7/57</td>
</tr>
<tr>
<td>Otto G. Hoiberg</td>
<td>Chief Advisor, Nebraska staff</td>
<td>7/57-10/58</td>
</tr>
<tr>
<td>Lawrence K. Crowe</td>
<td>Chief of Staff (also called Chief Advisor)</td>
<td>10/58-10/60</td>
</tr>
<tr>
<td>Marvel L. Baker</td>
<td>Chief of Staff</td>
<td>10/60-10/62</td>
</tr>
<tr>
<td>Harold L. Allen</td>
<td>Chief of Staff (also called Chief Advisor)</td>
<td>10/62-6/65</td>
</tr>
<tr>
<td>Donald G. Hanway</td>
<td>Chief Advisor, Nebraska group</td>
<td>6/65-6/67</td>
</tr>
<tr>
<td>Duane E. Lowenstein</td>
<td>Chief Advisor, Nebraska group</td>
<td>6/67-10/68</td>
</tr>
</tbody>
</table>

Other Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Period Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harold L. Allen</td>
<td>Assoc. Chief Advisor</td>
<td>11/59-10/62</td>
</tr>
<tr>
<td>Cecil W. Frutchey</td>
<td>Chief, Erzurum group</td>
<td>9/62-2/63</td>
</tr>
</tbody>
</table>

On the East Campus at Lincoln

Chief Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Period Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harry G. Gould</td>
<td>Campus Coordinator</td>
<td>1/55-9/59</td>
</tr>
<tr>
<td>Jason S. Webster</td>
<td>Campus Coordinator</td>
<td>9/59-10/68</td>
</tr>
</tbody>
</table>

Other Administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Period Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. W. Ackerson</td>
<td>Academic Advisor</td>
<td>9/56-7/59</td>
</tr>
</tbody>
</table>

The name of this program was from the start in 1955 to the end in 1968, the University of Nebraska Technical Assistance Program in Turkey.

Locations of Principal Offices

In Turkey

Ankara University at Ankara from the start of the program in 1955, until the program at Ankara was terminated in 1965. Ataturk University at Ankara from 1955 until 1958, then at Erzurum from 1958 until termination of the contract in 1968.

On the East Campus, Lincoln

Agricultural Hall 1955-1963
Agricultural Administration Annex 1963-1968

Preliminaries and Signing of the Contract with AID

Following an invitation in 1954 by AID to the Uni-

AID (U.S. Agency for International Development) is the foreign assistance arm of the U. S. Department of State. It went under the name of FOA (Foreign Operations Administration) when negotiations were started in 1954, changed to ICA (International Cooperation Administration) on July 1, 1955 (2, Aug 1955, p 4), and to its present name AID in 1961.
versity to consider providing technical assistance to the Government of Turkey in strengthening Ankara University and in building and operating Ataturk University, Dean W. V. Lambert arranged for Elvin F. Frolik, then chairman of the Department of Agronomy and George S. Round, extension editor and director of Public Relations, to make a trip to Turkey to assess the situation. Frolik and Round learned in Turkey (1) that an Executive Committee had already developed plans for assistance to the Faculty of Agriculture, and to the Faculty of Veterinary Science at Ankara University. Also, the Turkish Committee planned for Ataturk University to be located at four different campuses: 1) at Diyarbakir — engineering; 2) at Elasig — to be the University Center, and agriculture; 3) at Erzurum — veterinary medicine and fine arts; and 4) at Van — social sciences.

Upon their return to the U.S., Frolik and Round (1) reported favorably on the proposal, but recommended that before finalizing a contract there be an exchange of Nebraska and Turkish teams, composed of persons holding high level positions, and each team to spend considerable time in the other country. Following the inspection of facilities and getting acquainted with programs underway, (each in the other country) especially in agriculture and veterinary medicine, the members of the two teams would attempt jointly to work out important features of the proposed assistance program. The recommendation was accepted.

The Turkish party headed by the Minister of Education visited the University of Nebraska in August 1954. The Nebraska group was headed by Dean W. V. Lambert, with the other members being Albin T. Anderson, Department of History; Knute O. Broady, Teachers College; Elvin F. Frolik, Department of Agronomy; Roy M. Green, College of Engineering; and Carl Olson, Jr., Department of Veterinary Science. The Nebraska group departed Lincoln in late September 1954. It visited all four of the locations which had been suggested for the Ataturk University campuses by the Turkish Executive Committee. Work of the group was completed in Turkey in October and a final report was filed on November 1, 1954. Among other recommendations was one that Ataturk be developed at only one of the four proposed locations (2).

Following numerous conferences, negotiations and the usual paper work involving the University of Nebraska, AID, Ankara University, and the Government of Turkey, a contract was signed by AID and the Board of Regents of the University of Nebraska on March 28, 1955. The contract spelled out the arrangements whereby under AID financing, the University would provide technical assistance in strengthening the Faculties of Agriculture and Veterinary Science at Ankara University, and would help establish and operate Ataturk University in eastern Turkey. The assistance was to include: 1) stationing a U.S. team in Turkey to assist in teaching, research and extension, along with planning and designing the new university; 2) a participant program, i.e., sending Turks to the U.S. land grant universities for advanced training; and 3) procurement of commodities (equipment) (2, Aug 1955).

Administration, Recruitment and Living in Turkey

Operating a foreign assistance program was something new to the University. An administrative arrangement was necessary in both Turkey and at Lincoln, the one in Turkey to operate the program of assistance; and the one at Lincoln to do the recruiting; getting the staff members and their families off to Turkey; managing the participant program, including getting the incoming Turks located at various universities; handling the procurement and shipping of commodities; finalizing all contracts, amendments and other official papers with AID/Washington; and handling business and financial matters. It was a big undertaking.

The University of Nebraska was fortunate in having available the services of Harry G. Gould, former associate director of Nebraska Extension, who had just completed a four and one-half year assignment with USAID in Turkey. He was placed in charge of operations at the University on January 17, 1955, with the title of “campus coordinator”. Administratively, he reported to Dean W. V. Lambert. Marvel L. Baker, who had been serving as associate director of the Station, was appointed chief of staff in Turkey, with the title of dean and chief of staff. The first persons to depart the U.S. to live in Turkey were Mr. and Mrs. Baker. They arrived in Ankara on April 13, 1955.

The University staff at Lincoln, as a whole, felt little commitment to or involvement in the Turkish program. Basically, it was viewed as something outside the mainstream of University programs, something to be handled largely by University administrators, especially the campus coordinator. Since the University had a relatively small staff to carry out the traditional programs, the loss of even one person would throw more of an overload on the others in the department involved. Temporary replacements to fill vacancies created by staff accepting assignments in Turkey were difficult to come by.

The vanguard of the staff who arrived in Turkey in 1955 consisted of Marvel L. Baker, chief of staff; Albin T. Anderson, arts and sciences; T. Homer Goodding, agronomy; Orvis J. Keller (from Pennsylvania State University), engineer; and Stanley A. Smith (from Washington State University) architect. Mary Lou Magorian, secretary, was also a member of this initial group. The practice of recruiting a portion of

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*Faculty" in Turkey and numerous other countries has the same meaning as "College" in the U.S. Thus, Faculty of Agriculture in Turkey is to us the College of Agriculture.
the staff from other universities and employing U.S. secretaries in Turkey continued throughout the life of the program.

Those who accepted an assignment in Turkey did so for one or more of a variety of reasons as follows: 1) as "good soldiers" they responded to the call of duty; 2) they had an opportunity to be of service to people in an LDC; 3) it was a chance for the entire immediate family to live in a faraway country largely at government expense (except for military service many had never been to Asia or even Europe); 4) it was a means of improving their financial situations; and, lastly 5) it was an opportunity for an exciting life and a very different type of work. One of the staff members reported that he went to Turkey to get away from the "rat race" brought on by a heavy load of teaching, research and committee assignments.

Typically, the Nebraska families in Turkey had domestic help. In Ankara they had post exchange, commissary, and medical privileges at the U.S. military installation. They could have their furniture and automobiles transported to and back from Turkey at government expense. They were also given adequate vacation time to take interesting side trips in the Middle East. The prestige of their positions often exceeded that to which they were accustomed at "home base".

There were, however, inconveniences and hardships to contend with. The customary cultural shock was experienced by most. In many cases, especially until their systems developed resistance to the local microbes, the Nebraskans suffered bouts of gastroenteritis (usually not a critical, but extremely uncomfortable and sometimes embarrassing affliction). The language barrier was ever a problem except for the few who became really proficient in the Turkish language. There was a vast difference at the start between Ankara, a modern city and Erzurum described by Baker (3, p 374) as a city with many old buildings and traffic consisting of "... large trucks, cars, horse-drawn carriages which provided the taxi service, ox carts, buffalo carts, donkeys, and pedestrians".

Living in hotels upon arrival in Turkey until suitable housing could be found was not very pleasant, especially at Erzurum where hotels at the time were something less than four-star. Domestic water supplies were not dependable — it was wise to keep the bath tub filled to provide water when none came through the tap. Especially in the early years, medical and hospital services at Erzurum were not the best. Household goods were shipped by surface ship, with arrival in Turkey often delayed, along with some damage not being uncommon. Getting household appliances properly serviced was difficult. But, perhaps, most serious of all was the isolation, families being away from relatives (in many cases from children, grandchildren, and parents) and friends in the United States.

Entertaining U.S. visitors, Turkish friends, other Americans stationed in Turkey, and each other constituted important and pleasant diversions. In general, the Nebraska staff carried on a much more active social life than they were accustomed to in the U.S. To some extent this was continued, especially in entertaining Turkish participants and visitors, after the Nebraska staff members returned to the U.S.

Strengthening Ankara University and Helping To Establish and Operate Ataturk University

The program in Turkey consisted of two subprograms with primary emphasis on establishing and operating Ataturk University; and, secondly, helping to strengthen agriculture and veterinary science, and creating a college level department of home economics at Ankara University.

Of the initial Nebraska group in Turkey, Goodding was stationed at Ankara University to help strengthen the agronomy programs, while Baker, Anderson, Keller and Smith officed in the city and spent their time primarily in assisting Turkish officials in developing plans for Ataturk University. Baker also spent some time on the Ankara University program in his capacity of chief of staff. Baker made his first trip to Erzurum on May 16-17, 1955 (3, p 374). Although programs with both universities were extensive, the chief emphasis throughout was on establishing and operating Ataturk University, the University to be patterned after the "land grant" system in the U.S.

The participant program developed rapidly, with 25 Turks having arrived in the U.S. by December 31, 1955 (2, Dec 1955). These early participants were for the most part members of the faculties at Ankara University, usually coming to the U.S. for one or two years and often without respect to earning advanced degrees. The participants' proficiency in the English language in the early part of the program was generally inadequate (2, Dec 1955). This improved as time went along.

An important development was the passage of the Ataturk University Law by the Turkish Parliament, which became effective on June 6, 1957. The Law, among other things, settled the question of location(s), specifying that all of Ataturk University would be at Erzurum. Construction of three buildings on the new campus was started shortly afterward (2, Sep 1957).

Ataturk University officially opened its doors on Nov. 17, 1958, with 170 students matriculating (many more had applied but only 170 could be accommodated). The University was located temporarily in a
remodeled girls' school in the city of Erzurum. There were initially two faculties (colleges), a Faculty of Agriculture, and a Faculty of Letters and Science (akin to our College of Arts and Sciences) (2, Mar 1959).

By March 1962, a 24-unit apartment building had been completed on the Ataturk University campus, with accommodations for all of the University staff. The apartments were spacious and of excellent quality, which did much for the morale of the occupants.

The first commencement at Ataturk University was held on July 3, 1962, with 102 graduates who had received all of their college credits at Ataturk University. Baker gave the commencement address in Turkish, and Dr. B. N. Greenberg, member of the University Board of Regents, also participated in the ceremonies. It was an impressive occasion (2, Sep 1962).

The University was moved from the temporary downtown quarters to the new 10,000 acre campus near Erzurum in February 1963. By this time the Nebraska staff at Ataturk University numbered nine and at Ankara University, two (2, Mar 1963).

The assistance programs in agriculture and veterinary science at Ankara University were phased out as of June 30, 1963 (2). Work in home economics was continued by Evelyn (Morrow) Lebedeffe until June 30, 1965 when she brought to a close the assistance program at Ankara University. It had been underway for 10 years. Lebedeffe, along with Mary Rokahr (at Ankara University from 1956 to 1959) deserve much credit for helping to get Ankara University to establish a Department of Home Economics (2, June 1965).

For the most part, the Nebraska staff members worked closely, amiably and successfully with their Turkish counterparts at both universities and with other Turkish people. This involved not only teaching, but also helping to develop meaningful research and extension programs in agriculture, veterinary medicine, and home economics. There were numerous examples of success stories.

Many Nebraska staff members were asked to extend their customary initial two-year assignments. It was not always possible to accept because the person could no longer be away from his responsibilities at his/her home university, or because he/she wished to return to the U.S. for personal reasons. Those who served in Turkey for more than two years are listed on the next page.

The first graduating class at Ataturk University in 1962. Turkish flag hangs in background.
Staff Who Served in Turkey for More than Two Years

<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin A. Alexander, Animal Husbandry</td>
<td>1959-1963</td>
</tr>
<tr>
<td>Harold L. Allen, Ext. &amp; Infor. Spec.</td>
<td>1956-1965</td>
</tr>
<tr>
<td>Leo J. Fenske, Farm Mgt. Spec.</td>
<td>1960-1965</td>
</tr>
<tr>
<td>Robert L. Fox, Soils Spec.</td>
<td>1956-1959</td>
</tr>
<tr>
<td>Mary Rokahr, Home Economist</td>
<td>1956-1959</td>
</tr>
<tr>
<td>John C. Steele, Agricultural Engineer</td>
<td>1956-1958, 1962-1964</td>
</tr>
<tr>
<td>Evelyn (Morrow) Lebedeffe, Home Economist</td>
<td>1959-1965</td>
</tr>
<tr>
<td>Doris Lesoing, Admin. Asst.</td>
<td>1957-1961</td>
</tr>
<tr>
<td>Sally McCullough, Adm. Secty.</td>
<td>1960-1965</td>
</tr>
<tr>
<td>B. T. Simms, Veterinary Advisor</td>
<td>1957-1961</td>
</tr>
<tr>
<td>Ernest J. Wheeler, Crops Specialist</td>
<td>1960-1964</td>
</tr>
</tbody>
</table>

The spouses played an important role, serving as hostesses at many official/social functions; doing volunteer work, or even providing secretarial help in the university programs when no other qualified person was available; and generally becoming members of the Turkish community. The latter is especially important when a foreign group attempts to fit into the society of a country which is often far different in culture, religion, and economic development.

Disappointments and Frustrations

Along with the accomplishments over the years, of which there were many, there were also disappointments and frustrations. A number of examples follow:

The lack of adequate proficiency in the English language plagued the progress made by some of the participants (Turkish staff coming to the U.S. for advanced training).

Robert L. Fox, soil scientist, complained that his Turkish counterparts at Ankara University did too much of their research by "remote control." (2, Mar 1959).

Cecil W. Frutchey, who was employed as Chief of the Erzurum group, effective September 4, 1962 (2, Sep 1962), appeared to have become disenchanted with the program almost from the start. He resigned his position effective February 22, 1963, having fulfilled only about five and one-half months of his two-year contract.

Critical Illnesses and Deaths

From time to time there was considerable student unrest at Ataturk University. For example, students in the Faculty of Agriculture started boycotting classes on March 11, 1963 and within a week the movement had turned into a full-scale strike. The students returned to their classes on March 27. After an investigation, disciplinary action was taken against a number of the students, which in turn brought on another strike lasting for five days (2, Sep 1963).

In 1964, Jason Webster reported: "Many of the Turkish leaders who envisioned a modern university (land grant type) were replaced by those who wished to make Ataturk University a satellite of older Turkish universities. This situation has caused this reporting period to be one fraught with problems" (2, Sep 1964, p 9). Hanway noted in 1967 a trend "... in recent months toward the old Turkish University pattern of operation . . ."

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Cecil W. Frutchey, who was employed as Chief of the Erzurum group, effective September 4, 1962 (2, Sep 1962), appeared to have become disenchanted with the program almost from the start. He resigned his position effective February 22, 1963, having fulfilled only about five and one-half months of his two-year contract.

From time to time there was considerable student unrest at Ataturk University. For example, students in the Faculty of Agriculture started boycotting classes on March 11, 1963 and within a week the movement had turned into a full-scale strike. The students returned to their classes on March 27. After an investigation, disciplinary action was taken against a number of the students, which in turn brought on another strike lasting for five days (2, Sep 1963).

In 1964, Jason Webster reported: "Many of the Turkish leaders who envisioned a modern university (land grant type) were replaced by those who wished to make Ataturk University a satellite of older Turkish universities. This situation has caused this reporting period to be one fraught with problems" (2, Sep 1964, p 9). Hanway noted in 1967 a trend "... in recent months toward the old Turkish University pattern of operation . . ."

Critical Illnesses and Deaths

As might be expected over a span of 13 1/2 years, there were the sad occasions. Cecil T. Blunn, who arrived in Turkey in early 1956, suffered an attack of hepatitis while in Turkey. He spent three weeks in the U.S. Military Hospital in Ankara, during a portion of which he was in critical condition, and spent six additional months recuperating at the Blunn Turkish apartment before he was strong enough to return to work.

H. L. Weaver, botanist, suffered a heart attack on October 27, 1960. He was confined to a Turkish military hospital at Erzurum until November 21 at which time he was transferred to the U.S. military hospital at Ankara. He stayed there until December 16 when he was moved to a hotel in the city. He remained at the hotel until January 29, 1961 at which time he was sufficiently recovered to return to his home in Lincoln, Nebraska, but he never resumed his work at Ataturk University (2, Mar 1961).

Horace J. Harper, soil scientist, who had retired from Oklahoma State University and joined the Ne-
braska staff at Ataturk University on April 20, 1961, died of a coronary thrombosis at 6:30 p.m. on November 8, 1961. He had put in a full day's work and, although not feeling well, did not call the doctor until 5:00 p.m. He was 65 years old at the time of his death (2, Mar 1962).

Refika Dogan, a Turkish national who had completed her master's degree and was within one semester of completing her EdD degree at the University of Nebraska, died in July 1963 as the result of a fall down a flight of stairs in a University dormitory. The world lost an outstanding and devoted educator and a much beloved person in the death of Refika Dogan (2, Sep 1963).

Accomplishments and Conclusion

The program of University of Nebraska assistance at Ataturk University was officially phased out on October 31, 1968. It will be recalled that the program had started with Marvel L. Baker's arrival in Ankara, Turkey on April 13, 1955. The program was funded throughout by AID through a series of three successive contracts and 10 different amendments.

During the course of the contracts, the University had provided 46 long-term staff members to Ankara and Ataturk Universities with seven still at Ataturk University at the time the last contract was terminated. In addition there were short-term visits to Turkey by University administrators and technical consultants. Assistance had been provided to Ankara University from 1955 to 1965 in the areas of agriculture, veterinary science, and home economics. Help for Ataturk University was started with planning at Ankara, and the first university staff being headquartered in Erzurum in 1958.

Assistant included sending a total of 187 Turkish participants to the U.S. for advanced training; providing help to university administrators and to the technical staff in teaching, primarily, but also in research and extension (and in the earlier years at Ataturk University, filling line positions until the Turkish personnel could take over); purchase (with AID funds) and procurement of large amounts of scientific equipment and supplies, and large numbers of books and periodicals used in teaching, research, and extension; and planning and assisting in developing architectural designs and specifications for the new home economics building at Ankara University and the entire campus development at Ataturk University.

In addition, starting with little more than an idea, Ataturk University, by 1968, with funds for construction having been provided by the Government of Turkey, consisted of a campus and adjoining farm of 10,000 acres with 50 structures, including 10 classrooms, a laboratory, office buildings, three student dormitories, 18 staff apartment houses, one rug factory complex, several living facilities for families of farm workers, a number of barns for livestock, and other buildings for poultry, machinery and storage.

Faculties of Agriculture and of Science and Letters had been established at Ataturk University with much valuable assistance from the Nebraska Team. Departments that constituted the Faculty of Agriculture were agricultural economics, agricultural engineering, animal science, plant science and soil science. Some assistance was provided in home economics at Ataturk University but the discipline never attained departmental status and at the termination of the contract appeared to be on its way to extinction. A University Extension Institute and an Agricultural Research Institute had been established.

In the Science and Letters Faculty of Ataturk University, the following Departments were functioning by 1968: language, linguistics, and modern English; economics and business; chemistry; physics-mathematics; and natural sciences. A University library was established, with a new building constructed for that purpose being occupied in February 1967.

While not a part of the University assistance program, a Faculty of Medicine was established through arrangements between Ataturk University and the Hacettepe Science Center.

The Turkish Faculty of Agriculture consisted of 97 members, and that of the Faculty of Science and Letters, 111 members. By the fall of 1968, student enrollment was expected to reach 1,000. Forty-eight agricultural research projects had been completed, and 31 more were underway in mid-1968. University Extension work in agriculture under Turkish leadership had achieved a basic level of growth and development wherein the Turkish staff members were functioning as a service-arm of the University.

At the close of the contract Ankara University Faculties of Agriculture and Veterinary Science had been strengthened, and Home Economics was firmly established. Ataturk University was a functioning institution; however, it never attained the status of a university with a “land grant” philosophy and structure. In fact, at the time the contract was terminated, Ataturk was moving more and more in the direction of the traditional Turkish University.

At the request of the authors, John C. and Olga Steele, in October 1986, made an unofficial and informal review of the Ataturk University and Ankara University programs with which the University had been involved (4). Briefly, their findings based on personal observations and reports from Turkish University Administrators and staff were as follows: In 1986 Ataturk University had an enrollment of 15,000 students with nine faculties (colleges) and 950 staff members. There were 2,400 undergraduate and 45 graduate students in agriculture, and 107 undergraduates in veterinary science. There was no program in home economics.

*Possibly this was of more concern to the Americans than to the Turks — each group being steeped in its own cultures and traditions.
At Ankara University there were 3,500 undergraduate students and 250 graduate students in agriculture. The School of Home Economics had an enrollment of 300.

There were 36 college centers in Turkey in 1986 compared with six in 1964. "All universities of Turkey are governed by the rules and regulations of the Law of Higher Education of 1981. They have the same central organizational structures." This of course included Ataturk and Ankara Universities.

It appears that the participant segment (Turkish students studying in the U.S.) was the most successful part of the Nebraska program. John C. Steele estimated that 70 percent of the participants with whom he worked are connected with universities, colleges or other educational institutions — many as deans and heads of departments. Prof/Dr. Hursit Ertugrul, a former participant and presently Rector of Ataturk University, stated: "The program was useful and successful. The academic strength of the staff was greatly enhanced by the program." Prof/Dr. Ali Balaban, also a former participant and retired dean of the College of Agriculture at Ankara University, stated: "The project has had profound effect on the College of Agriculture's research and training program".

In Turkey, agricultural research and extension are carried on directly by national Ministries. The faculties of agriculture do the resident instruction, with the universities also under jurisdiction of a national Ministry. The faculties of agriculture and veterinary science do some research and extension work (the latter especially with respect to training students), but Ataturk and Ankara Universities (as is true of all Turkish universities) do not have components or responsibilities comparable to the U.S. state experiment stations and cooperative extension services.

Perhaps the hope of establishing in eastern Turkey a university largely patterned after the U.S. land grant universities, was not realistic. The Turkish staff at Ataturk University live and work under Turkish law and regulations, and under traditional Turkish university customs. The faculty members wish, and understandably so, to be able to maintain those standards which will enable them to move freely from university to university and to maintain acceptable professional reputations among their contemporaries. Much as we believe in the land grant system, we must understand that Ataturk University cannot be an island unto itself.

Turkey is obviously making much progress in many ways, including its educational (both resident instruction and extension) and research programs in agriculture. Based on progress and accomplishments, the Nebraska program can be said to have made an important and lasting contribution — organizational structure must be considered as secondary in importance to what is accomplished.

References
2. Reports of the University/FOA (ICA) (AID)*Turkish program, covering various periods of time, but most often six months, starting with the first one covering the period through Aug 31, 1955, and ending with the final report issued at the termination of the contract, Oct 31, 1968. The reports were edited by the campus coordinators and published at Lincoln, NE.
4. Steele, John C. and Olga Nov 1, 1986. Special report on Ataturk and Ankara University programs in agriculture, veterinary science and home economics for history project. IANR, UNL.

*Succession of names for the same U.S. agency.

Chapter 6. The Conservation and Survey Division (1)

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Names of the Administrative Unit
(No organizational unit, as such) 1871-1899

State Geological Survey 1899-1921
Nebraska Conservation and Soil Survey 1911-1921
Conservation and Survey Division 1921-present

Administrators

Principal Administrators
Samuel H. Aughey, Honorary State Geologist 1871-1883
Lewis E. Hicks, Honorary State Geologist 1884-1892

1The origin of the present Conservation and Survey Division dates back to two units within the University, viz. the position of the "Honorary State Geologist", the "State Geologist" and the "State Geological Survey", on the one hand; and the "Nebraska Conservation and Soil Survey" on the other. The two "survey" organizations coexisted within the University from 1911 until 1921, at which time the Legislature created the Conservation and Survey Division which encompassed both. Under 1921 legislation, the 1913 law providing for the appointment of a state geologist was repealed, and Condra as Director of the newly created Division was designated as "ex officio state geologist".

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In this book we have included in the roster only those faculty members who were on the University staff during at least some time between July 1, 1924 and June 30, 1974. Inasmuch as Conservation and Survey was a part of the IANR during that period only from April 1 to June 30, 1974, only the names of persons who were Conservation and Survey Division faculty members during that three-month period are included in the Roster of Faculty, Appendix 1.

Other Administrators

Eugene C. Reed, Associate Director 1944-1954
Vincent H. Dreeszen, Assistant Director 1959-1967
Marvin P. Carlson, Assistant Director 1970-1986

Headquarters Location

At the time the Conservation and Survey Division became a part of the IANR on April 1, 1974, it was housed in Nebraska Hall on the City Campus where it remains today.

Brief History of the Division

Up to 1974, the Conservation and Survey Division, although always cooperating closely with the College of Agriculture, had never been administratively connected in any way with the College. Under the terms of the 1921 legislation which created the Conservation and Survey Division, the director reported administratively directly to the Chancellor of the University. The Division retained this status until April 1, 1974 when LB 149, which had been passed by the 1973 Legislature, was activated. It then became a division of the IANR.

Legislation passed in 1913 defined the duties of the Division as being “... the survey of natural resources of the state” with the resources mentioned being soil, water, water power, potash, forest, and road materials. The 1919 Legislature “... enlarged the duties to include more geological activities”.

Eugene C. Reed established close cooperation with the U.S. Geological Survey making possible a much enlarged survey of groundwater resources. Reed's experience as a petroleum geologist prior to joining the Conservation and Survey Division staff served him well and helped make possible the oil strikes in Nebraska in 1939, 1949, and 1959.

Vincent H. Dreeszen who joined the Division as a staff member in 1949 “... shepherded the drilling program and pursued the study of his principal interest — the Cenozoic rocks of the state and their important water resources.” On becoming director, Dreeszen gradually expanded the scope and scale of the Division to more nearly fulfill the provisions of the 1921 Act.

In view of the fact that the Division was a part of the IANR for only three months during the period principally covered by this book, we have not attempted to treat in detail its programs and accomplishments. The Division does constitute an important and excellent segment of the Institute — however, it will remain for future historians to chronicle its activities.

Reference