A HERITAGE OF LEADERSHIP

CENTENNIAL

1896

ANIMAL SCIENCE

1996

A HERITAGE OF LEADERSHIP

IOWA STATE UNIVERSITY

Department of Animal Science

A Story of the First 100 Years

Richard L. Willham
DEDICATION

To this you belong. This centennial department is part of a continuous academic community. Its members are located across Iowa and beyond. Faculty, staff, students, and alumni together with all having livestock interests continue to enrich the community. This story of a heritage of leadership is dedicated to all who belong to this academic community of democracy’s college.

The prize Percheron stallion, Jalap.
ACKNOWLEDGMENTS

Many people contributed to the writing of this story about a centennial department. This history was made possible by the manuscript on departmental history prepared by P.S. Shearer in 1960. The former head kept listings of the faculty and graduate students up to 1975. He listed the undergraduate and herdsmen students into the 1950s. The retired faculty, their spouses, and their children shared stories and insights. . . . M.D. Helser stepped back into the scalding vat in the meat lab. . . . Dean Kildee canceled his judging trip to be with his daughter when she was ill. . . . Numbering one class backwards lost the International for a judging team. The faculty, staff, and students were real people.

Undergraduate students did independent study on the history during the spring of 1995. Thanks go to Matt Haan, Mike Kahlenann, Kevin Maas, Chad Pennington, Patrick Sage, Tami Schwartz, Steve Sontag, Andrea Steffens, Chad Younge, Sheri Bennett, Beth Cope, and Mike Fisher. In the summer of 1994, Marshall Jurgens put out a special edition of the An Cy newsletter that announced the plans for the upcoming centennial. An attached questionnaire for alumni was returned by 206, and 54 stories that added color were used in the first and more detailed version of this history. The current faculty and staff provided more information than could be used. Many made constructive edits and additions to the manuscript. The staff in animal breeding was very supportive. They put the manuscript and appendices on the computer. They were Becky Stone, Gloria Lantz, and Mary Healey. Denise Warren helped with the manuscript. Dan Kovich, an honor student in animal science, worked through the fall of 1995 checking, writing appendices, and researching the history. The staff of the library’s special collection department, including Betty Erickson, Becky Jordan, and Doris Simmons, were helpful with photographs. A special thanks is given to all these people.

The administration: Dennis Marple, head, Dave Topel, Dean of Agriculture, and Bud Ewing, former head, who edited the first and more detailed version, were supportive. The agriculture information service: Carol Greiner, as editor, worked wonders. Rex Heer of Media Graphics was responsible for the aesthetic quality of the publication. The author thanks all who participated in the adventure, especially his wife, Esther.

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PREFACE

History is a chronological narrative that gives perspective to the past. The purpose is to better create the future based on an understanding of the past. A historian gathers facts, interprets them, and then writes a story. This is difficult because self becomes entangled in the interpretation. So for a given bit of time and place there can be many different stories written. This history is one story of an academic department of a college in a land-grant university that spans the 20th century. Deep love of the people involved, pride in their achievements, and great awe of place has motivated the storyteller, who has been an active participant in the department for almost 40 of the 100 years. To be objective has been hard. It is one story among the many possible. Read and experience it as such.

In the bicentennial year of 1976, the Block & Bridle students in my livestock heritage course asked me to present a pictorial history of the department to be given during a Kildee Hall tour before the Animal Science Banquet in April. This set of collage slides with narrative and music was first presented in Lush Auditorium and has been used in the course since then. In the spring of 1992, Dennis Marple, the new head, accepted my invitation to view the presentation with the class. After class, he said that we need a departmental history to celebrate our centennial in 1996. I asked to research and write the history. Had I realized just how much a creative, synergistic group of academics and their students could do in 100 years, I might not have asked. One-hundred years is a long time.

For all who read this story, I did my best to cover events and programs that I knew or had read about. I missed important things and for this I apologize. This is true in the first and more detailed version and more so in this condensed version of the book. I gained a deep appreciation for the participants in the story. It really was fun, but lonely at times. Many errors exist, especially in the appendices and for this I again apologize. The story was researched and written first while recovering from a broken leg. I am now aware of what friendship really means.

This story is about an adventure in higher education for the people. The participants are central because they created the heritage of leadership. The author of the Morrill Act said in 1875:

“The colleges were established on a sure foundation, accessible to everyone, where all the sciences needful for the practical vocations of life may be taught, and where agriculture, the basis of present and future prosperity, may find troops of loyal and earnest friends studying the familiar and recondite economics and at last elevating it to the highest standards of intellectual attainment.”

Agriculture, and in particular animal agriculture in Iowa, is “the basis of present and future prosperity.” “Troops of loyal and earnest friends” studying the sciences of livestock production describes well the ever growing academic community of the department, “…and at last elevating it (agriculture) to the highest standards of intellectual attainment,” has been and continues to be what the Animal Science Department at Iowa State University is about!
This is the view of the proposed addition from the south.
Note that the old Meat Laboratory - a tradition from 1918 - is incorporated into the plans.
CONTENTS
DEDICATION ...................................................................................... i
ACKNOWLEDGMENTS ....................................................................... ii
PREFACE ............................................................................................. iii
CONTENTS ........................................................................................... v
GENESIS
  Dream ............................................................................................... 1
  Farm House (1858-1896) ................................................................. 1
HUSBANDRY
  The First 25 Years (1896-1920) .................................................... 3
  The Second 25 Years (1921-1945) ................................................... 8
SCIENCE
  The Last 20 Years in Curtiss Hall (1946-1965) ............................. 13
  The First 20 Years in Kildee Hall (1966-1985) .............................. 20
  The Last 10 Years (1986-1995) ...................................................... 25
VISIONS - The Next 100 Years ......................................................... 33
CONTRIBUTIONS - (1896-1996) .................................................... 35
APPENDIX ............................................................................................ 45
  Administration .................................................................................. 46
  Faculty ............................................................................................... 47
  Area Extension and Staff ................................................................. 55
  Graduate Students .......................................................................... 58
  Departmental Clubs and Herdsmen's Course ............................... 71
  The Judging Teams ......................................................................... 88
  Awards ............................................................................................... 105
REFERENCES ..................................................................................... 113
GENESIS

DREAM
The dream in the 19th century was to create democracy's colleges. This aspiration for public higher education in the practical arts was to be of the people, by the people, and for the people—a definition of democracy coined by Abraham Lincoln in his Gettysburg address given a few difficult months after he signed the Morrill Act in 1862. This act provided federal support, through land-grants to states, for the vision of a new education for a new industrial age.

The dream reflected the perceived needs of an agrarian nation that was expanding westward and was in the initial phase of a spectacular industrial revolution. Higher education in the agricultural and mechanical arts was to support the expected economic development. There was real faith in education that was championed by agricultural interests.

FARM HOUSE
Iowa became a territory in 1838 and the 29th state in 1846. By 1853, Iowa had three liberal arts colleges and a state agricultural society; the state fair began the next year. The state university was opened in 1856 as newspapers and agricultural publications proliferated across the state.

Beginning in 1848, there was interest in the Iowa General Assembly in founding an Agricultural College. The 7th General Assembly of 1858, through the particular efforts of Benjamin H. Gue, passed a bill titled, "An act to provide for the establishment of a State Agricultural College and Model Farm with a Board of Trustees, which shall be connected with the entire agricultural interests of the State." The trustees selected a Story County site of 648 acres and in 1860 began the construction of the Farm House and the cattle barn. Iowa was the first state to accept the provisions of the Morrill Act.

The board, along with a series of farm superintendents, developed the model farm, and a board committee toured other colleges to gain ideas for the design of a college. In 1864, construction began on Old Main and, by 1868, the trustees had selected Adonija Welch as college president. Of the four professors, Norton S. Townshend was professor of practical agriculture. He returned to Ohio and became an agricultural leader.

Classes began and Welch was inaugurated in 1869. Isaac P. Roberts came in 1870 as farm superintendent, but was quickly promoted to professor of agriculture. He is credited with conducting the first livestock experiments at the farm, as well as being an excellent teacher. He and Welch started a series of farmer's institutes that were held out in the state.

Roberts was replaced in 1873 by his student, Millican Stalker. His tenure was cut short in 1877 because Welch selected him to be director of a new department of veterinary studies. Stalker left in 1878 to study veterinary medicine and returned in 1879 to start the first land-grant veterinary school in the United States.

Seaman A. Knapp, a leader in Iowa livestock circles, became professor of practical agriculture in 1880. Besides teaching, he conducted experiments that were often thwarted by lack of funds. With Charles E. Bessey, he wrote the first draft of what would become the Hatch Act of 1887 that provided for state agricultural experiment stations.

President Welch was dismissed by the board of trustees in 1883, and Knapp became president. He served over one year and then returned to his professorship. He represented the college at the convention of agricultural colleges and experiment stations at Washington in 1885. After leaving the college, he continued to lobby for the Hatch Act. In the south, Knapp developed youth programs during his distinguished career.

Herman Knapp, his son, became the professor of agriculture, and after Herman became treasurer of the college, Loren P. Smith was selected to replace him as professor. Smith, a Cornell University graduate, was interested in the agricultural sciences, and his essay on the harnessing of horses was a source of amusement to the "farm boy" students.

The drift from the practical to the scientific at the college prompted the "entire agricultural interests of the state" into action in 1891. Led by "Uncle Henry" Wallace and James "Tama Jim" Wilson, the powerful Stock Breeders Association adopted a resolution demanding that the board of trustees return the college to what they felt was its original purpose—the training of farmers.

The board responded by electing William M. Beardshear as president and "Tama Jim" Wilson as professor of agriculture (dean) and director of the agricul-
tural experiment station, which was started in 1888. Wilson was a farmer, journalist, legislator, and congressman during his career. These changes reflected state interests. The new land-grant colleges over the nation were in transition thanks to the influence of both basic and agricultural scientists on the faculties, the opportunity to conduct research at the agricultural experiment stations, and the standardization given by the new Association of Agricultural Colleges and Experiment Stations. Luckily for Iowa, these two leaders moved the college forward.

Charles F. Curtiss, an 1887 graduate of the college, was elected as assistant director of the experiment station when Wilson was made director. The two made quite a team. When Wilson came, agriculture students were called “hayseeds,” and only one student, J. H. Shepperd, was enrolled in the agriculture program. A full agricultural curriculum was established, and livestock research was conducted. East, or ag campus had a creamery, a horse barn, a veterinary hospital, experiment station barns (1894), and an Agricultural Hall (1892). Producer interests were recognized by the establishment of departments of dairying (later dairy industries), animal husbandry, and farm crops (later agronomy) within agriculture. Curtiss was made professor of animal husbandry in 1896 because of his growing reputation as a livestock authority.

The same year, Wilson’s friend from congress, Wm. McKinley, became President of the United States and asked Wilson to become his Secretary of Agriculture. After a few agonizing days, Wilson accepted. The trustees asked Wilson to take an unpaid leave from the college and, following his recommendation, promoted Curtiss to director of the experiment station. Wilson served as Secretary of Agriculture for 16 years under three presidents.

Curtiss moved to the Farm House with his wife, Olive. Their three daughters—Ruth, Edith, and Helen—became the belles of the college kids living in the faculty housing on campus. The family lived in the Farm House from 1896 to 1947 when Dean Curtiss died.

SUMMARY

Many famous Americans were raised in a farm house, but few farm houses can boast of more agricultural leaders living at different times under the same roof. Important things happened both within and around the Farm House of the Iowa Agricultural College.

The two arches over Independence Avenue in Washington, DC, that join the agricultural building on the mall with the rest of the USDA offices, are named for two residents of the Farm House—Seaman A. Knapp and James "Tama Jim" Wilson. Both Townshend at Ohio and Roberts at Cornell had distinguished agricultural careers. Stalker became dean of the first land-grant veterinary college at Iowa. And Dean Curtiss created one of the most significant agricultural colleges in the nation. This is the foundation for naming this story A Heritage of Leadership.

Ten decades have elapsed since a department of animal science was created at the then Iowa Agricultural College. The conception occurred in 1858 when the bill to create a college and model farm was signed. This was followed by a stormy 38-year gestation that involved the entire agricultural interests of the state. The most far-reaching events were the passage and acceptance of the Morrill Act and the Hatch Act by Iowa.
HUSBANDRY

THE FIRST 25 YEARS

Iowa was an agricultural state of diversified family farms in 1896. Chicago was the grain and livestock market of the Corn Belt. The abundant corn crop of Iowa was marketed through hogs, cattle, and sheep. The stock were shipped by rail to Chicago and sold to major packers by commission firms on the largest stock yards in the world. The packers shipped the carcasses by refrigerated rail cars back east and for the first time in history provided “meat for the millions” as the nation industrialized. Chicago had the largest horse and mule market in the world as well. The milk sheds around the growing cities expanded as rail transport developed. Poultry products were sold locally and provided “egg money” for many farm wives.

Chicago was the center of the booming purebred livestock business. The British stock breeding system, which had developed breeds of livestock and promoted them through fairs and livestock shows where the stock were ranked by judges, was imported along with the new breeds perceived to be adapted to the needs of an industrializing nation. The Breeder’s Gazette, first published in 1881 by the Sanders family in Chicago, became the bible for the entrepreneur stockmen who both imported stock and developed purebred herds and flocks of the new breeds. The breed associations for the new breeds were located in the Livestock Records Building at the entrance to the stock yards. Chicago was the hub of American livestock agriculture in 1896 as a new department in agriculture began at the Iowa Agricultural College under the leadership of Curtiss.

“The agricultural colleges were then in the primitive stage of establishing a place of usefulness and service to the livestock industry of America. ... Practical stockmen did not accord a high rating to college faculty or student judges, and the estimate of the probability of the colleges ever being able to furnish animals of sufficient merit to compete in open classes was even less.” (Curtiss quote from Sanders, 1942)

This was the challenge as seen by Curtiss, the first professor of animal husbandry and later head in 1898. Curtiss was both a researcher in the agricultural experiment station from 1891 on and a prominent livestock judge at major fairs and shows. He was able to gather a faculty that conducted research and equipped graduates who could participate in the current livestock industry.

Agriculture Hall was completed in 1892. The second floor was the location for animal husbandry and the rest of agriculture. On the ground floor, there was a livestock room where classes of stock were judged by students. Dean Curtiss, until he retired in 1932, made sure the grass on campus was mowed with teams of horses.

Iowa State University Library/University Archives.

In 1898, the college became Iowa State College of Agriculture and Mechanic Arts. The seal had the motto, Science with Practice. It succinctly states what the college is about. Science is first and its application is the logical result of acquiring the basics. We owe the early basic scientists, who found opportunity at Iowa State, a great deal. They fought for a college solidly grounded in the basic sciences, not an ag tech school. Science first and then its application has made the department a world leader over the 100 years.

Science was first, but Curtiss had to attract students and train them to be participants in the current livestock industry where being able to rank stock visually on type or judging was paramount for stockmen. John A. Craig, head of the first animal husbandry department in the country (1890) at Wisconsin and later on a member of the experiment station staff at Iowa State, was first to include livestock judging as a classroom exercise in animal husbandry. He started the first intercollegiate livestock judging competition in 1898. Training in judging and developing existing herds and flocks at the model farm into teaching examples of the breeder’s art were important to Curtiss.
There's murmur ripples among the crowd,
   There's a stir at the entrance gate,
Where biting the bit bars, prancing and proud,
   The Percheron geldings wait;
Then, shining harness and lights ablaze,
   As slow to the rein they swing,
With foam on their bits the Armour grays
   Come champing into the ring.

There's a muffled thunder of trampling feet
   And a roar like the roar of the tides,
And someone shouts and the rest repeat
   "Here come the Morris Clydes!"
And the hearts of the Scotsmen thrill and “lep”
   As the team no wealth can buy
Spurning the dust with their “heather step”
   In the pride of the north go by.

It is far and far to Chicago now
   And the glitter of yonder teams;
I shall never see them again, I trow,
   Except in the land of my dreams!
But oft when all sounds are stilled
   I can hear the cheers roll down,
And see the ring with the splendor filled
   Of the teams of Packingtown.

The 20th century was ushered in by the livestock community at the first International Livestock Exposition (1900) held at the Union Stock Yards in Chicago at Thanksgiving time. Conjured up from the livestock of a continent, it sprang into astonishing existence. One innovation was the intercollegiate livestock judging contest and another was classes for finished stock of the colleges. The Iowa team was 5th in 1900.

In 1902, Curtiss was made dean of agriculture and director of the experiment station. Willard J. Kennedy, who had won the international judging contest in 1900 for Illinois, was made the second head of animal husbandry and judging team coach. The Iowa teams promptly retired the coveted Spoor Trophy by winning in 1901, 1902, and 1903. The bronze bull, that became the symbol for the International, graced the rotunda of Curtiss Hall for a long time. Also, Iowa produced the International Grand Champion steer in 1902, 1905, 1910, and 1911. And the students came! The list of early B.S. graduates in animal husbandry reads like a who's who in the livestock world.

These photos picture what W. H. Ogilvie, the first teacher in agricultural journalism at Iowa State, depicted in his poem “The Teams of Packingtown” in 1906. Armour and Company and the Morris Packing Company, later to become Wilson and Company, used the hitches to advertise as Budweiser does now.

The winning team of 1901 consisted of H. O. Tellier, E. H. Hall, R. J. Kinzer, E. B. Kennick, and J. J. Hoover. Kinzer became an instructor; went to KSU; and then on to be the American Hereford Breed Association Secretary. Pictured is the Spoor Trophy—the bull in defiance stance—sculpted by Isadore Bonheur. Iowa State has this bronze.
Craig initiated livestock judging and put emphasis on the aesthetics of the animals judged in his *Judging Livestock* published in 1901. Carl W. Gay published *Principles and Practice of Stock Judging* in 1914, which was couched in terms of anatomy and physiology. Then in 1915, W. H. Vaughn published *Types and Market Classes of Livestock*, which was based on market usefulness. All three were faculty members of the department at Iowa State. And J. H. Shepperd, the lone agriculture student when Wilson came, was the long-time superintendent of the International contest.

The Saddle and Sirloin Club was founded in 1903 and was located on the top floor of the Livestock Records Building. This building was next to the quaint Stock Yard Inn adjacent to the amphitheater where the International was held. Members of the livestock fraternity lunched on fine linen with silver at the club. It was Tudor appointed, reflecting the British heritage, and over time, the walls were hung with portraits of livestock greats. The portraits were hung with ceremony at International time and included portraits of college men who had rapport with the industry.

The harvest festival initiated by Curtiss in 1898 had outgrown the campus by 1904. Perry G. Holden, the corn evangelist, came to Iowa in 1902 and with his corn trains, set the stage for a state act in 1906 that provided for an extension department with Holden as superintendent. Unfortunately, selection of desirable ears did not increase yield, but Holden’s influence dominated the corn shows for a long time. This was the beginning of extension in Iowa.

The dairy husbandry program was a part of the department from the beginning, but early on dairy industries became a separate department. The year 1906 marks the beginning of the American Dairy Science Association (ADSA). Four presidents have come from Iowa. The first president was Raymond R. Pearson, who later became president of Iowa State College. The *Journal of Dairy Science* was initiated in 1917. The Iowa Beta Chapter of Gamma Sigma Delta, the honor society of agriculture, was installed in 1907, and the first conclaves was held at Iowa State in 1910. H. H. Kildee was national president in 1945. Chapter presidents from the department were Rex Beresford, A. B. Caine, M. D. Helser, W. F. LaGrange, A. L. Anderson, R. M. Kottman, S. L. Balloun, L. E. Johnson, C. F. Foreman, M. R. Geasler, P. O. Brackelsberg, M. D. Kenealy, and P. L. Spike.

The American Society of Animal Science (ASAS) started in 1908 with Curtiss and Kennedy as charter members of the animal nutrition group. In 1915, the name was changed to the American Society of Animal Production to include teaching, breeding, and management. Iowa State was host in 1917, but after 1919, the meetings were held in Chicago at the Sherman House during the International. Starting in 1961, the society began meeting at universities and changed its name to ASAS. Faculty were deeply involved from the start. C. F. Curtiss, J. M. Evvard, H. H. Kildee, J. L. Lush, W. A. Craft, P. S. Shearer, ard our current head, Dennis Marple, were society presidents.

The first poultry husbandry faculty member was H. C. Pierce in 1908. By 1911, there were 13 courses listed, and numerous experiment station publications were produced. In 1917, a 20-acre poultry farm was established for research. By 1919, there were nine poultry faculty.

In 1908, the Poultry Science Association began. Pierce was a director. The third meeting was held at Iowa State in 1910. In 1914, a journal was published, and in 1926, the name became Poultry Science Association. J. L. Sell served as president in 1986.

The department moved in the summer of 1910 to the first floor of the new agricultural hall (now Curtiss Hall) so the dean could supervise the department since his office as dean was on the same floor, fireplace and all. The department occupied the north half of the first floor. Dairy and poultry husbandry had the first two rooms on the east side of the south corridor. Extension.
An early picture of what would become Curtiss Hall. Animal husbandry was located on the first floor in 1910 and moved to the ground floor in 1952.
Iowa State University Library/University Archives.

personnel were in the southeast corner room. The agricultural library occupied the southwest corner room. Additional space was made available by the removal of the library to the new college library in 1925. Thereafter, extension was brought together in Morrill Hall, much of which had been used by the library. Curtiss Hall, built of Bedford limestone, stands as a tribute to the continued faith of Iowans in their Democracy's College.

The same year, 1910, John M. Evvard, a research scientist trained at Missouri, joined the experiment station staff as assistant chief in animal husbandry. He worked in animal nutrition and is credited with 1,100 papers ranging from basic to applied. He worked with George Snedecor, who became a statistician, on the design and interpretation of animal experiments. He studied self-feeders, compensatory gain, supplements for corn, and mineral relationships in swine as well as do-

ing cattle studies and building a graduate program. He was a charter member of the Osborn Research Club that started in 1920. The club still meets and many faculty belong.

In 1912, Raymond Pearson became president of the college. By training, he was a dairy man and acquainted with agriculture. Perry Holden left extension and W. J. Kennedy was made director. W. H. Pew, who came as a faculty member, became head of the department and coach of the livestock judging team. During the early years of stock judging, Kennedy was embroiled in a judging team scandal. That and other problems forced Pearson to ask for Kennedy's resignation which he got. In 1914, the year that the Smith-Lever Act, which provided for the cooperative extension service, passed Congress, R. K. Bliss, a 1905 animal husbandry graduate, was made director of extension in Iowa. He built the program for the next 50 years.

As the department grew in number of students and curricula, a need for a student club was recognized to supplement the Agricultural Club for all agriculture students. The animal husbandry club, called the Saddle and Sirloin Club, was formed in 1913. In 1918, members met with similar clubs and formed the National Block and Bridle Club. Since the start, the club has been the largest and most active one at the college. From 1914 on, the club has conducted a Little International, a stock show for the final laboratory exercise in a required judging course. The club is where students learn organizational skills and leadership. The activities of the club have expanded over the years.

The undergraduate program of the department was second to none. The students were taught and advised by a young and active faculty. They became expert stock judges winning at the International and the American Royal in Kansas City many times. E. N. Wentworth ('07) wrote the prize song, State College of Iowa, which was adopted as the official alma mater. Wentworth was also a livestock judge. Included among the students are R. K. Bliss, C. W. Gay, and M. P. Jarnagan in 1903; W. H. Pew and E. N. Wentworth in 1907; W. H. Black, G. W. Godfrey and Henry A. Wallace (founder of the first hybrid corn company, Pioneer, and Secretary of Agriculture during the depression) in 1910; R. Beresford and E. L. Quaife in 1911; P. S. Shearer in 1912; R. C. Pollock (National Livestock and Meat Board) in 1913; F. S. Hultz in 1915; W. F. La Grange in 1917; M. R. Irwin in 1920;
and V. B. Hamilton (Farm Bureau) in 1921. These men all occupied positions of leadership in agriculture.

By 1915, there was a cattle shed, old cattle barn, three judging pavilions, two hog barns, the experiment station barn, sheep barn, and a new horse barn on the East campus. There was a horse barn for the grounds department because Dean Curtiss loved horses, and the campus mowing machines were horse drawn until he retired. The dairy farm of 170 acres south of the campus was purchased in 1905, and the dairy stock was moved there in 1907. The poultry farm was just north of the dairy.

The department began developing plans for teaching herd barns on the northeastern corner of the campus in 1915, but the first World War stopped activities. The Meat Laboratory was the first building completed in 1918. It was the second meat laboratory on a college campus and had a judging arena, meat demonstration facilities, slaughter floor, and coolers. It was called Helser's or Pew's Cathedral, because of its church-like architecture. M. D. Helser, the meats professor, was a lay preacher and attended the Collegiate Presbyterian Church, which was designed by the same architects.

The flocks and herds of the model farm were the initial livestock used in the teaching laboratories of the department. Over the years, stock was purchased by the faculty, both in Britain and from prominent stock breeders. P. S. Shearer in his 1960 history of the department describes the beginnings of the herds.

The departmental research program was a part of the agricultural experiment station from its inception in 1888. By 1920, work with swine, sheep, cattle, poultry, and horses had outgrown the facilities. A farm of 182 acres located south of Lincoln Way and east of Beach Avenue was developed as the animal husbandry experimental farm. This farm was where the Iowa State Center, initiated by a department graduate of 1923 and later President of Iowa State College, James H. Hilton, is located now.

The Smith-Lever Act of 1914 that provided for the cooperative extension service passed in congress just in time to mobilize the nation for the first world war. The number of faculty and associates who were state livestock extension specialists in dairy, poultry, and animal husbandry increased dramatically. Numbers by 1920 were three in dairy production, three in animal husbandry, and two in poultry husbandry.

From its inception, the department has had a strong graduate program, even before the graduate college was formed in 1913. The first M.S. with a major in animal husbandry was awarded to W. K. Robbins in 1880. The first Ph.D. recipient was W. E. Villegas of the Philippines in animal husbandry, and C. W. Knox received the Ph.D. in poultry husbandry both in 1921. Several of the graduate students were instructors and then became faculty members. They were W. Dinsmore, E. N. Wentworth, H. H. Kildee, P. S. Shearer, M. D. Helser, A. B. Caine, and W. E. La Grange. The graduate program being strong was responsible for the great impact it had on the whole of animal husbandry. The department provided faculty for many of the departments being formed in colleges and universities over the nation. Of the graduate students up to 1921, 1 was a university president, 2 were agricultural deans, 7 were department heads, and 20 became faculty members.
World War I ended in 1918. W. H. Pew resigned as department head, and H. H. Kildee became the fourth department head of animal husbandry. The department started offering a two-year, winter-quarter program called the Herdsmen's Course. This very successful program provided herdsmen for the livestock industry and a program for those returning to a livestock farm. More than 2,000 were graduated by 1954 when the program became a part of the farm operations curriculum. This curriculum became part of agricultural studies and was discontinued in 1995.

The department from 1918 to 1954 had a two-year, winter quarter herdsmen’s course. Pictured are the 1935 herdsmen students and the faculty.

In 1919, the USDA, in cooperation with the colleges, launched a program titled “Better Sires: Better Stock.” The use of purebred sires to improve commercial production was promoted by the faculty and staff with gusto. Breed associations became powerful; the most notable was the American Hereford Association with R. J. Kinzer, a 1901 graduate of the department, as the secretary.

In 1920, an agricultural depression hit the nation; it was the result of the great demands of the war and a sudden lack of markets. The Packers and Stockyard Act of 1921 regulated the marketing of livestock, and the National Livestock and Meat Board was born.

The first 25 years of the department were ones of increase in the numbers of faculty, undergraduate, and graduate students. Livestock judging was a primary part of the curriculum and the teaching herds were developed. Research efforts multiplied and livestock extension specialists served Iowa.

THE SECOND 25 YEARS

The second twenty-five years of the animal husbandry department began during the agricultural depression of the 1920s, continued through the great depression of the 1930s, and ended after the second world war. These were trying times for all concerned. Thousands of family farms went broke, but often the families stayed as renters. The number of farms and the rural population held relatively constant since there was nowhere else to go. The livestock, dairy, and poultry extension personnel at Iowa, along with the Farm Bureau, helped the people through.

President Pearson gave the keynote address at an agricultural conference in 1921 held by President Warren G. Harding. The address was titled, A National Policy for Agricultural Research. This set the stage for continued research in the department.

The campus armory was built in 1921 with a dirt floor so the horse drawn artillery units of the ROTC could train in bad weather. The library was completed in 1925; it has one of the best collections of agricultural literature in the states. E. W. Lindstrom, trained at Wisconsin, became head of genetics and was instrumental in securing the service of J. L. Lush in animal husbandry in 1930.

In 1922, all the spring celebrations by the divisions of the college and their departments were combined into the first Veishea. It is one of the largest student-run celebrations in the country. The Block and Bridle, Dairy

The departmental clubs have participated in Veishea since its inception in 1922. Displays to promote the clubs and the department, food booths, and sometimes floats for the parade were done. The 1925 sweepstakes float was Dairy Husbandry.
Science, and Poultry Science Clubs have participated with displays, floats in the parade, and food stands, as well as a large horse show, now held at the State Fairgrounds. Undergraduates assume leadership roles, making the celebration a valuable educational experience.

The beef teaching herd grew in stature under the leadership of Professors Curtiss, Kildee, Stephenson, and Shearer. The longtime, Scottish herdsman, George Edwards, came in 1923. He transmitted the Scottish traditions to many of the students. Graduates looked up George on their return to campus.

Beginning in 1923, the department realized a teaching herd complex on the northeastern edge of the campus and even advertised the department to passengers on the railroad. The hog barn with a small pavilion (1923), the sheep barn (1923), the cattle barn (1925), and the horse barns starting in 1925 were hollow tile, gable roofed barns with aesthetic yet a practical appearance. The livestock pavilion was completed in 1925 and represents the college to many students.

The year 1925 clearly belonged to Dean Curtiss. He was the first faculty member to have his portrait hung in the famed Saddle and Sirloin Club. The judging team only placed 5th, but Iowa State showed the Grand Champion steer, Mah Jongg. The dean was a stock breeder on his 330-acre Rockwood farm near Ames. He was director of the International Livestock Exposition for many years and in 1911 was the most published animal husbandry researcher. The dean was a dapper Victorian gentleman. His tradition lives on because the professors of agriculture on the frontiers of science are given the title of C. F. Curtiss Distinguished Professors of Agriculture.

The Purnell Act of 1925 provided funds for livestock products research, and the meats faculty took advantage of the opportunity. The Capen-Zook Report ranked the college as one of the top technological universities of the nation. Henry A. Wallace ('10) taught a course on statistics and enticed G. W. Snedecor to become a statistician. In 1933, Snedecor started the first statistical laboratory that helped in the analysis of research conducted in the agricultural experiment station.

In 1926, federal beef grading was started. F. J. Beard, later a faculty member, was involved. The intercollegiate meat judging contest was started the same year. But the significant event in corn belt agriculture was the formation of a hybrid seed corn company called Pioneer by Henry A. Wallace ('10). The adoption was swift and by 1934 uniform fields of hybrid corn blanketed Iowa. This did not go unnoticed by animal breeders. C. W. Knox of poultry husbandry established inbred lines of chickens that have served as the foundation for much subsequent poultry breeding and immunogenetics work.

The Livestock Pavilion was built in 1925, and many former students, especially judging team members, remember it fondly. This structure for a long period has been used daily for laboratory classes that used stock. Today, however, it leaves much to be desired.

Iowa State University Library/University Archives.

The year 1925 belonged to Dean Curtiss. His portrait was hung at the Saddle & Sirloin Club, and the steer Mah Jongg was Grand Champion. Pictured is the steer and from right to left: George Edwards, the herdsman at Iowa State; the judge, J. Egerton Quested of Kent, England; E. N. Wentworth, the International Ringmaster; John Clay, the Commission Man; H. H. Kildee; and last Dean C. F. Curtiss. Note the spats on Curtiss and the English judge.
Meat judging began in 1926. Pictured is M.D. Helser's team of 1929. The members are R. Held, E. H. Hall, W. I. Pepper, and C.R. Plager.
Iowa State University Library/University Archives.

After years of planning and fund raising, the Memorial Union opened in 1928 under the direction of Col. H. E. Pride. The commons served as a place for faculty and staff coffee breaks. Many were the discussions of current research by faculty and graduate students. In 1929, the year the stock market crashed, Wallace's Farmer listed the ten greatest discoveries in agriculture in the last 20 years. The college played a part in all ten.

Despite the bleak economic outlook, Jay L. Lush, a student of Cole at Wisconsin and a researcher at the Texas A&M Experiment Station, joined the faculty of the department. He developed a graduate program and founded the discipline of animal breeding that used the quantitative approach. With no funding for research, his first students did genetic histories of breeds using the herdbooks of the department.

P. S. Shearer became the livestock judging team coach in 1931, when the team won the American Royal and the International contests the same year for the first time. This was quite a coup for the department. A year earlier, outlying experimental farms began to be acquired. Over the years, these have been used extensively by the department.

In 1933, F. D. Roosevelt became U.S. President and selected Henry A. Wallace ('10) as his secretary of agriculture. H. H. Kildee became dean of agriculture and R. E. Buchanan, the director of the agricultural experiment station. Curtiss had been both when he retired in 1932 after 30 years. M. D. Helser, the meats professor, became dean of the new junior college. And in April of 1934, the Union Stock Yards of Chicago burned. This included the amphitheater, the Livestock Records Building, and the Stock Yards Inn. It was rebuilt in time for the International in November, and the artist R. W. Grafon reproduced the portraits destroyed by the fire.

P. S. Shearer became the 5th department head in 1935. J. C. Holbert was the livestock judging team coach. Funding was minimal, and it is a tribute to Shearer that the department continued to educate both undergraduates and graduate students of merit while continuing a sound research program.

The 1931 team coached by P.S. Shearer was his triumph because for the first time the team from Iowa State won both the Kansas City and the International contests!

So important was Chicago as the center of the livestock industry, no time was lost after a tragic fire in April of 1934 to rebuild and host the International in November of 1934. The amphitheater was big.
The 1936 Yearbook of Agriculture was dedicated to "the creative development of new forms of life through plant and animal breeding." Henry A. Wallace ('10) argued for the regional concept of research or cooperative research. W. A. Craft (USDA-BAI) moved to Ames in 1937 and set up the Regional Swine Breeding Laboratory. The yeasty annual meetings of the state and federal collaborators was where the field of animal breeding matured. The laboratory demonstrated the potential of regional research that became funded by the Research and Marketing Act of 1946. The Napier swine research farm of 342 acres gave animal breeders on the faculty the opportunity to develop inbred lines of Poland China swine.

The animal husbandry faculty (staff) are pictured in 1935. From left to right: In the back row are Plum, Willham, Wilcke, Lush, Henderson, Beresford, Hammond, and Hansen. In the front row are Arnold, Beard, McDonald, Anderson, Melby, Caine, LaGrange, and Shearer.

Iowa State University Library/University Archives.

Two books published in 1937 put the Iowa State College Press on the map. They were Animal Breeding Plans by J. L. Lush and Statistical Methods by G. Snedecor. In 1943, A. L. Anderson published his book, Introductory Animal Husbandry, a text that had a profound influence on undergraduate teaching. In the same year, L. N. Hazel, a student of J. L. Lush, published on the selection index that had profound effects on the animal breeding fraternity.

The graduate student numbers declined as the depression lengthened as did undergraduate numbers. Graduate training for faculty in other animal husbandry departments was accommodated. The graduate students from 1921 to 1945 numbered 255 for the department. Of these 80, or 31%, were or became faculty members of which 16 were at Iowa State; 19, or 7%, became department heads; 3 became deans; and 3 college presidents. This is not a bad record for a heritage of leadership. Also, A. D. Buchanan-Smith (MS '24) became a Scottish Lord.

The poultry husbandry program was led by H. A. Bettenbender, R. Cochran, E. Henderson, and H. L. Wilche. In 1946, poultry became a separate department under R. E. Phillips. The dairy husbandry program was led by C. Y. Cannon, and the dairy extension group was active in DHIA work.

On January 7, 1941, the Japanese attacked Pearl Harbor, starting the nation's involvement in World War II. Classrooms were empty of students. The faculty, who had loaned students money in the depression, now carried on correspondence with students who were in the military. And the teaching faculty of Anderson, LaGrange, Caine, Holbert, Cannon, and others helped the returning servicemen find jobs once the war was over. In 1944, the National Research Council published dietary standards for livestock. Iowa State research and faculty were involved. Without any knowledge by the Ames community, a small frame building housed from 1942 on the portion of the Manhattan Project that produced bomb grade uranium. The atomic bombs dropped in 1945 ended the war.

During World War II, the classrooms were not full, but many military training programs were on campus. Pictured is P.S. Shearer (at halter) and Dean Kildee talking cattle with three homesick servicemen.

Iowa State University Library/University Archives.
SUMMARY

The first 50 years of the department of animal husbandry at Iowa State College were filled with firsts. They set the stage for the performance of the department in service to science, education, and animal agriculture. These years set the heritage of leadership for the department that now had a sound reputation the world over. The early years involved the building of a faculty and staff. In all the years, livestock, poultry, dairy cattle, and meat judging were integral parts of the program for undergraduates as was their leadership roles in the departmental clubs. The graduate program was essential to the development of many newly formed departments of animal husbandry. Research efforts continued to expand, even in the depths of a national depression. The extension faculty were important in the development of animal agriculture in Iowa and the nation. This department was in the right place at the right time to make things happen. Much of this opportunity had to do with being in Iowa, a livestock state. A world war followed by a lengthy agricultural and national depression and a second world war matured the department, but by 1945, the department was positioned for a literal explosion in research, teaching, and extension opportunities.
THE LAST 20 YEARS IN CURTISS HALL

Monumental changes occurred in the livestock industry during the second 50 years of the department. Some of the changes were a result of the teaching, research, and extension programs of this department. Possibly the largest contribution to change was the direct result of having educated producers and service persons in leadership roles. These people could embrace change, see opportunities, and make reasoned decisions, a product of their education.

The livestock industry still sells perishable, biologically variable, food products for the most part. The trend is to sell standardized, processed products rather than to sell a commodity. Food consumption patterns have changed with the advent of the fast food industry and the diet-health concerns with animal fat. The industry has and is addressing the issues. Livestock marketing is decentralized because trucking on the interstates replaced rail. Vertical integration in broiler and egg production is nearly complete with contract producers for giant food companies. Meat processors have moved to box the products. Milk is marketed through cooperatives to large creameries that make a variety of food products. Pork production is moving toward large, specialized, confinement producers that are becoming integrated. Most beef is fed in giant, southwestern feedlots, using feed grains rather than grass, that now support more cows and calves. Iowa family farms are more specialized and larger in size, but fewer in numbers. Land once used to support the draft horses is now in corn and bean production, produced with large mechanized farm equipment. Livestock shows are still important, but now breeding stock is selected based on genetic predictions of economic performance that come from records of performance, and commercial crossbreeding in several species has become the rule. The growth and development and production of stock is managed by using balanced, least-cost rations. Enhanced reproduction is the rule, with the use of frozen semen in artificial insemination in particular. This department has participated, innovated, and logically responded to these changes over the last 50 years, as well as positioned itself to lead in the biotechnological revolution currently going on.

Many factors conspired to make the recovery from World War II explosive in terms of growth. The things left undone because of the war and the preceding depression turned into opportunities of great dimension in research, teaching, and extension efforts of the department; funding, new research farms, and facilities became available through the experiment station. But most important were the new faculty hires who had the vision, training, and enthusiasm to develop singular research programs dealing with the opportunities of the livestock industry. This was the era when discipline-oriented sections evolved.


These disciplines were animal breeding with J. L. Lush (1930) and L. N. Hazel (1947); swine nutrition with D. V. Catron (1945) and G. Ashton (1951); ruminant nutrition with C. C. Culbertson (1919) and W. Burroughs (1951); dairy nutrition, later named nutritional physiology, with B. H. Thomas (1931), N. L. Jacobson (1947), and R. S. Allen (1951); reproductive physiology with R. M. Melampy (1948); and meats with E. A. Kline (1948) and J. Kastelic (1950). The Regional Swine Breeding Laboratory under the capable leadership of W. A. Craft (1937) and G. E. Dickerson (1941-1947) continued to research and coordinate swine breeding.

The demonstrated success of the laboratory led to the Research and Marketing Act (PL-733) of 1946 that provided for coordinated regional research (North Central, Southern, and Western). Long-term breeding research (beef and dairy in 1947) found a home for more than 40 years as did other disciplines.
Research farms and facilities were forthcoming after the war. Swine nutrition and management research moved to an 88-acre farm on State Street south of Ames in 1944. The college acquired 1433 acres once used as ordnance storage at the plant located south of Ankeny, after it was declared surplus by the government in 1946. The department was assigned 1000 acres for research studies in poultry, swine, dairy, and beef breeding. A special appropriation by the state legislature in 1953 was used to buy 300 acres and develop facilities for the beef nutrition program that was located north of Ontario, Iowa. Barns at the dairy farm south of the campus were remodeled for intensive dairy nutrition work that included calves. Forage studies were conducted by the dairy nutrition group at the Beach Avenue farm. Facilities at the poultry farm north of the dairy were enhanced. Livestock projects in several species used land on the developing outlying farm system.

The dairy barns south of campus. The dairy herd was moved here in 1908 from the old cattle barn on campus.
Iowa State University Library/University Archives.

The GI bill, which provided funds for returning service persons to pursue a higher education, both undergraduate and graduate, was as important as the Morrill Act in terms of opening Democracy’s Colleges to all. Enrollment tripled from 1944 to 1946. Students were more mature and motivated, many were married. Pammei Court married student housing was built with surplus military buildings. The department lost a sheep pasture but gained students.

The teaching section was enhanced by new faculty: E. A. Kline (1948), J. J. Kiser (1951), and D. C. Acker (1956). Acker wrote an introductory text, Animal Science and Industry, and became head of the farm operations program. The department taught courses for this program.

The dairy extension section was enhanced by the hiring of R. Fincham (1941) and D. E. Voelker (1947). The DHIA records were computerized in 1957, and the system was expanded to service more states.

The graduate program expanded, especially in animal breeding and nutrition. The students on the GI bill were serious, talented, and made contributions to their disciplines. Faculty positions in which to place the graduates were numerous in the land-grant colleges.

E. A. Kline came to ISC in 1948. He coached the meat judging team from 1948 to 1963. Pictured is the 1950 team with G. Weise, W. Dubbert, R. Myers, D. Archer, and D. Rinner.
Iowa State University Library/University Archives.

Iowa State University Library/University Archives.
In 1949, F. C. Andre, an entomologist, was made Dean of Agriculture and Director of the Experiment Station. Dean Kildee continued to judge stock of all species at major shows and became involved in international programs, but he found time to visit George Edwards at the beef barn. This was a year of changing the guard all over campus.

The National Science Foundation (NSF) and the National Institutes of Health (NIH) began in 1950 to provide research funds. The federal government had experienced the power of science to solve problems (for example, the Manhattan Project) and set out to encourage research to solve pressing problems of the age. The basic physiology research in the department found a source of support. Business machines of IBM began to appear in colleges. The computer revolution and information age had started.

In 1950, a heterosis conference was held on the campus. Geneticists participated from around the world. Animal husbandry, statistics, agronomy, genetics, and breeding organizations cooperated to host the fruitful conference. This was followed in 1952 by a conference titled Statistics and Mathematics in Biology. The same year, Melampy organized the first conference on female reproduction in farm animals at Iowa State. This continues as the Biennial Reproduction Symposium of ASAS. The departmental faculty were leaders in their respective disciplines.

The Department of Agronomy moved in 1952 from Curtiss Hall to its new building, constructed where the first cattle barn stood. The animal husbandry department moved to the entire ground floor of Curtiss Hall and proceeded to become wedged in every nook and cranny. The department head office was located in the south corridor on the east side. Behind the head's desk was a tinted collage of Longhorn and Hereford cattle watering. The herdbook room was on the same side. At the end of the south corridor was a classroom and the offices of the teaching section. On the west side was livestock extension; dairy extension was still in Morrill Hall. Nutrition and physiology laboratories lined the north corridor and ended with the ruminant and swine nutrition offices. Reproductive physiology was in the basement. Under the auditorium were the animal breeding (south) and dairy (north) sections. In the basement below the auditorium, the poultry department had its offices.

Besides new quarters, J. L. Lush and A. W. Nordskog, a poultry breeder, at the request of the commercial breeding companies, instigated the Poultry Breeders Roundtable, which became a yearly affair. What was asked was to have a program of papers by breeders and geneticists who were on the front line of genetics research whatever the species. Many noted geneticists addressed the meetings over the years. This has continued.

The 1922 team coached by P.S. Shearer had several notables. Pictured are J. C. Holbert (faculty member and judging team coach), S. S. Wheeler, D. S. Dubbert, H. B. Boyle, S. I. Graham, and J. H. Hilton (later President of Iowa State).

Iowa State University Library/University Archives.

In 1953, after a long search, James A. Hilton, a 1923 graduate of the department, became President of Iowa State College. He was the first alumnus and the second from agriculture to grace the Knoll at the college. Curtiss had been a candidate, both in 1901 and 1910. The same year, the structure of DNA was reported by Watson and Crick. This discovery was to revolutionize biology and influence the research of the department. Also, L. N. Hazel developed the 10-cent backfat probe in swine,
which, after verification in the cooler by E. A. Kline, provided a way to select pigs for reduced fat without using a progeny test. The probe did for swine what Babcock’s fat test did for milk recording. Soon after, R. M. Durham was hired in extension to capitalize on the probe. The result in 1956 was the first boar testing station and was located west of Ames.

One of the most important and far-reaching events in the department in the early 1950s was the patenting of defined levels of diethylstilbestrol (DES), a growth-promoting hormone, to feed beef cattle for improved growth and efficiency. The saga includes how Wise Burroughs found that quality clover hay contained estrogens that enhanced growth, and how he, by studying the literature on DES, determined the levels to produce the desired effects, but not the negative ones. The work with the Iowa State College Research Foundation to secure the patent, the feud with colleagues at Ames and Purdue, the announcement at Cattle Feeder’s Day in 1954 that turned the feed industry upside down, the struggle to secure FDA approval, the involvement of President Hilton in the licensing done with Lilly, and the phenomenal use of Stilbosal by the feeders make a story worthy of the book about it by A. I. Marcus in 1994. The events changed the way new technology was utilized and controlled by the Food and Drug Administration. Eventually DES was banned in 1979. A portion of the proceeds from the patent built Lush Auditorium, and the use of DES enhanced the profitability of cattle feeding.

In 1954, L. E. Johnson replaced P. S. Shearer as department head. The research section heads had great power because they had distinguished themselves in their discipline and had attracted a growing number of graduate students. Departmental focus was sectional rather than unified, and the number of undergraduate students had declined. Johnson go: a new building, was able to get money from the Dean and had a desire to improve undergraduate teaching.

Dean Andre divorced the close relationship between the Farm Bureau and the cooperative extension service of Iowa in 1955. This gave extension more opportunity to educate. The Ames community and the college cooperated to secure for Ames the National Animal Disease Laboratory. The department conducts cooperative research with the USDA scientists at the NADL.

The 50-year anniversary of ASAS had an apologetic paper on livestock judging by A. E. Darlow in 1958. He noted that “Each of these men who walked into the classroom of the arena, for all the world to see, has proven to be a master teacher.” The faculty in our department who judged—Curtiss, Kennedy, Pew, Kildee, Shearer, Holbert,
Anderson, La Grange, and many others—were "master teachers."

The centennial of Iowa State College was in 1959, and that year the name became Iowa State University of Science and Technology. To witness the stone masons change COLLEGE to UNIVERSITY on Beardshear Hall would have pleased President Pearson who proposed the change in the 1920s.

The animal breeding faculty consisted of Lush, Craft, Hazel, L. D. McGilliard (1949-1956), and A. E. Freeman (1956-). Inbreeding was studied in dairy, beef, and swine. A twin dairy project was started at Ankeny. The synergistic group of graduate students numbered between 10 and 20 and taught each other. The international flavor, with students like Tom Sutherland (1954-1958) from Scotland, who later became world-known as a U.S. hostage in Lebanon, enhanced the group. The graduate program was the best in the world.

In 1959, Lush was asked to study the genetic effects of irradiation in swine by the Atomic Energy Commission. The study was concluded in 1968. D. F. Cox (1960-1968), R. L. Willham (1959-1963), and Eric Andresen (1960-1967), the swine blood group expert from Denmark, were the first faculty on this project. Facilities were constructed at the Bilsland farm near Madrid, Iowa, along with a laboratory building between the sheep and swine teaching barns. Avoidance behavior and mortality studies were initiated. In more than 30,000 swine, there was little evidence for significant genetic damage. Cox made sure all faculty and staff found positions before he closed the project and moved to statistics to teach the agriculture graduate students.

D. F. Cox, weighing, and H. Henderson, herdsman ear notching, are collecting birth data in the swine irradiation study.

The swine nutrition faculty were Catron, Ashton (1951-1956), and J. T. McCall (1961-1964). When Catron left in 1959, he was replaced by two of his students, V. C. Speer (1957-1990) and V. W. Hays (1954-1966). Catron was a dynamic personality in tune with the interests of the feed companies. He directed more than 500 nutrition experiments at the State Street farm. Besides conducting basic and applied studies that gave the life-cycle program, the swine nutrition group reported in 1967 on swine confinement results before such was in vogue.


In 1959, Iowa State College became Iowa State University. The change in name was watched from Curtiss Hall by members of the department.

Iowa State University Library/University Archives.
The dairy nutrition section, which rapidly evolved into the nutritional physiology section, faculty were Jacobson (1946-1974), G. L. Wise (1947-1949), B. H. Thomas (1931-1949), and R. S. Allen (1951-1966) who was joint with biochemistry. Research dealt with calf nutrition physiology and the conquest of bloat (conducted on the fields of the old research farm along Beach Avenue). Also a 17-year study of atherosclerosis that started with a National Institutes of Health grant in the 1950s with goats used as a model. This was one of the early studies to investigate diet-health issues. D. C. Beitz replaced Allen in 1966 and J. W. Young came in 1965. Both developed basic research programs. A. D. McGilliard came in 1957 and quickly developed expertise in surgery to install monitoring devices necessary to the research program.

Poultry was a separate department from 1947 to 1973. R. H. Forsythe became head in 1960 when undergraduate numbers were from 25 to 30. The graduate programs in breeding under A. W. Nordskog (1945) and in nutrition under S. L. Balloun (1950) were strong. Nutrition requirements and blood group research were conducted. Extension activities were done by L. Z. Eggleton (1960). W. W. Marion (1960), later head of poultry and then head of food technology, conducted product research.

R. M. Melampy (1948) conducted reproductive physiology research, and his undergraduate reproduction course was considered to be one of the best. He was a taskmaster with graduate students, but he produced many leaders in the field. L. L. Anderson (1958), one of his students, joined the faculty and does basic and applied experiments while being an excellent teacher.

The meats section added D. E. Goll (1962- ), F. C. Parrish (1965), D. G. Topel (1965), and later M. H. Stromer (1968). A research program that initiated the muscle biology section began.

A new management research program started in 1961 with H. L. Self (1959). Self was professor in charge of the outlying farms where the studies were conducted. W. F. Hoffman (1969- ) was the first Ph.D. student.


The first Iowa Swine Testing Station was started by R.M. Durham in 1957. He helped build it and used his gruff extension style with gusto! R.C. de Baca (lower center), J.B. Herrick (center), W.G. Zmolek (right center), T.W. Wickersham (right), and R.E. Rust's meat trailer are shown.
Iowa State University Library/University Archives.

puter. R. Snyder (1923-1931) was in meat extension, but R. E. Rust (1959-1994) popularized what was under the hide and conducted sausage schools for a world clientele. Veterinary extension with J. B. Herrick (1948-1977) and M. L. Spear (1956-1970) was housed with the group. E. Haynes (1956) moved from sheep extension to teaching. This faculty provided state leadership through educational meetings but evolved to schools that covered a variety of topics in more depth.

Pictured is A. Anderson teaching a course in nutrition. The professors of the department are remembered by students for their advising and help.
Iowa State University Library/University Archives.

The dairy teaching section expanded, even with the loss of C. Y. Cannon in 1951 and D. L. Espy in 1956. Blake, Cook, Lambert, and Miles were members for short periods. A. R. Porter (1931-1938, 1939-1974) became section head in 1951. L. Ratcliff (1956-1969), J. A. Simms (1959-1974), G. E. Stoddard (1949-1952), and C. F. Foreman (1955-1985), who became section head later, were participants. These professors recruited students from their involvement with the industry, and worked closely with the some 100 students in the dairy science curriculum. Porter and Foreman recruited students just as H. H. Kildee had done.

A. B. Caine was the draft horse professor. He is shown teaching Breeds of Livestock in the herdbook room in Curtiss Hall. Students are using the herdbooks to generate pedigrees of specific animals.
Iowa State University Library/University Archives.
THE FIRST 20 YEARS IN KILDEE HALL

Disciplines were developed in the department, but a synthesis of information from them must be amalgamated into a decision-making framework of systems for use by the livestock industry. Further, the nature of the problems being researched required a team approach that included several disciplines. And the computer revolution that occurred between 1966 and 1985 was capitalized on by faculty. Again, industry leadership was exerted by the animal science department.

The major event in 1965 was the move to a new building constructed just for the department. It is located in the old steer pasture west of the judging pavilion and the meat laboratory. It was dedicated as Kildee Hall at a ceremony in Lush Auditorium in the summer of 1966 with Dean Kildee in attendance. Planning began in 1962 and A. E. Molin, a staff member, made sure that there were one-person offices located around the parameter of each floor with the laboratories and classrooms in the center section. Nutritional physiology, swine nutrition, and beef nutrition occupy the third floor, with poultry science and animal breeding on the second. The first floor has livestock extension, the animal and dairy teaching sections with the Anderson/La Grange reading room, and the main departmental office. The basement has dairy extension, reproductive physiology, and laboratories under the auditorium. The main entrance lobby between Kildee and the auditorium has a mural that depicts the history of Iowa livestock agriculture and the activities of the department. It was created by D. Kirsch, the artist in residence at the university.

Kildee Hall was occupied by the Animal Science Department in 1965. It is a four-story building and includes the 425-seat Lush Auditorium. Dean Kildee attended the dedication in 1966.

Iowa State University Library/University Archives.
In 1967, continental breeds of cattle were imported by way of Canada, and in 1968 the Beef Improvement Federation, a federation of performance groups in the beef industry, was formed to provide guidelines for performance testing and genetic prediction. Faculty were deeply involved in the development of the federation and Willham wrote a history of its first 25 years. And people landed on the moon in 1969. The year 1970 marks the beginning of modeling animal production systems at Texas and California.

L. R. Kolmer became Dean of Agriculture and Director of the Experiment Station in 1973. H. L. Self helped bring together the feeder and cow-calf groups into the Iowa Cattleman’s Association in 1972. A symposium was held in honor of J. L. Lush in 1973, and C. R. Henderson’s paper at the symposium detailed the statistical methodology to make BLUP genetic predictions, from field data. Since, this methodology been used in beef, dairy, swine, and sheep programs. Henderson’s thesis at ISU contained the basic ideas.

In 1973, S. A. “Bud” Ewing became the 8th department head. Ewing is perceptive and was a good leader for the department, with time to listen and dream because he organized the growing administrative paper work and hired an administrative assistant.

During this period of departmental history, animal breeders were helping the livestock industry develop evaluation programs that included genetic predictions of individuals based on the performance data.
During this period, A. E. Freeman worked with the bull studs to research problems using both DHIA and project data, develop and refine the young sire sampling programs of the studs, and with P. J. Berger develop sire evaluations for dystocia. Through the Beef Improvement Federation, Willham developed beef sire evaluation guidelines and programs in the breeds. In 1980, he and Berger conducted a field data sire evaluation along with the genetic trends using Angus data. Currently all animals of the several breeds have genetic predictions.

The genesis of the muscle biology section grew from the meats research and from biochemistry. D. Goll came in 1962. The section was housed in the Dairy Industries Building until it moved to the Molecular Biology Building in 1992. Goll, Stromer, Parrish, and R. Robson, who came in 1972 with a joint appointment in biochemistry, made up the synergistic group. The first graduate level course in muscle biology (Molecular Biology of Muscle) was taught by this group. A classic series of ten papers was published on the molecular properties of postmortem muscle, and the calpain system was researched from 1971 on. In 1976, muscle biology became a separate section of animal science.

The beef nutrition section of Burroughs, Trenkle, and Vetter conducted studies on the value of nonprotein nitrogen; developed assays for hormones in the blood; determined the feeding value for animal wastes, high-lysine corn, and corn dried at high temperatures; studied corn-crop residue as a cow feed; and began basic studies involving protein synthesis as related to growth.

V. C. Speer, R. C. Ewan (1965-), and D. R. Zimmerman (1967-) made up the swine nutrition section faculty. Amino acid requirement studies, sow production level research, energy availability of feeds, selenium studies, and young pig diets were topics of the work.

The reproductive physiology section faculty were R. M. Melampy and L. L. Anderson. Estrus control of heifers, embryo transfer, and ovarian follicular development were studied in cattle. Embryo loss in swine also was investigated.

The animal breeding section faculty were Freeman, R. L. Willham (1966-), P. J. Berger (1972-), L. L. Christ- tian (1965-), and D. L. Kuhlers (1973-1977) who replaced D. G. Sires (1969-1972). A dairy-beef crossbreeding study, DHIA data studies, a selection study using high and average dairy bulls, Tribolium castaneum research, and work on the stress syndrome in swine using a halothane vapor screening were topics being investigated.

The poultry science section faculty consisted of L. Z. Eggleton (1946-1980), W. J. Owings (1964-1995), R. J. Hasiak (1972-1991), C. D. Lee (1952-1972), C. L. Nelson (1974-1977), R. H. Forsyth (1960-1967), W. W. Marion (1971-1973), G. Brant (1971-), S. L. Balloun (1971-1975), A. W. Nordskog (1945-1983), and J. J. Sell (1976-). In the 1940s and 1950s, the poultry industry of Iowa was a national leader, but in the 1960s, 1970s, and 1980s, there was rapid down-sizing in Iowa; poultry production moved southeast. Research in nutrition of chickens and turkeys continued as did product research and, in particular, genetic studies involving the blood group locus that was found to be associated with the immune response and disease resistance. Extension was active in conducting studies to determine the economics of production in Iowa. Currently the poultry industry is increasing in Iowa.

The meat science section faculty were F. C. Parrish (1965-), J. G. Sebranek (1975-), and D. G. Topel (1964-1979). Both trained and consumer panels were used in product studies. Meat palatability appeared not to be
related to marbling level, and the prediction of tenderness was studied by using other criteria. Soft, pale, and exudative pork problems were researched.

The dairy teaching faculty consisted of C. F Foreman, W. W. Wunder (1968-85), D. R. Mertens (1973-1974), M. D. Kenealy (1975-80), and A. R. Porter. The dairy science club continued to be active, and the banquets were well attended. A "special problems" laboratory dealing with herdsmanship was developed.

The dairy extension faculty and staff were D. E. Voelker, R. E. Whitmore (1961-1974), K. Nelson (1970-80), B. R. Eastwood (1965-1979) and R. Orth (1975- ). Educational messages were broadcast on the radio; use of DHIA records in decision making was promoted; and dairy meetings were held.

The livestock extension faculty were W. G. Zmolek, T. W. Wickersham, E. J. Stevermer, R. E. Rust, M. R. Geasler (1970-1975), G. H. Rouse (1973) and D. R. Strohbehn (1973-80). Seminars on the beef business in Iowa were conducted; EPA guidelines for feedlots were contributed to; meat short courses were developed; and systems analyses of swine and cattle production were planned.

The teaching herds were still a part of the teaching program. The herd persons continue to influence many students. The purpose of the herds and flocks is to demonstrate breeding, feeding, and management systems for Iowa and to provide stock for classes. The beef, swine, and sheep units have participated in the transition to performance evaluation and have participated in the state programs of testing. In 1975, D. R. Strohbehn suggested to the Iowa Beef Breeds Council that all the purebred production sales be consolidated into an Iowa Beef Exposition. It runs a for week at the State Fairgrounds.
The faculty and staff also participate in departmental social events. There was a formal fall tea held at the department head's house until 1975. Since then, a Chuck Wagon Breakfast has been held. Many faculty and staff spouses participate in a group called Kildeetees. The spouses of some of the faculty and staff become as well known as their spouses, for example, Jim and Betty Kiser and Tom and Janie Wickersham. The faculty and staff participate in many civic activities and raise families in the Ames area. The academic year is closed with a picnic.

In 1995, the 21st Chuck Wagon Breakfast was held in the Livestock Pavilion. The faculty, staff, and guests enjoy the omelets cooked to order and the fellowship.

In 1975, Ewing brought on the faculty P. L. Spike and in 1985 D. E. Wilson, both animal breeding graduates, to be systems analysts and develop the use of personal computers for decision making by producers. Ewing saw the revolution in computers coming and placed the department in a leadership role. The livestock extension section adapted quickly. The chip for the handheld computer to make management decisions was marketed by Texas Instruments in 1979. And program development continued. Spike is teaching undergraduates in the computer lab in the basement.

In 1977, the new meat laboratory was built north of Kildee Hall, the ADSA national meetings were held at ISU, and the Rhodes farm for research was acquired from Pioneer, who had developed it for beef production. Ewing secured funding for a state-of-the-art meat laboratory, which expanded the opportunity for meats research. D. G. Topel was the chair of the planning committee. The ADSA meeting was held at the Scheman Continuing Education Building. N. L. Jacobson and C. F. Foreman chaired the organization committee of that successful national meeting. The Ankeny beef breeding herd was moved to the Rhodes farm. Ewing set up a beef systems group of all faculty involved in beef research. Both basic and applied studies are conducted at Rhodes. The beef extension people designed and conducted numerous studies, which was a first. J. R. Russell (1978-) works in forage research for beef cattle, and S. P. Ford (1979-) works in reproductive physiology. M. F. Rothschild (1980-) works in swine breeding and has become a noted molecular geneticist. S. J. Lamont (1984-) works in molecular genetics and immunogenetics with poultry. And the work of Freeman with D. C. Beitz and G. L. Lindberg (1992-) in nutritional physiology, on mitochondria, the energy source of the cell, moved the animal breeding section into molecular genetics.

In 1984, the Meat Export Research Center was established by a special, earmarked appropriation by the state legislature. Ewing again secured the funding. This group, with D. G. Olson (1980-) as director, conducts research on product development and increase of shelf life and does marketing research. Later MERC became a part of the Utilization Center for Agricultural Products and Olson was appointed director. Both plant and animal products are researched.

The Poultry Science Association's national meeting was hosted by the department in 1985 with J. Sell as chair and some 1,154 persons in attendance. Earlier meetings of the PSA were held at Iowa State in 1910 and 1959.
The Meat Export Research Center conducts research and develops links in the expansion of meat product sales around the world as the logo indicates.


In the 1980s, an agricultural depression precipitated by high land prices and interest rates hit Iowa. Many livestock producers went out of business. All in agriculture worked to help solve the problems, and the university was given a mandate to work on economic development.

The department ushered in the computer age in teaching, research, and extension. The use of research teams to solve problems started. Performance testing and the use of genetic predictions came in vogue. Both basic and applied research results were published. The undergraduate and graduate programs continued to be among the top programs in the country. Departmental clubs were active, and the judging teams continued to be successful, although they were not as important as in the first 50 years of the department.

**THE LAST 10 YEARS**

Gordon Eaton became President of Iowa State University in 1986 to start the last 10 years of departmental history. One of Eaton's priorities was to remake the university with emphasis on the development of centers to solve problems of economic development. Eaton demanded from the legislature, and got, appropriations for faculty pay raises. Eaton left in 1990, and his new provost, M. D. Glick, became acting president. He instituted Project Vincent that brought to ISU one of the best computer networks.

In 1991, M. C. Jischke became president. He and his wife, Patty, opened the Knoll, the traditional home of ISU presidents, with functions that honored students, faculty, and alumni.

In 1988, D. G. Topel, a former faculty member in the department, became Dean of the College of Agriculture and Director of the Agriculture and Home Economics Experiment Station. Since Curtiss became dean in 1902 to the present, the college dean has been someone from the animal science department for 55 of the 94 years. Topel secured legislation that gave the experiment station an additional 3 million dollars for 5 years starting in 1990.

The Dean of Agriculture, David Topel, was a member of the department from 1964 to 1979. He conducted creative research, inspired both graduate and undergraduate students, and was chairman of the group that brought the new Meat Laboratory to completion.

Iowa State University Library/University Archives.
S. A. “Bud” Ewing announced in 1991 that he was stepping down as head. His contributions to this department are many—he facilitated the growth and development of the faculty and staff and the programs as well as giving real direction to the activities.

In 1992, Dennis Marple, who became the head at Auburn when Topel left, became the ninth department head. His B.S. and M.S. degrees are from ISU. He brings a quiet style of leadership.

The Leopold Center for Sustainable Agriculture was created in 1987 to identify impacts of agricultural practices, develop profitable farming systems that conserve natural resources, and inform the public of findings through the extension service. Interdisciplinary issue teams were created. J. R. Russell of the department became chair of the animal management team established in 1989; 6 members of 13 were from animal science. The objective is to develop forage-based beef production systems. Results of research have been presented over the state.

A powerful graduate program that now includes molecular biology studies in the several disciplines is being conducted. Outside grants have become a larger part of the total research support and that for research assistships. A higher fraction of graduate students is from other countries. Research excellence is recognized yearly by the Holco awards, and students give departmental seminars.

The undergraduate program of animal science offers 40 courses and has three majors, animal and dairy science and a pre-vet major. The students are advised by faculty, a long-standing departmental policy. The livestock judging teams won national honors in both 1992 and 1993. The other judging teams, including the new horse judging team, were successful as well. The departmental clubs have been active. New courses offered include animal biotechnology, companion animals, domestic animal behavior, lactation biology, embryo transfer, and growth and development, as well as the computer courses. In 1989, P. A. Miller joined the faculty and does research, teaching, and extension in horses. H. D. Tyler joined in 1991 in dairy teaching as did M. A. Faust in dairy extension.

The Livestock Judging Teams have competed with other universities since 1900. The teams from this department have been national champions 20 times. This is far above any other department.


In 1990, the animal science department hosted the national meetings of ASAS. M. W. Jurgens was the general chair of the event. An art exhibition titled Art About Livestock opened in conjunction with the meeting and ran for three months at the Brunnier gallery.
In 1990, the university was host to the annual meeting of the American Society of Animal Science. The logo for the meeting reflects ISU and the society logo in the year. The O represents a ring chromosome of bacteria in which has been inserted foreign DNA. This suggests the importance of molecular genetics in the 90s.

The art exhibition titled Art About Livestock was opened in conjunction with the ASAS meetings in 1990. In its three-month duration, some 16,441 people experienced the exhibition. The formal opening was a black tie affair. Pictured with one of the three bronze bulls in the exhibition are the Willhams.

After a 10-year effort by Iowa State faculty and others, a shipment of Chinese pigs arrived in 1989. Intensive basic and applied research related to these pigs has taken place in several disciplines. The reproductive ability of the Chinese pigs is higher than that for domestic swine, and they may have disease resistance abilities. Reference families have been developed. The estrogen receptor gene is the first to be patented in the department.

The coming of the Chinese swine was important. Pictured are some of the sows and members of the research team including (left to right) Lizhen Wang, Ruth Larson, Xiaozee Duan, Jeannine Helm, Yunsheng Wu, and Lori Messer.

Illustrated is a pig chromosome with the location of known portions identified. The U.S. Pig Genome Mapping effort is headed by Max Rothschild.

Max Rothschild is the head of the National Pig Genome Coordination Effort, which is a collaborative effort by stations, the USDA, and scientists from the European PiGMap group. A data base has been developed and is available through the World Wide Web. A consensus map is being developed.
Transgenesis is the process of creating genetically modified organisms through the transfer of single genes not represented in the parental genome. The first transgenic animal was reported on in 1980. The ISU Agricultural Biotechnology Program has made start-up packages for new biotechnology researchers. C. R. Youngs joined the faculty in 1989 and C. K. Tuggle came in 1991. Youngs has started the development of transgenic techniques for large animals, and Tuggle began work on identifying useful genes. In late 1991, Tuggle produced the first transgenic mouse fetus. The Animal Gene Transfer Facility was developed by 1992.

Tom Sutherland, a graduate of the department who had been held hostage in Lebanon for 6 years, and his wife Jean returned to campus for Veishea of 1992 where they were the parade grand marshals. The department held a ceremony for them in Lush Auditorium and presented them with a scherenschnitte by Linda Emmerson that depicted their graduate student days (1954-1958) at Iowa State. A special B&b display in the pavilion was dedicated to retiring head Ewing and the Sutherlands.

An interdepartmental graduate major in genetics was established at Iowa State in 1992. Some 50 geneticists, including those in animal science, participate. This indicates the central importance of DNA in all of biology and molecular biology in particular. In the same year, the Molecular Biology Building was occupied and the muscle biology section moved there.

In 1993, the AN CY newsletter to alumni, both graduate and undergraduate, was started. M. H. Jurgens is the editor. The purpose is to keep alumni informed of the academic community to which they still belong.

D. E. Goll left the muscle biology section in 1976. P. J. Bechtel joined the faculty in 1977 and left in 1979. T. W. Huiatt joined the faculty in 1982. In the mid-1980s, the group developed the concept of the muscle cell cytoskeleton. They demonstrated through research that the key attachment sites and their proteins are critical in understanding both growth and the meat produced.

The linear accelerator facility was added to the east of the new meat laboratory and opened in 1993. Here, meat, other foods, and flowers, for example, are exposed to irradiation to enhance shelf life by killing microorganisms. Hazards are minimized by electrically generating electron beams rather than by using spent radioactive materials. The facility will enhance the programs of MERC and the Food Safety Consortium.

The Utilization Center for Agricultural Products (UCAP) under the direction of D. G. Olson strives to bridge products and technology development with the commercial use of the technology and products. It has four focused research programs—the Meat Export Research Center, the Center for Crops Utilization Research, the Food Safety Consortium, and the Linear Accelerator Facility. These were brought together in UCAP in 1992.
The Discovery Unit for swine nutrition, behavior and management research was completed in 1992. It consists of production and research facilities for 200 sows and litters in confinement and is located on 160 acres four miles west of campus.

The Swine Nutrition, Behavior, and Management Center was completed in 1992 and consists of production and research facilities in confinement. The Discovery Unit, located on 160 acres four miles west of the campus, replaced the old swine nutrition farm on State Street.


D. E. Wilson and G. H. Rouse have focused on the application of real-time ultrasound technology to beef and some work in swine since 1988. It is a collaborative effort with the Center for Nondestructive Evaluation. The evaluation of body composition in the live animal and the objective determination of marbling are the primary interests. Cumulative funding since 1988 for ultrasound projects exceeds 1.8 million dollars. The group measures fat thickness, rib eye area, and percent ether extract in the eye muscle through their research. They hold ultrasound training and certification programs for operators at the university in cooperation with the Beef Improvement Federation. Genetic predictions for body composition are being developed, but the most exciting is that this technology can measure intramuscular fat in beef carcasses at line speeds. This can negate the subjective element in federal grading. An image processing center for ultrasound readings has been developed as a prototype.

The research on ultrasound as a means of measuring body composition in live animals has led to the genetic predictions of composition, especially in beef cattle. Cooperation with the Center for Nondestructive Evaluation has led to the opportunity to make federal carcass grading objective. Pictured is G. H. Rouse and D. A. Duvelo, a student operating the computer.

The department has been involved since its inception with international activities. P.O. Brackelsberg is the coordinating professor for short-term training programs in the department. In 1994, Dean Topel formalized an agreement to continue schools in China and Russia and explore schools in Cuba started by Gene Ensminger of his Agriservice Foundation. Since 1930, agricultural study tours to foreign countries have been available to undergraduates. The department faculty have often been involved in international meetings, and some agreements of cooperation have been made with foreign universities and groups, including the Ukraine and Costa Rica. Livestock agriculture is now international in dimension; genetic predictions of some species are now reported on an international basis. The teaching programs include the international dimension because the entire university is becoming more involved.

The department underwent a comprehensive USDA-CSRS review of its programs in 1994. D. N. Marple, with faculty and staff input, developed an imposing document for use by the review team of peers. Their suggestions are being implemented currently.
This review document details the current research, teaching, and extension activities of the department. Only highlights of the work of a synergistic faculty and staff are related in what follows.

The animal breeding and molecular genetics section faculty are P. J. Berger (computation), L. L. Christian (swine), M. F. Rothschild (swine), A. E. Freeman (dairy), C. K. Tuggle (molecular), S. J. Lamont (poultry), and R. L. Willham (beef). Current work is in quantitative and molecular genetics and immunogenetics. In 1994, the section conducted a symposium on Future Genetics for the Animal Industry, and The Genetics of Populations by J. L. Lush was published.

The meat science section faculty are C. L. Knipe (1984- ), F. C. Parrish, J. G. Sebranek, R. E. Rust, J. C. Cordray (1995- ), and D. G. Olson. Current work is in enhancement and development of animal products and their evaluation in an international market.

The nutritional physiology section includes J. W. Young, D. C. Beitz, G. L. Lindberg, R. L. Horst, T. A. Reinhardt, and N. L. Jacobson. Current work is in gluconeogenesis, mitochondrial genetics, cholesterol reductase, exercise physiology in horses, and milk fever. Faculty are members of numerous research teams.

The reproductive physiology section faculty are L. L. Anderson, S. P. Ford, and C. R. Youngs. Current work is in breeding and parturition hormone relationships, use of RU486, control of pregnancy, and embryo technology. Much of the work is basic.

The ruminant nutrition section faculty are A. H. Trenkle, S. Nissen (1982- ) and J. R. Russell. Current work is in measurement of protein metabolism, study of HMB, and forage utilization.


Pictured is the research team of (left to right) John Mayfield, Gene Freeman, Don Beitz, and Gary Lindberg who since 1985 have researched the role of mitochondria, the energy production centers of cells, in dairy cattle breeding.

Pictured is Joe Sebranek holding a meat grinder that he developed in 1990 to remove bone chips.

Pictured are S. P. Ford, L. L. Anderson, and C. R. Youngs, the faculty in reproductive physiology, at the Animal Reproduction Laboratory west of the campus.
The poultry section faculty are J. L. Sell, S. J. Lamont, W. J. Owings, G. Brant, and D-U Ahn (1994). Current work is in computer supported teaching (Brant), molecular and immunogenetic studies (Lamont), chicken and turkey nutrition (Sell), poultry product research (Ahn), and an active extension program (Owings). A. W. Nordskog was inducted into the Poultry Hall of Fame in 1995.

Production and management research were reported by M. P. Hoffman and by livestock extension to include D. R. Strohbehn, D. D. Loy, and D. G. Morrical, as well as studies by M. S. Honeyman.

The animal, dairy, and poultry extension sections faculty are P. J. Holden, D. C. Morrical, E. J. Stevermer, D. E. Wilson, D. R. Strohbehn, D. D. Loy, R. E. Rust, J. C. Cordray, T. J. Baas, M. A. Faust, L. L. Timms, L. H. Kilmer, D. E. Voelker, R. Orth, and W. J. Owings. Extension integrates specific research into production systems for use. The current role is to enhance the Iowa livestock industry, ensure the safety and value of animal products, encourage youth activities, encourage development of value-added products, and provide industry services. Information use in producer decision making has evolved as software development proceeded. Innovative programs are the rule, even though extension has undergone downsizing. Area livestock specialists have added to the programs.

The Iowa Pork Industry Center was created in 1994 with the mission to promote more efficient pork production technology in Iowa, to maintain Iowa’s pork leadership, and to strengthen rural development efforts. The center will complement the extension efforts. It is a coordinated effort of the Colleges of Agriculture, Business, Veterinary Medicine, and Engineering. L. L. Christian of animal science and J. D. McKeen of veterinary medicine are co-directors and are guided by an advisory committee.

The 1994 Iowa legislature approved $2.1 million for a pre-design phase in which plans will be developed for intensive livestock research and instruction facilities to support programs in animal science and veterinary medicine. The program for animal science includes an addition to Kildee Hall to provide space for instruction using animals, additional teaching laboratories, and facilities for intensive study of large animals, including research laboratories and offices for faculty. Also, the new Meat Laboratory with laboratories and support facilities will be completed. Further funds are needed to upgrade selected farm facilities.

The building for the National Swine Research Center is under construction close to the Meat Laboratory. USDA researchers will study problems of the swine industry, in particular problems related to environmental quality, facilities, and animal well-being.

The Outlying Research System farms have been assets to the research efforts of the department. H. L. Self and now M. S. Honeyman, on the department faculty, direct the farms. The Allee farm, the McNay Memorial farm, the Rhodes farm, the Western farm, and the Armstrong farm have animal science research projects.

Communication within the faculty and staff has been handled by each head. Methods include staff meetings, seminars with time for updates, newsletters, and now notices sent by e-mail. The department is in the computer age, and you can find us on the World Wide Web.
The Animal Science Department of Iowa State University will celebrate its centennial in 1996. The department is planning a celebration in the spring and you are invited.

The last 10 years are not yet history. History is the record of human activity passed through the filter of time to bring out the relevant. Change accelerates each year and is continually taking us by surprise. We had two new university presidents, two deans and two department heads in this 10-year period. New faculty were added, but several retired. The teaching programs include new technology and are more international in scope. Research is more basic, but extension has done singular applied studies. Important work in molecular genetics in the department is being done. The department is involved with the livestock industry just it has been for 100 years.

SUMMARY

The second 50 years of the Animal Husbandry/Science Department at Iowa State College/University were as filled with firsts as were the first 50 years. The heritage of leadership was enhanced as the building of a faculty and staff second to none continued. The opportunities in research, teaching, and extension after World War II were exploited by the department. During the first 20 years of the second 50, disciplines within the department were developed, and the graduate programs of the disciplines educated many of the leading researchers in the fields. Then in the next 20 years, research teams were created across the disciplines to solve more complex problems. The computer revolution was exploited as information was utilized through software development to make informed decisions for producers. This is similar to judging livestock, only now the process using genetic predictions is objective. Concurrently, biotechnology and molecular genetics have become integral to the sophisticated research program. Besides the basic studies to lay the foundation of knowledge for future technology transfer, many applied studies are conducted to answer current problems of the livestock industry. The undergraduate program has continued to evolve to prepare graduates to participate and lead in the livestock industry. This department has positioned itself well to serve the industry in research, teaching, and extension on into the 21st century.
VISIONS

THE NEXT 100 YEARS

Clear visions for the future are critical if the department is to achieve the mission given it by society. The mission of the Department of Animal Science and of Iowa State University is to create the future through discovery and to share the excitement of discovery with youth and the public. Creative youth are the future. For some 900 years, universities have contributed to western civilization, and thus helped this civilization to become a vigorous, multifaceted, self-transforming society.

This awesome responsibility was given by society to academic communities because there the creative minds of the age have the freedom to flourish. Thus, members of the community are free to dream, discover truth, challenge established ideas, and share the excitement of discovery and change with succeeding generations and the general public. True academic freedom—the protection of the creative visionaries—is essential to accomplish the mission. Society has benefited in often surprising ways.

Over the last 100 years, the departmental faculty have exercised their academic freedom to conduct research, promote programs, and provide liberal educations. For example, the transition from purely subjective appraisal of breeding stock to more objective means of providing genetic predictions of breeding stock was researched and promoted. The introduction of this technology and the resulting social change was not initially welcomed by many in the livestock industry. Yet, today, the technology is incorporated into industry programs, and the excitement of the transition has been shared by students, both undergraduate and graduate, and through extension with the public. This is but one example of many that demonstrate the heritage of leadership through the exercise of academic freedom.

Besides working for change, the faculty and staff have considered themselves a part of the livestock industry they serve. They have a profound respect for all those engaged in the industry and an understanding of the problems being faced. They participate in industry activities and conduct applied studies to find solutions to current problems.

Science found a home in the emerging land-grant colleges as the agricultural experiment stations developed. The academic communities, including Iowa State, proceeded to generate new knowledge at ever-increas-

ing rates. After World War II, however, a new challenge to academic communities arose. The problem-solving power of science led some to believe that if enough resources were concentrated into a perceived problem, science could solve it. Also, the cost of doing sophisticated research increased dramatically. These changes reduce the opportunities for the academic community to pose interesting, though not necessarily relevant, project-oriented problems and to have the finances to contribute new knowledge, often through serendipity. Care must be taken to keep research focused on the perceived needs of the researcher.

The department has had continuous representation on the ISU Biotechnology Council; thereby influencing the investments in and development of this area on campus. This involvement has catapulted departmental researchers into the forefront in biotechnology.

The visions of future research in the department range from basic to applied. Reproduction research will concentrate on understanding the female reproductive processes, so that the process can be controlled. Nutritional physiologists will study the physiology and biochemistry of nutrient use by animals and the enhancement of the nutritive properties of animal products. Swine nutrition, growth, and behavior research will

C. K. Tuggle is shown with a gel that shows genetic variation in a gene that regulates growth.
focus on biological relationships that have a major impact on animal well-being, productivity, and pork quality. Beef nutrition research will address the growth, development, and composition of fed cattle and the forage/animal interface of the cow herd. Poultry nutrition research will study nutrition-disease relationships and protein use with proteolytic enzymes in turkeys. Molecular genetics and immunogenetics research will determine fundamental biological mechanisms and continue to pioneer the application of emerging biotechnologies in livestock. Quantitative genetics research will enhance genetic predictions, estimate genetic parameters, and study health. Production and management research will develop production systems for Iowa and decision-making programs that utilize available information. Muscle biology research will concentrate on the function and organization of the muscle cell cytoskeleton. Meat science research will study enhancement of safety, control of quality and value, and expanding use of meat products and by-products.

The teaching program will continue to provide a liberal education to the students, both graduates and undergraduates. President Beardshear in 1900 succinctly stated the intent of the college, "The theory is that the young agriculturists or industrialists must aspire to a liberal education that will make him the peer of any educated or professional man in life." The department produces such graduates and will continue. Being current technicians of the age—expert livestock judges, successful producers, able laboratory technicians, or keen researchers and teachers—without the perspective of the past to create the future is simply not enough. Graduates will be provided the basic sciences that will allow them to retrain themselves, animal science to acquire the first employment, and liberal arts to expand into leadership opportunities. Faculty will continue to revise and develop a curriculum that is relevant to current needs. And the most important is that the faculty will continue the heritage of one-on-one advising that really makes a difference in lives.

Extension has survived some trying times of late. The delivery format in terms of audience and hardware will be continually updated. More applied research will be designed, conducted, and reported by extension. Extension will organize more sophisticated services to the industry because the faculty will continue to have deeper specific expertise. Service will fit the trends of the industry.

Pictured is a graduation exercise in Hilton Coliseum where B.S., M.S., and Ph.D. students in animal science were graduated with a liberal education. The commencement speaker is a faculty member of the department.

In 1962, W.A. Craft presented a departmental seminar on the change from husbandry to science, because in that year the name charge to animal science was made. Besides giving a historical review, he closed with a vision of things to come. He said there would be more basic research—and there has been. He said there would be more cooperation among disciplines in research and problem solving—and this has come to pass. He indicated that economic understanding was needed to provide profitable production systems—and this has occurred. Then he said that there is too much science taught at the expense of management in undergraduate courses—now, the systems approach is being woven into the production courses. A multiple use of experimental animals was visioned—and we do this now. Seemingly Craft had a clear crystal ball in 1962.

SUMMARY

The vision of the department is to achieve its mission, which is the creation of the future of the livestock industry. This will be achieved in the land-grant tradition. The faculty intends to create and dream, research the new theories, and integrate new knowledge into the whole. This new knowledge will be developed into technology and particularly biotechnology that will be the heart of programs of success in the livestock industry. This is exciting stuff and worthy of sharing with youth and the people through extension. The triad of research, teaching, and extension builds on itself and initiates change that accelerates in time. The student, both undergraduate and graduate, will continue to make this vision reality.
CONTRIBUTIONS

A SHORT SUMMARY
1896 - 1996

"Yet to admire our successes as if they had no past, would make a caricature of knowledge." Bronowski (1973)

The goal was to write one story, of the many possible, about the animal husbandry/science department at Iowa State College/University. The idea has been to bring to life our greats and to share the accomplishments of a synergistic first 100 years. Iowa has been from its inception, and still is, a livestock state. Animal agriculture is important, both to the state and this university. The department has been blessed with support from the state over the 100 years and has returned leaders and technology. Everyone who has been involved with this department is a part of this growing academic community—all made a contribution and this is the essence of the story.

![Graph](image)

*Livestock production is important in Iowa. Cash farm receipts from livestock are the primary source of agricultural income.*

FACTORS

At least 10 interdependent factors provide the network in which the activities of the department can be placed. Several of these factors were influenced by departmental activities, but others were signs of the times. These interdependent factors are as follows:

1. The literal explosion of science was a factor. The department contributed some truly classic papers that expanded the knowledge base in the sciences. The work in reproductive physiology, nutritional physiology, both ruminant and monogastric nutrition, and animal breeding and genetics has made such contributions. Also new knowledge from the basic sciences has been used by the faculty to enhance the production of livestock. The general importance of science, the experimental method in research, and the advances in data analysis and interpretation have been the backdrop of this century. The work in experimental design began in 1928 with Evvard and Snedecor and was continued by Lush and others.

2. The development of American agriculture over the 100 years has been both contributed to and reacted to by the department. Mechanization at first made the draft horse important, but later that source of power was eclipsed by the tractor and an oil-based dependence. This move made at least one-fourth more acres in Iowa available for crop production. At first, livestock markets were consolidated in cities such as Chicago, but by 1960 the livestock markets and packing facilities were decentralized and trucking replaced rail transport. This department contributed to the many changes in American agriculture. The rations fed (especially when couched in the concepts of life cycle nutrition designed by Catron), the traits selected, the use of AI in genetic prediction, the exploitation of heterosis through crossbreeding, and many other contributions by the department led to changes.

3. The participation in our national experience was complete by this department. Faculty, staff, and students were all involved in two major world wars and all the others. Extension led the way in Iowa toward producing more for the war efforts. The master swine producer program was started during World War II and still continues. Members of the faculty, staff, and students engaged in production agriculture contributed and responded to the farm programs of the USDA. This department has made a real contribution to the building in the United States of the unique social infrastructure called the land-grant system. Research, teaching, and extension are synergistic and have led to the most powerful agricultural or food production system the world has known.
These research facilities were in use just after the turn of the century by the department. Professor Evvard is shown.
Iowa State University Library/University Archives.

4. The establishment of the agricultural experiment stations was a key factor for the department. Many faculty and staff have experiment station appointments. The Iowa station began in 1888 after the Hatch Act, so was in place before the department started. Evvard was on the experiment station budget totally. The real importance of the stations is that new knowledge was generated. Davenport (1924) put it this way as government put science to work for agriculture, “From that day, colleges of agriculture went definitely on a scientific basis, and from that day forward they began to succeed. ... Farmers began to feel that the college man must know something and had ways of finding out things (research) not possessed by the man in the corn rows or the feedlot. ... Agriculture is really teachable, but from the standpoint of the science involved, not of an art to be practiced by traditional methods.” As the 100 years proceeded, faculty taught more and more science.

5. The organization of graduate education was an area of major contribution by this department. Our graduate program was developed early in the 20th century. Researchers trained graduate students. Faculty involved in judging major shows in the industry had little time to devote to graduate students. Therefore, as time went along and faculty were replaced, more were research oriented and fewer were generalists.

6. The generation of educated producers made possible the adoption of new technology. Our department produced many who became livestock breeders and producers over the nation. Many have responsible positions in the organizations that service the livestock industry.

7. The means to communicate have expanded every year of the 100. In 1914, the Smith-Lever Act was passed. It organized the Cooperative Extension Service in the United States. Iowa had extension by 1906. The extension agents were to interpret and take the research results from the Hatch Act directly to the producers. Researchers had long interacted with producers, especially from this department, but now there was a structure. The agents lived among the people. We now have area livestock extension agents as well as the state specialists. After the explosion of the first atomic bomb in 1945, we were to have entered the atomic age. Actually, we entered the information age that was stimulated by the computer—another Iowa State innovation. Today, communication is being revolutionized by the computer. Many problems to be solved today revolve around putting computers to work to utilize the wealth of information avail-

The castration of lambs was accomplished using the teeth. Many of our students do not have farm backgrounds now, so more management procedures must be demonstrated.
Iowa State University Library/University Archives.

Today, it is hard to find faculty with the breadth of interest to become department heads. A little natural selection has taken place. Those who reproduced (professors who trained graduate students) repopulated the departments of animal science the world over.
The computer age was embraced by the department early on. To deal with the mass of information available to make informed decisions today requires the computer. The students became computer literate in short order in the department. Many courses utilize the computer to better teach the material.

able so that good decisions can be made. It is the same as judging—using available information to make decisions in shades of gray.

8. The founding of scientific societies and their journals for the animal sciences was participated in by this department. ADSA, PSA, ASAS, and AMSA have provided a forum for advances in new animal science knowledge. The journals have provided a place for peer review and dissemination of information. Society meetings have stimulated the faculty and staff and the graduate and undergraduate students who attend.

9. The innovations of the industry organizations have been contributed to by this department. Leadership and the developmental research necessary for these organizations to develop and grow have been important. The National Livestock and Meat Board creation under R. C. Pollack of the department is an example as is the development of the bull studs, especially the current work of Tom Lyon of 21st Century Genetics.

10. The growth of colleges into universities had an impact on this department. Over the last 30 years, ISU truly became a university. Opportunities for our students to acquire a true liberal education blossomed. This has had an impact on the students, not that the previous graduates could not expand and grow into leadership positions both in academics and the business world.

At the 1987 ASAS meetings held at Kansas State University, Acker and Koch (1987) presented the significant accomplishments in livestock research in the last 100 years. The responses from leaders in animal science suggested that artificial insemination, crossbreeding, embryo transfer, and non-nutrient feed additives in both monogastric and ruminant nutrition were key contributions over the 100 years. This department has made significant contributions to each. In the list of the authors, they also included the concept, measurement, and use of heritability in the selection of livestock to which Iowa has contributed the most.

SUMMARY

We close this chapter with a simple abbreviated story of this department. The important issues should be clearly visible.

The 7th General Assembly of Iowa in 1858 provided for “A State Agricultural College and Model Farm, to be connected with the entire agricultural interests of the state.” The Morrill Act, which provided land grants to states for public higher education in the agricultural and mechanical arts, was signed into law by Abraham Lincoln in 1862. In 1864, Iowa State College became the land-grant institution in Iowa, and classes began in 1868 at Old Main.

The first campus building was the Farm House built in 1860. It was home to a series of early agricultural leaders, the first being N. S. Townshend who returned to Ohio. I. P. Roberts taught, conducted livestock experiments, and with President Welch presented farmer institutes in the state before going to Cornell. Millican Stalker taught and later returned to Iowa State in 1879 to start the first land-grant veterinary school. Seaman Knapp was professor of practical agriculture, wrote with Bessey the draft of what became the Hatch Act of 1887 that provided for state agricultural experiment stations, replaced Welch as president in 1884, left the next year to see the Hatch Act through Congress, and became a leader in youth activities.

The first 24 years of “liberal” education was not what the powerful Stockbreeders Association desired for their offspring. Led by “Uncle Henry” Wallace and “Tama Jim” Wilson who were both journalists, the demands of the association were met by the board of trustees of the college. Wm. Beardshear, a reverse collar politician, was selected as president, and “Tama Jim” Wilson became professor of agriculture (Dean) and director of the agricultural experiment station in 1891. Wilson resided in the Farm House.
Much has been said about Dean Curtiss over the years. He created the College of Agriculture at Iowa State on a firm foundation of research, excellent teaching, and extension. Today, we have Charles F. Curtiss Distinguished Professors of Agriculture and the tradition continues.

Also in 1891, Charles F. Curtiss, an Iowa farm boy from Nevada and graduate of Iowa State College, joined the faculty of the experiment station and earned his M.S. in 1894. Wilson and Curtiss as a team developed agriculture at the college. In 1896, Curtiss, whose reputation as a livestock authority was growing, was made professor of animal husbandry. At this time, producer groups were recognized by the establishment of departments of dairying, animal husbandry, and farm crops. Curtiss was named head of the department in 1898.

In 1896, Wilson took leave, with Curtiss in charge, to become U.S. Secretary of Agriculture under his friend Wm. McKinley. He served 16 years under three presidents and made the USDA into the premier agricultural research institution of the age. To lay the foundation for “A Heritage of Leadership,” the two USDA arches that join the agriculture buildings across Independence Avenue in Washinton, D.C., are named Wilson and Knapp after two livestock men of Iowa State College and residents of the Farm House.

During the formative years of Iowa State College, political turmoil centered around having an ag tech school or a college solidly grounded in the basic sciences. At the time, scientists found opportunity in the land-grant institutions just coming of age. Our motto and seal “Science with Practice” adopted in 1898 succinctly states what the college is about. Science is first, and its application is the logical result of acquiring the basics. We owe the early basic scientists at Iowa State a great deal. Science first and then its application has made the department a world leader over the 100 years.

The 20th century was ushered in by the livestock industry at the first International Livestock Exposition, held at the Union Stockyards in Chicago at Thanksgiving time in 1900. College men contributed to its success. A collegiate livestock judging contest was a new feature.

Curtiss was made dean of the agriculture college and director of the experiment station in 1902 and twice was a candidate for president of the college. Agricultural colleges at the time were establishing a place of service to the livestock industry. Practical stockmen gave low ratings to college faculty, student judges, and the chance for stock from the teaching herds to compete in shows. It was important for the colleges to have winning judging teams and prize stock. Curtiss named W. J. Kennedy to be head and coach of the livestock judging team. Kennedy had coached the winning Illinois team in 1900. He promptly retired the coveted Spoor Trophy for Iowa by winning in 1901, 1902, and 1903. The bronze bull graced the rotunda of Curtiss Hall for a long time, and the students came.

The judging of livestock as a classroom exercise and the collegiate contests were initiated by John Craig when he was head at Wisconsin and later on the faculty at Iowa State. The process, making decisions (placing the class) and then justifying the placing by giving reasons when all choices are in shades of gray, is what leader-
ship is about. "A Heritage of Leadership" comes in no small measure from the exhaustive training given students in livestock judging. Practice of the process promotes leadership skills as attested to by the many students who became leaders! The livestock judging teams have competed since 1900 and have been the champion team 20 times, far more than any other institution. The dairy cattle judging team has participated since 1908. There was a poultry team from 1920 to 1959. There has been a horse team since 1990, a meat evaluation team since 1970, a meat judging team since the inception of the contest in 1926, a wool team from 1961 to 1969, and an academic quadrathlon team since 1979.

The Saddle and Sirloin Club, which served meals opened in 1903 close to the Chicago Stockyards. Over time, the club developed a portrait collection of livestock greats including leaders from the colleges. The department at Iowa State has had portraits of 28 faculty and former students hung at the club, 42% of all the academics represented. Each had rapport with the livestock industry. The tradition continues at the North American Livestock Exposition in Louisville, Kentucky.

Animal Husbandry became a department while housed in Agricultural Hall (now Carrie Chapman Catt Hall). Dean Curtiss loved horses; they were used to mow the grass until he retired in 1932. His family lived in the Farm House from 1897 to 1946. In 1910, the department moved to the first floor of the new Agricultural Hall (now Curtiss Hall). A feature of the new quarters was the herdbook room where students produced the pedigrees of noted animals for class. The second meat laboratory on a land-grant campus was completed in 1918 and served the teaching program well. It was called Helser's Cathedral because of its church-like architecture.

The faculty in charge of the teaching herds secured stock from prominent breeders and made trips to Britain to secure animals that were used to promote the new breeds and win market class championships at the shows. Dean Curtiss enticed George Edwards of Scotland to be the longtime beef herdsman. The herdsman had lasting influences on the students. The herdsman course of the department from 1918 to 1954 gave the livestock industry more than 2,000 graduates.

This sketch of our Pavilion was created by Clint Hansen. Many were the classes of livestock that were placed by students from 1925 on.
Early on, the teaching herd barns were the original cattle barn (where the Agronomy Building is now), two horse barns, and barns for cattle and sheep all on the East Campus. The dairy cattle were moved to new facilities south of the campus in 1905. The poultry farm was where the Towers dorms are now. In the mid-1920s, the gabled roof, hollow brick barns for swine, sheep, bee, cattle, and horses of the teaching herds were constructed and constituted an attractive set of buildings. In 1926, the Livestock Judging Pavilion to match the barns was built central to them. This is the building remembered by students taking courses with judging laboratories and especially by the judging teams.


The faculty of one, Curtiss, in 1896 grew to 5 by 1900 and was 26 by 1920, where it stabilized through the agricultural depressions of the 1920s and 1930s. Numbers rose after World War II to 42 by 1950, and by 1960 there were 63 faculty. Numbers have fluctuated between 60 and 65 for the last 30 years. Since 1896, the department has had 306 faculty members with the rank of Instructor and above. A total of 46 were associates in the department. There are 12 distinguished professors among the faculty; seven of whom are active participants in the academic community today.

The Animal Husbandry/Animal Science Faculty

The faculty of the department began with one in 1896 and today has some 60 members in research, teaching, and extension.

Departmental faculty were on the experiment station staff from its inception in 1888. The department made ration and breed comparisons in the set of research barns of 1904, located where the power plant now stands. Later the Beach Avenue farm was the site for livestock investigations, especially with feeding of forages to stock. The Iowa State Center now occupies the site. Research involvement gave the department the opportunity to foster a scientific education, and both the undergraduate and graduate programs began to succeed. The most innovative early researcher was John Eward, a nutritionist. He and George Snedecor developed and promoted the use of statistics to design, analyze, and interpret research data. Jay L. Lush came in 1930 and built the discipline of animal breeding. He developed a gradu-
Professor Jay L. Lush was a graduate teacher. He could explain a concept verbally, mathematically, and draw a picture of it too. He created animal breeding as a discipline in animal science. Pictured with him is Dr. Chantalakhana of Thailand.

The department was home of the first trial for the Regional Research concept as proposed in 1936 by the Secretary of Agriculture, Henry A. Wallace, a 1910 graduate of the department. Bill Craft, also a graduate, became coordinator of the Regional Swine Breeding Laboratory at Ames in 1937 and built it into the setting in which the field of animal breeding developed. Its success paved the way for subsequent regional research.

After World War II, research opportunities expanded, and several new research farms opened. The department organized discipline sections with new faculty who had vision and enthusiasm to develop singular research programs, attract graduate students, and solve problems of the livestock industry, now being led by former students ready to adopt the new. The new research leaders were L. N. Hazel (1947) in animal breeding, D. V. Catron (1945) in swine nutrition, W. E. Burroughs (1951) in beef nutrition, R. M. Melampy (1948) in reproductive physiology, J. Kastelic (1950) in meats, and N. L. Jacobson (1947) and R. S. Allen (1951) in what became nutritional physiology.

When the agronomy department moved to its new building in 1952, the first floor of Curtiss Hall became the location for animal science, with livestock extension returning from Morrill Hall. The GI bill and the provision for student housing (Pammel Court) allowed the graduate programs of the disciplines to expand. The graduate program was strong even before the graduate college in 1913. There was such a surge of advanced degrees starting in 1916 that by 1940 some 300 advanced degrees had been granted. This is why the department has had such an impact on the departments of other states. The department granted a total of 862 M.S. degrees and 471 Ph.D. degrees for a total of 1,333 from 1896 to 1995. From 1946 to 1996, the department granted 16% of the advanced degrees in agriculture.

The number of M.S. and Ph.D. degrees earned at Iowa State is one of the hallmarks of the department. These students went on to define livestock agricultural education the world over.

Department faculty played leadership roles in the development of the American Dairy Science Association (1906), the Poultry Science Association (1908), and the American Society of Animal Science (1908). R. A. Pearson, later to be president of Iowa State College, was the first president of ADSA, and seven faculty have served as president of ASAS. Many faculty have won awards from these societies. Recently, the national meetings of ADSA in 1977, PSA in 1985, and ASAS in 1990 were held at Iowa State University.

The publication record of the department is monumental. In 1994 alone, members of the department wrote 72 refereed journal papers; 88 published abstracts; 17 creative works such as patents and software packages; 77 experiment station bulletins and extension publications; 41 books, chapters, technical reports and presentations published in symposia proceedings; and 57 grant proposals resulting in funding. These figures are similar to those of other years. From 1950 to 1994, the papers that received a journal number from the experiment station number 1,655. Papers with a faculty member as senior author number more than 400 in the Journal of
Animal Science from 1912 to 1993, more than 250 in the Journal of Dairy Science from 1932 to 1993, and more than 350 in the Poultry Science Journal from 1926 to 1993. Publications from the faculty and graduate students appear in a large number of other journals. Over the 100 years, a good mix of scientific and popular publications has existed.

The department will be remembered for several important research innovations. The use of statistics in livestock experiments, the creation of the selection index, the feeding of sulfestrol to cattle, the corn-soy diets, and life-cycle programs for swine, the conquest of bovine disease, the back fat probe for swine, the understanding of atherosclerosis, and the definition of endocrine interactions in reproduction are contributions. Later, the definition of nutrient requirements in several species; the utilization of breed crossing in commercial production of beef, swine, and sheep; the understanding of the blood group locus located in the MHC complex of poultry; the study of mitochondria in dairy breeding; the refinement of genetic prediction in dairy, beef, swine, and sheep; the control of parturition in cattle and swine; the feeding of protected protein to young cattle; and many others are hallmarks of the department.

The Saddle and Sirloin Club for undergraduates was formed in 1913. Iowa State was one of four colleges that united to form the National Block and Bridle Club in 1918. Since its inception, the club has been a leader on the campus. The Little International Show conducted by the club is in its 75th year, and the Horse Show at Veishea time is celebrating 52 years. The Dairy Science Club began in 1925 and has a milk maid contest, which garners considerable press. Both clubs have Veishea displays, have food stands with ice cream, and have had floats in the parade. At one time, there was a Poultry Science Club.

These student organizations reflect the sound advising by faculty members over the 100 years. This advising besides a constant revision of courses to meet the needs of the students and excellent, innovative teaching has made the undergraduate program. There is a dairy science, animal science, and pre vet curriculum. The teaching section underwent a renaissance in the early 1960s at the insistence of the department head, L. E. Johnson. The number of students rose dramatically, and with a young teaching faculty, the department had more than 700 students. Numbers declined during the agricultural depression of the 1980s, but enrollment has grown to more than 750 presently.

It is always more impressive to talk about the number of students enrolled, which today is around 750. But the number of B.S. degrees earned over the years is also impressive.

The B.S. degree was identified by department in 1904. Between 1904 and 1945, the department granted 2,174 B.S. degrees, which was 43% of those granted in agriculture and 11% of those in the university. Between 1946 and 1994, the department granted 4,186 B.S. degrees, which was 20% of those in agriculture and 4% of those in the university. Overall from 1904 to 1994, the department granted 6,360 B.S. degrees. These represent 20% of those in agriculture and 4% of those in the university. The early graduates read like a Who's Who of livestock industry leaders, as will the names of more recent graduates in time.

The one-on-one advising of students, both undergraduate and graduate, by faculty is what the students

A very creative float done by Block & Bridle for the 1990 celebration of VEISHEA. R. J. Fink sent this picture to the author.
remember. The friendships and personal help have had lasting effects. Students in uniform were corresponded with during the world wars, and many were befriended in the depression times. Also, the encouragement to attend college by the faculty and staff when they were attending industry functions has resulted in great benefit. Dean Kildee was the master; his actions were based on what he experienced as a youth. Students learn much from their peers. This is true in the graduate student groups with a mix of foreign students. And it is especially true in the work in the departmental clubs.

Initially, international involvement was done by individual faculty. Most were participants. Now, the structure is more formal. Student groups come for training, and teams of faculty conduct programs in foreign countries. The international dimension has been expanded in undergraduate courses. Since the 1930s, there has been an agriculture travel course for students.

Building plans were begun in 1953, but it was not until 1966 that the new Department of Animal Science (1962) moved into its own building across the street from the Veterinary Quadrangle and close to the teaching herd barns. The building was dedicated as Kildee Hall, and the Dean Kildee attended the dedication. The new laboratory space and classrooms were quickly filled, but the teaching herds, except the horses, were moved south of town.

Livestock extension occurred in the farmer institutes long before the Smith-Lever Act of 1914 that provided for the Cooperative Extension Service. The college extension began with Perry Holden, the corn evangelist, in 1906. Then R. K. Bliss, a 1904 graduate of the department, developed Iowa's extension for 50 years. Rex Beresford (1911) set up the baby beef shows, and Elvin Quaife (1911) served the swine industry of Iowa. Having extension housed with the department after 1952 has proved beneficial. Dairy extension was a leader in the initiation of the national DHIA program. After computerization in 1957, the group runs an eight-state DHIA center while serving the dairy interests of the region. Livestock extension has been a leader in the development of performance programs for swine with the swine enterprise records, life-cycle production, and swine testing stations. Beef performance and testing stations and sheep programs with ram testing stations were initiated. The Iowa Beef Expo was started by extension. Industry organizations like the Beef Improvement Federation are supported by the extension faculty. Veterinary extension was housed with the department and developed reproduction and health programs. Beginning in 1966, a number of area livestock extension specialists serve the state.

Shortly after Kildee Hall was occupied, a number of faculty began to work together in research teams to attack problems facing the industry and to research basic topics of concern. Extension faculty began to conduct research in areas of ultrasound and to answer producer questions in Iowa.

In 1977, the new Meat Laboratory was opened. New research was begun in all areas of product preparation and use. A muscle biology section was developed to study the basics of the product, and a Meat Export Research Center was established. In 1992, irradiation facilities were completed to research preservation procedures.

Our head, S. A. Ewing, anticipated the growth of personal computers and positioned the department to lead in the development of a systems approach, especially in extension, and to initiate the use of computers in undergraduate education. New faculty positions in systems analyses, Phil Spike and Doyle Wilson, moved the department into the computer age. Decision making programs in extension and the providing of genetic predictions to the beef, swine, and sheep industries were forthcoming.

The department, for most of its history, has been organized by sections. Animal and dairy science have been together at Iowa State, although dairy industries was separate early. Poultry was with the department, became separate in 1949, and after 1974 has been a section of the department. Research sections are by discipline, many of which were first created at Iowa State. Sections include nutritional physiology and muscle biology with biochemistry connections; beef nutrition; swine nutrition, growth and behavior; meat science; reproductive physiology with veterinary research connections; poultry nutrition; and animal breeding with statistics and Interdepartmental Genetics Program connections. Coupled with these sections are those for livestock extension, dairy extension, animal science teaching, dairy science teaching, poultry science, and administration.

A research revolution involving the faculty has taken place quietly in recent years. The DNA, which controls all functions of the cells, is now recognized as the very core of all biological sciences. The national swine ge-
ome mapping efforts are centered in the department. Research requires well-appointed laboratories. This includes breeding, physiology, nutrition, and product research. Basic research in molecular biology is critical to form the basis for the creative use of biotechnology in service to the livestock industry. Soon the expertise of the faculty using the team approach can model individuals, and these can be used to investigate production systems when coupled with economics.

At the turn of the century, our president said “The theory is that a young agriculturist or industrialist must aspire to a liberal education that will make him the peer of any educated or professional man in life.” We have and still produce such graduates! Our governor in his inaugural address of 1854 said “She (Iowa) wants educated farmers and mechanics, ... She needs men engaged in the practical duties of life, who have conquered their professions, and who are able to impart their knowledge to others.” This dream is a reality. This department has a singular record of contributions to knowledge both basic and applied, to the building of other departments through the graduate program, and to the sharing of new knowledge through extension. Our logo, with a PC flanked by an Erlenmeyer flask and on the screen the livestock species, speaks to the image of this department in the twilight of the 20th century, but researching for the 21st.

The participants in this academic community of another age will look with mute approval as the current faculty, staff, and students build on “A Heritage of Leadership.” To share the excitement of discovery with youth in the next anticipated 100 years will be an adventure that will open dimensions not yet comprehended.

Animal science at Iowa State University begins its next 100 years from a heritage of leadership that spans the 20th century. The Kirsch mural in the foyer of Kildee Hall reflects this heritage. Across the Mississippi, there were virgin forests followed by a great sea of prairie punctuated to the north by a wilderness of marshes, and on west across the loess hills was the Missouri. The buffalo were replaced by the pioneers who tripled the population by the end of the 1850s, bringing animal agriculture and the family farm. Central is the seal and motto “Science with Practice.” Science has always been first, and its practical application has been the logical result of acquiring the basics. Growth and development shown by the embryo flanked by laboratory work and that with the computer signify both the research and the maturation of the department. Teaching resides with the mortar board, extension with the books and television, and the ushering in of democracy’s college with the Morrill Act. The value-added products of this fertile state punctuate that Iowa is a livestock state.
APPENDIX

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATION</td>
<td>46</td>
</tr>
<tr>
<td>FACULTY</td>
<td>47</td>
</tr>
<tr>
<td>AREA LIVESTOCK EXTENSION SPECIALISTS</td>
<td>55</td>
</tr>
<tr>
<td>TEACHING HERD STAFF</td>
<td>56</td>
</tr>
<tr>
<td>RESEARCH HERD STAFF</td>
<td>56</td>
</tr>
<tr>
<td>CURRENT STAFF</td>
<td>57</td>
</tr>
<tr>
<td>GRADUATE STUDENTS</td>
<td>58</td>
</tr>
<tr>
<td>THE BLOCK &amp; BRIDLE CLUB</td>
<td>71</td>
</tr>
<tr>
<td>THE DAIRY SCIENCE CLUB</td>
<td>76</td>
</tr>
<tr>
<td>THE POULTRY SCIENCE CLUB</td>
<td>86</td>
</tr>
<tr>
<td>THE PRE-VET CLUB</td>
<td>86</td>
</tr>
<tr>
<td>HERDSMEN'S COURSE</td>
<td>87</td>
</tr>
<tr>
<td>LIVESTOCK JUDGING TEAMS</td>
<td>88</td>
</tr>
<tr>
<td>DAIRY CATTLE JUDGING TEAMS</td>
<td>93</td>
</tr>
<tr>
<td>POULTRY JUDGING TEAMS</td>
<td>97</td>
</tr>
<tr>
<td>HORSE JUDGING TEAMS</td>
<td>98</td>
</tr>
<tr>
<td>WOOL JUDGING TEAMS</td>
<td>98</td>
</tr>
<tr>
<td>MEAT ANIMAL EVALUATION CONTEST</td>
<td>99</td>
</tr>
<tr>
<td>MEAT JUDGING TEAMS</td>
<td>101</td>
</tr>
<tr>
<td>ACADEMIC QUADRATHLON</td>
<td>104</td>
</tr>
<tr>
<td>SADDLE &amp; SIRLOIN CLUB PORTRAITS</td>
<td>105</td>
</tr>
<tr>
<td>C. F. CURTISS DISTINGUISHED PROFESSORS</td>
<td>105</td>
</tr>
<tr>
<td>ASAS AWARDS</td>
<td>106</td>
</tr>
<tr>
<td>ADSA AWARDS</td>
<td>106</td>
</tr>
<tr>
<td>PSA AWARDS</td>
<td>107</td>
</tr>
<tr>
<td>AMSA AWARDS</td>
<td>107</td>
</tr>
<tr>
<td>ISU AWARDS</td>
<td>107</td>
</tr>
<tr>
<td>DAIRY SHRINE CLUB</td>
<td>108</td>
</tr>
<tr>
<td>INDUSTRY SERVICE AWARDS</td>
<td>110</td>
</tr>
<tr>
<td>UNIVERSITY PRESIDENTS</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>President</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------</td>
</tr>
<tr>
<td></td>
<td>Adonijah S. Welch</td>
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<tr>
<td>1868-1883</td>
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<td>Seaman A. Knapp</td>
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<tr>
<td>1883-1884</td>
<td></td>
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<tr>
<td></td>
<td>Leigh S. J. Hunt</td>
</tr>
<tr>
<td>1885-1886</td>
<td></td>
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<tr>
<td></td>
<td>William I. Chamberlain</td>
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<td>1886-1890</td>
<td></td>
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<td>William M. Beardshear</td>
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<td></td>
<td>Albert B. Storms</td>
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<tr>
<td></td>
<td>Raymond A. Pearson</td>
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<tr>
<td></td>
<td>Raymond M. Hughes</td>
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<td></td>
<td>Charles E. Friley</td>
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<tr>
<td>1936-1953</td>
<td></td>
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<td></td>
<td>James H. Hilton</td>
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<td>1953-1965</td>
<td></td>
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<tr>
<td></td>
<td>William Robert Parks</td>
</tr>
<tr>
<td>1965-1985</td>
<td></td>
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<tr>
<td></td>
<td>Gordon Eaton</td>
</tr>
<tr>
<td>1986-1990</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Martin Jischke</td>
</tr>
<tr>
<td>1991</td>
<td></td>
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<tr>
<td>Name</td>
<td>Inst.</td>
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<tr>
<td>Ahn</td>
<td>D-U</td>
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<tr>
<td>Amundson</td>
<td>C.</td>
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<tr>
<td>Anderson</td>
<td>A.D.</td>
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<td>Anderson</td>
<td>A.L.</td>
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<tr>
<td>Anderson</td>
<td>R.G.</td>
</tr>
<tr>
<td>Anderson</td>
<td>R.K.</td>
</tr>
<tr>
<td>Andresen</td>
<td>E.I.</td>
</tr>
<tr>
<td>Arnett</td>
<td>C.N.</td>
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<td>Ashton</td>
<td>G.C.</td>
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<tr>
<td>Atkeson</td>
<td>G.</td>
</tr>
<tr>
<td>Baas</td>
<td>T.J.</td>
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<tr>
<td>Baker</td>
<td>F.E.</td>
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<tr>
<td>Balloun</td>
<td>S.L.</td>
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<tr>
<td>Baringer</td>
<td>M.E.</td>
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<tr>
<td>Barker</td>
<td>H.C.</td>
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<tr>
<td>Barnhart</td>
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Codes:
- AB: Animal Breeding
- BE: Beef Extension
- BT: Beef Teaching
- DD: Dairy
- DE: Dairy Extension
- DN: Dairy Nutrition
- DT: Dairy Teaching
- EE: Extension
- GG: General
- GT: General Teaching
- HT: Horse Teaching
- LP: Livestock Production
- MB: Muscle Biology
- ME: Meat Extension
- MM: Meats
- NP: Nutritional Physiology
- OE: Ovine Extension
- OT: Ovine Teaching
- PB: Poultry Breeding
- PN: Poultry Nutrition
- PP: Poultry
- PT: Poultry Teaching
- RN: Ruminant Nutrition
- RP: Reproductive Physiology
- SE: Swine Extension
- SN: Swine Nutrition
- ST: Swine Teaching
- US: USDA
- VE: Veterinary Extension
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<td>Zeece</td>
<td>M.G.</td>
<td>MB</td>
<td>1973</td>
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54
AREA LIVESTOCK EXTENSION SPECIALISTS

Bruce Bervin: Extension Livestock Specialist, Ft. Dodge area, 1974-1978
Andrew "Andy" Boston: Extension Livestock Specialist, Cedar Rapids area, 1968-1969
Russell L. BreDahl: Extension Beef/Forage Field Specialist, SW Iowa, 1992-Present
Darrell Busby: Extension Livestock Field Specialist, SW Iowa, 1980-Present
Keith Caldwell: Extension Livestock Specialist, Ft. Dodge area, 1972-1973
Dennis L. DeWitt: Extension Livestock Field Specialist, NW Iowa, 1977-Present
Beth Ellen Doran: Extension Beef Field Specialist, NW Iowa, 1993-Present
Russ Eukon: Extension Livestock Field Specialist, North Central Iowa, 1993-Present
Marion Fitzgerald: Extension Livestock Specialist, Tipton and Cedar counties, 1964-1966
Keith Gilster: Extension Livestock Specialist, Waterloo area, 1972-1972
LaMar Grafft: Livestock Production Specialist, East Central area, 1985-1992
Karl Griffith: Extension Livestock Field Specialist, Mason City area, 1970-1993
Eldon Hans: Livestock Production Specialist, NE area & East Central area, 1968-1985
Tony Harvey: Extension Dairy and Beef Field Specialist, NE Iowa, 1992- Present
Doug Henderson: Extension Livestock Field Specialist, Des Moines area, 1972-1993
Ronald D. Irvin: Extension Livestock Field Specialist, Davenport & East Central Iowa, 1969-Present
Cliff Iverson: Extension Livestock Specialist, Ottumwa area, 1966-1985
Larry Kennedy: Extension Livestock Specialist, Creston area, 1968-1969
Brett Kirch: Extension Beef Field Specialist, West Central Iowa, 1995-Present
Byron M. Leu: Extension Livestock Field Specialist, Ottumwa area & SE Iowa, 1986-Present
Larry K. McMullen: Extension Swine Field specialist, East Central Iowa, 1992-Present
Jim Meno: Extension Swine Field Specialist, Waterloo area & East Central Iowa, 1972-Present
Earl Mobley: Extension Livestock Specialist, Sioux City area, 1968-1989
Carl Neffert: Extension Livestock Field Specialist, Central Iowa, 1992-Present
Russ Olson: Extension Beef Field Specialist, West Central Iowa, 1992-1995
Robert Ramsey: Extension Livestock Specialist, Creston area, 1971-1986
Gene Rouse: Extension Livestock Specialist, Spencer Extension area, 1971-1976
Wendell Ryder: Livestock Specialist, Dubuque & Waterloo areas, 1970-1989
Denise L. Schwab: Extension Livestock Field Specialist, Central Iowa, 1992-Present
Terry L. Steinhart: Extension Swine Field Specialist, SE Iowa, 1992-Present
David Stender: Extension Swine Field Specialist, NW Iowa, 1989-Present
Dale Thoreson: Extension Dairy and Beef/Forage Field Specialist, NE Iowa, 1992-Present
Jerry Weiss: Extension Swine Field Specialist, NW Iowa, 1992-Present
Doyle Wolverton: Extension Livestock Specialist, Council Bluffs area, 1971-1980
TEACHING HERD STAFF


RESEARCH HERD STAFF

Reproductive Physiology: M. Shell (1958-Present)


CURRENT STAFF

Over the 100 years, staff members have contributed to the operation of the department. The secretaries, laboratory technicians, and specialists are an integral part of the function. Records are sparse concerning the early participants, but a few are long remembered. Lucinda Foster was the secretary to the department head over in Curtiss Hall. For the undergraduate students, Judy Rae Obrecht, Barbara Comer, Helen Kepler, and Ilene Carlson helped solve many problems. The section secretaries were most helpful in working with the graduate students. All deserve mention in the history. What follows are the current staff members:

ADMINISTRATION
Wanda Niemann
Renee Knosby
Karol Krumm

ANIMAL BREEDING
Rebecca Stone
Gloria (Wright) Lantz
Mary Healey
David Kelley
Marlan Braet
Brad Beckett
Mark Johnson
Mike Hill
Tom Sandve
Robert E. Lee
Robert Day
Ruth Larson
Jeannine Helm
Clint Brooks
Joe Detrick
Dennis Garvey
Kevin Summy
Robert Trager
Don Williams

DAIRY SCIENCE EXT.
Ardulla Krull
Diane Maxwell
Greg Palas
Ron Black
Kathleen Adams
Joyce Hagley
Sharon Peterson
Peggy Pickell
Marce Zeman

DAIRY SCI. TEACHING
Ilene Carlson
Paul Amundson
John Kent
Thomas Golden
Duane Kleve
Steve Pursel
Cory Brady

IOWA PORK INDUSTRY
Lisa Gammon
Daniel Uthe
Carl Watson

MEAT SCI. & MERC
Sharon Colletti
Roxanne Cemens
Larry Dyer
Richard Foster
Regina Hendrickson
Michael Holtzbauder
Marcia King-Brink
Jerry Knight
Elaine Larson
Lisa Mayberry
Deb Michael
James O'Brien
Vail Olson
Randall Petersohn
Rich Dalkey

POULTRY SCIENCE
Ann Shuey
Mary Cochran
Martha Jeffrey
Michael Kaiser
Nancy Nelson
Jerry Mackie
Dale Peterson
William Rogers
Jeff Tjelta

REPRODUCTION
Donna Johnston
Karen Langner
Daniel Isaacson
Nina Biensen
Carole Hertz

RUMINANT NUTR.
Julie Roberts
Deborah Bleite
Carl Christensen
Dave Fisher
Kelly Nissen
Jeff Thorson
Kevin Tweedt

MUSCLE BIOLOGY
Lynn Newbold
Mary Sue Mayes
Jo Philips
Suzanne Sernett

NUTRITIONAL PHYS
Jane Linn
Arlie Penner
Marlene Richard

SWINE NUTR.
Cheryl Ervin
Leona Brown
Douglas Cook
Ann Weisberg
Yusheng Wu
Randy Holbrook
Harlan Moody
John Simonson
Robert Tripp
GRADUATE STUDENTS

Ab-Rashid, A. (MS 1985) D5*
Abbas, S. (MS 1980) PS
Abdullah, M. (MS 1986; PhD 1994) NP
Acharya, R.M. (PhD 1966) AB
Achultz, J.R. (PhD 1965) RP
Acker, D.C. (MS 1953) SN
Adair, V. (MS 1984) RP
Adame, E. (PhD 1963) LP
Adamu, A.M. (MS 1977; PhD 1985) RN
Adeyamjü, S.A. (MS 1969; PhD 1971) RN
Adkins, R.S. (MS 1975; PhD 1980) SN
Aduku, A.O. (MS 1973; PhD 1980) PS
Aherve, F.X. (PhD 1968) SN
Ahmad, M.U. (MS 1964; PhD 1966) AB
Ahmad, G. (MS 1991) LP
Aitchison, T.E. (MS 1971; PhD 1975) NP
Ajala, A. (MS 1976) LP
Akowuah, E. (MS 1970) RN
Al-Batash, H.A. (MS 1990) PS
Al-Owaimer, A.N. (MS 1994) MS
Al-Tamimi, R.M. (MS 1988) LP
Alcivar, A.A. (MS 1983; PhD 1987) RP
Aldinger, S. (PhD 1959) SN
Aldrich, M.T. (MS 1916) AH
Allen, R.E. (PhD 1976) MB
Alston, J. (MS 1953) SN
Alva-Valdes, R. (MS 1979; PhD 1981) LP
Amaral-Phillips, D.M. (MS 1983; PhD 1988) NP
Amann, L. (PhD 1989) MS
Amundson, C.M. (MS 1979; PhD 1986) MS
Anderson, D.E. (PhD 1954) AB
Anderson, M.D. (PhD 1964) SN
Anderson, J.H. (MS 1975) AB
Anderson, L.D. (MS 1971) MB
Anderson, R.K. (MS 1950; PhD 1956) RN
Anderson, L.L. (PhD 1961) RP
Anderson, A.L. (MS 1922) LP
Anderson, J.H. (MS 1975; PhD 1977) AB
Anderson, L.H. (MS 1992) RP
Andrus, F.D. (MS 1968) AB
Angel, C.R. (MS 1987; PhD 1990) PS
Annis, R.T. (MS 1989) PS
Applegate, T.J. (MS 1995) PS
Arababan-Ghafouri, M. (MS 1975) LP
Araujo-Abreu, R. (MS 1979) MS
Araujo-Fabres, O.E. (MS 1982) NP
Arbou, W.E. (MS 1960) AB
Arenston, B.E. (MS 1982; PhD 1985) SN
Arenston, R.A. (MS 1990; PhD 1993) SN
Armentano, L.E. (MS 1977; PhD 1982) NP
Arnett, R.E. (MS 1917) AH
Arnold, F.J. (MS 1940) RN
Arnold, R.N. (MS 1980; PhD 1986) RN
Arora, K.K. (PhD 1969) AB
Ashraf, M. (MS 1979; PhD 1981) PS
Ashton, L.H. (MS 1972) LP
Atkins, K.B. (MS 1984; PhD 1991) AB
Attah, B.W. (MS 1942) LP
Autrey, K.M. (MS 1939; PhD 1941) DS
Awotwi, E.K. (MS 1975; PhD 1982) RP
Azmayesh, S.A. (MS 1977) RN
Babalola, A.B. (MS 1986) LP
Bagni, B. (MS 1990) RP
Bahman, A. (MS 1981) DS
Bailey, E.M. (MS 1985) SN
Baker, R.O. (PhD 1959) SN
Baker, E.G. (MS 1958) AB
Baker, C.T. (MS 1929) DS
Bales, G.L. (MS 1980) PS
Baliga, V.L. (MS 1970) RP
Ball, W.C. (MS 1937) MS
Bandstra, B.A. (MS 1984) AB
Baringer, M.E. (MS 1949) LP
Barker, H.B. (MS 1949) DS
Barker, D.L. (MS 1991) PS
Barnhart, C.E. (MS 1948; PhD 1954) LP
Barr, G.R. (PhD 1962) AB
Barringer, R.D. (MS 1964; PhD 1967) RN
Barrows, F.T. (MS 1983; PhD 1987) PS
Barrows, K.K. (MS 1978) NP
Bartley, E.E. (MS 1946; PhD 1949) DS
Baas, T.J. (MS 1989; PhD 1990) AB
Bassett, C.F. (MS 1926) MS
Batcher, D.F. (PhD 1965) AB
Beard, F.J. (MS 1924; PhD 1942) MS
Beard, L.H. (MS 1933) DS
Bectt, R.R. (MS 1984) NP
Beck, D.L. (MS 1986) LP
Becker, R.B. (MS 1920) DS
Beckman, M.J. (MS 1989; PhD 1993) NP
Beekman, D.D. (MS 1990; PhD 1994) MS
Beliharz, R.G. (PhD 1965) AB
Bell, H.K. (MS 1948) LP
Bennison, R.W. (MS 1951) SN
Benoit, A.M. (MS 1986) RP
Bent, L.A. (MS 1922) DS
Bereskin, B. (PhD 1963) AB
Bergkamp, J.L. (MS 1972) MS
Berry, J.C. (PhD 1939) AB
Bertrand, J.A. (MS 1983) AB

* Discipline codes at end of Faculty list.
Bertrand, J.K. (MS 1981; PhD 1983) AB
Berven, B.B. (MS 1973) LP
Best, J.D. (PhD 1972) RP
Biensop, N.J. (MS 1994) RP
Bilak, M.M. (PhD 1991) MB
Bilak, S.R. (PhD 1991) MB
Bimblich, L.P. (MS 1975) RN
Bishop, D.J. (MS 1987) MS
Bjercke, R.J. (PhD 1978) MB
Blackman, C.L. (MS 1917) AH
Blackmore, D.W. (MS 1953; PhD 1954) AB
Blake, J.T. (MS 1950; PhD 1955) DS
Blanchard, W.W. (MS 1986) AB
Blauch, R.P. (MS 1965) AB
Blood, F.E. (MS 1935) LP
Bloom, S. (PhD 1955) DS
Bodart, S.J. (MS 1987) LP
Boettcher, P.J. (PhD 1995) AB
Boggess, M.V. (MS 1986; PhD 1990) AB
Bohidar, N.R. (MS 1957) AB
Boland, E.N. (MS 1913) AH
Boldman, K.G. (MS 1984; PhD 1988) AB
Boles, J.A. (MS 1987; PhD 1990) MS
Bondari, K. (MS 1968; PhD 1971) AB
Bonham, C.L. (MS 1926) AB
Bonner, J.M. (MS 1971; PhD 1974) NP
Bong, L.J. (PhD 1940) DS
Borsotti, N.P. (MS 1981) AB
Bosch, M.A. (MS 1963) RN
Bosman, S.W. (MS 1957) AB
Bovard, K.P. (MS 1954; PhD 1960) AB
Bowerman, A.M. (PhD 1963) RP
Boynton, C.H. (MS 1940) DS
Branaman, J.L. (MS 1982) LP
Brandt, A.E. (MS 1926; PhD 1932) MS/AB
Brasche, M.R. (MS 1987) RN
Bravo, B.F. (MS 1964) RN
Bredahl, R.L. (MS 1969; PhD 1970) AB
Brennan, R.W. (MS 1978; PhD 1985) RN
Brim, M.R. (MS 1992) DS
Brinkman, M.H. (MS 1986) LP
Brinks, J.S. (PhD 1960) AB
Brinque, R.J. (MS 1945) AH
Brinlall, E.P. (MS 1922) DS
Brown, L.C. (MS 1924) LP
Brown, H. (PhD 1959) SN
Brown, E.E. (MS 1917) AH
Brown, L.R. (PhD 1959) DS/NP
Bryant, J.M. (MS 1964) DS
Bryant, A.B. (MS 1963) RN
Buchanan, D.S. (MS 1926) LP
Buchler, R.D. (MS 1972) LP
Buckley, F.A. (MS 1933) DS
Buckley, B.A. (MS 1980) NP
Bunch, R.J. (MS 1961; PhD 1964) SN
Bunk, M.J. (MS 1977) PS
Burlford, C.P. (MS 1926) AB
Burge, C.A. (MS 1923) AH/MS
Burkhart, D.J. (MS 1972) NP
Burns, R.H. (MS 1921) LP
Busch, W.A. (MS 1966; PhD 1969) MS
Bush, L.J. (PhD 1958) AB
Butcher, R.L. (PhD 1962) RP
Butt, S.J. (MS 1957) LP
Buttons, B.C. (MS 1991) MS
Buttram, S.T. (PhD 1987) AB
Bywater, J.H. (PhD 1936) AB
Cabris, J.A. (MS 1968) RN
Cain, C.B. (MS 1924) LP
Caine, A.B. (MS 1917) AH
Caine, A.H. (MS 1918) AH
Caine, J.T. (MS 1905) AH
Cali, Y. (PhD 1992) SN
Camou, J. (PhD 1990) MS
Campbell, P.A. (MS 1906) AH
Cannon, D.J. (MS 1923) AH
Cannon, C.Y. (MS 1924; PhD 1927) DS
Carballo, M. (MS 1984) LP
Carl, L.M. (MS 1922) LP
Carlson, J.P. (MS 1978; PhD 1980) AB
Carman, G.M. (PhD 1953) AB
Carneto, G.G. (MS 1950) AB
Carpenter, L.S. (MS 1984) LP
Carrillo-Casas, I.P. (MS 1987) LP
Carrion, P.D. (MS 1994) SN
Carter, B.C. (MS 1939; PhD 1956) AB
Carter, D.C. (MS 1955) LP
Catron, D.V. (PhD 1948) NP
Cavos, L.F. (PhD 1954) RP
Cervantes-Nunez, A. (PhD 1992) NP
Chagnot, S.J. (MS 1925) MS
Chamberlain, C.C. (PhD 1959) RN
Chandry, H.M. (MS 1966; PhD 1969) MS
Chang, R.D. (MS 1947) LP
Chang, C. (MS 1961) MS
Chiemco, D.I. (MS 1969) MS
Chantalakhan, C. (MS 1962, PhD 1968) AB/NP
Chapman, H.L. (PhD 1955) SN
Chapman, A.B. (MS 1931) AB
Chase, M.W. (MS 1924) LP
Chaudhry, H. (MS 1969) MS
Chaves-Molina, J. (MS 1982) MS
Chen, F.L. (MS 1949) AH
Chen, J. (MS 1994) RN
Chen, X. (MS 1990) NP
Chen, H. (MS 1983) AE
Cheng, C.S. (MS 1972; PhD 1976) MB
Raun, N. (PhD 1961) RN
Raun, A. P. (MS 1956; PhD 1958) RN
Reiling, B. A. (MS 1991) MS
Reinmiller, C. F. (MS 1936) MS
Reitzel, B. J. (MS 1981) MB
Ren, D. (MS 1991) NP
Rennick, K. A. (MS 1982) RN
Rennie, J. C. (MS 1950; PhD 1952) AB
Repp, W. W. (PhD 1955) RN
Reyes, G. A. (MS 1988) AB
Reynolds, L. (PhD 1983) RP
Rhodes, C. S. (MS 1980) LP
Richardson, D. (MS 1950; PhD 1951) LP/SN
Richey, J. A. (PhD 1971) AB
Ridpath, J. F. (PhD 1983) MB
Riguelle, H. A. (MS 1971) SN
Rikabi, R. A. (MS 1994) LP
Rindsig, G. L. (MS 1973; PhD 1976) AB
Ritchie, R. R. (MS 1938) LP
Ritter, T. W. (MS 1979) RN
Roache, K. L. (MS 1960) AB
Robbins, W. R. (MS 1880) AH
Robbins, R. C. (MS 1955) MS
Robbins, E. T. (MS 1907) AH
Roberts, C. Y. (MS 1953) SN
Robles, A. (MS 1976; PhD 1982) SN
Robson, R. M. (MS 1966; PhD 1969) MS
Rodewold, B. W. (MS 1929) AB
Rodriguez, M. H. (MS 1977) PS
Rodriguez, E. (MS 1979) LP
Rodrigues, J. E. (PhD 1966)
Rohlf, M. (MS 1954) SN
Rojas-Bourillon, A. (MS 1985) RN
Rojas-Rizo, J. L. (MS 1993) LP
Romsons, D. R. (PhD 1970) NP/RN
Ronsewold, D. L. (MS 1973) SN
Rosell, V. L. (MS 1982; PhD 1984) SN
Rouse, G. H. (MS 1969) MS
Rousselow, D. L. (MS 1973; PhD 1979) SN
Roux, C. Z. (PhD 1969)
Rovira, J. S. (MS 1966)
Rowe, K. E. (PhD 1966) AB
Roulot (PhD 1959) SN
Ruebush, D. H. (MS 1939) AH
Ruf, E. W. (PhD 1952) RN
Ruiz, M. E. (MS 1967; PhD 1970) SN
Ruland, F. S. (MS 1968) SI
Rule, D. C. (PhD 1984) NP
Rust, J. W. (PhD 1963) RN

Sacco, R. E. (MS 1983) AB
Sackville, J. P. (MS 1921) AB
Sadek, M. H. (PhD 1988) AB
Saide-Albornoz, J. (MS 1992) MS
Saldana, K. S. (MS 1982) MS
Salmon, N. H. (MS 1933) LP
Samiuere, C. E. (PhD 1959) RN
Sandhouse, H. A. (MS 1922) MS
Sandoval, A. E. (MS 1985; PhD 1987) MS
Sanfriorenzo, J. H. (MS 1956) AB
Sang, N. (MS 1977) MS
Sater, G. R. (PhD 1990) MB
Sato, M. (MS 1975) AB
Sato, M. (MS 1975) AB
Sauber, T. E. (MS 1994) SN
Sauer, J. J. (MS 1987) RP
Savin, W. H. (MS 1919) AH
Sawyer, L. (MS 1916) AH
Sayre, L. C. (MS 1925) LP
Schade, D. A. (MS 1981; PhD 1984) NP
Schaefer, F. B. (MS 1973) AB
Schaefer, D. L. (MS 1992) MS
Schantz, E. J. (MS 1933) NP
Scheideler, S. E. (MS 1987) PS
Schliefert, M. L. (MS 1964) AB
Schmidt, J. G. (MS 1968) MS
Schmidt, J. M. (PhD 1994) MB
Schneider, J. F. (MS 1976; PhD 1978) AB
Schoenleber, F. S. (MS 1887) AH
Schollmeyer, J. V. (PhD 1976) MB
Schreiner, P. J. (MS 1982) MB
Schroder, B. G. (MS 1973) MS
Schroeder, L. A. (MS 1973) RN
Schoessler, N. G. (MS 1939) AH
Schutte, D. J. (PhD 1934) AB
Schutz, M. M. (PhD 1991) AB
Schuyler, P. C. (MS 1977) AH
Schwab, D. (PhD 1987) LP
Scott, E. L. (MS 1924) LP
Seath, D. M. (PhD 1939) RN
Seifert, G. W. (PhD 1970) AB
Sellers, H. I. (PhD 1966) AB
Senyatso, E. K. (MS 1990) LP
Serrano, L. E. (MS 1995) MS
Sewell, W. E. (PhD 1943) NP
Seymour, E. W. (MS 1962; PhD 1964) SN
Shank, G. B. (PhD 1986) NP
Shank, B. (MS 1985) AB
Shanks, R. D. (MS 1977; PhD 1979) AB
Sharp, L. B. (MS 1920) LP
Shaw, J. M. (MS 1924) AH
Shearer, P. S. (MS 1928) LP
Shelby, D. R. (MS 1962) AB
Shelby, J. C. (MS 1939) LP
Shelby, C. E. (PhD 1952) AB

67
Shellenberger, P.R. (PhD 1964) DS
Sheppard, S.J. (MS 1969) SN
Sheu, C.C. (MS 1988) MB
Shimada-Miyasaka, A. (MS 1969) SN
Shipka, M.P. (MS 1990) RP
Shively, J.E. (PhD 1967) RN
Shoptaw, L.N. (PhD 1935) DS
Shoup, H.H. (MS 1923) LP
Shrode, R.R. (MS 1945; PhD 1949) AB
Shu, H. (MS 1995) RN
Sidwell, G.M. (MS 1948; PhD 1954) AB
Sierra, J.H. (MS 1983) LP
Siers, D.G. (MS 1966; PhD 1968) AB
Silcox, R.E. (PhD 1985) AB
Silva, M.A. (PhD 1974) PS
Simpson, O. (MS 1962) RN
Sim, J.A. (MS 1941; PhD 1962) DS/AB
Sinclair, R.P. (MS 1926) MS
Singh, I. (MS 1974) MS
Singh, H. (PhD 1982) AB
Skaar, B.R. (MS 1983; PhD 1985) AB
Skaggs, C.L. (PhD 1992) AB
Skinner, R.L. (MS 1954) MS
Skridlant, H. (MS 1970) RN
Slagle, S.P. (MS 1978) SN
Slaybaugh-Mitchell, T. (MS 1992) AB
Smith, W.W. (MS 1966) AH
Smith, R.G. (MS 1974) AB
Smith, R.H. (MS 1928) DS
Smith, A.D. (MS 1924) AB
Smith, K.J. (PhD 1963) RN
Smith, C. (MS 1957; PhD 1958) AB
Smith, G.O. (MS 1917) AH
Smith, R.O. (MS 1941) AB
Smith, T.R. (MS 1993) NP
Smith, R.K. (MS 1993) NP
Smith, K.H. (MS 1989) RP
Smith, E.C. (MS 1994) MS
Snell, M.G. (PhD 1928) NP
Snyder, W.P. (MS 1929) AH
Snyder, R.W. (MS 1922) MS
Sommerfeldt, J.L. (MS 1982) NP
Soomer, F.M. (MS 1990; PhD 1991) RN
Soto-Salanova, M.F. (MS 1991; PhD 1995) PS
Spee, V.C. (MS 1951; PhD 1957) SN
Spike, P.L. (PhD 1975) AB
Spikes, P.W. (MS 1966; PhD 1968) AB
Squibb, R.L. (PhD 1948) DS
Stalder, K. (PhD 1995) AB
Staj, J.L. (MS 1957) LP
Stanley, E.B. (MS 1923) LP
Stanley, D.L. (MS 1977) SN
Staples, M.W. (MS 1928) AB
Stark, B.A. (MS 1983) MB
Stender, D.R. (MS 1984) MS
Stephenson, R.S. (MS 1916) AH
Stevenson, H.F. (MS 1924) DS
Stewart, W.R. (MS 1927) DS
Stice, S.L. (MS 1985) RP
Stifel, F.B. (PhD 1967) NP
Stillmunkes, D.G. (MS 1990) MS
Stillwell, E.C. (MS 1923) AH/MS
Stonaker, H.H. (MS 1941; PhD 1942) AB
Story, C.D. (MS 1950; PhD 1954) LP/RN
Strandberg, K. (MS 1970) MS
Straus, F.S. (MS 1940, PhD 1942) AB
Strock, K.L. (MS 1978) LP
Stromer, M.H. (PhD 1966) MB
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THE BLOCK AND BRIDLE CLUB

Just as the Animal Science Department at Iowa State University has long enjoyed a stellar reputation, so to has its undergraduate club—the Block and Bridle. Having benefited from a close affiliation with the faculty and the animal industry at large, in eighty-one years the Block and Bridle has grown into the largest and most active club on the ISU campus. Currently, more than 150 members continue in the precedence of leadership and dedication set by the many alumni who shaped the club into what it is today. The Block and Bridle sponsors numerous livestock related events throughout the year, both at large and through its interest groups. These events have come to be considered highlights of the academic year and are continually evolving to meet the new challenges faced by a changing industry.

In 1913, a group of animal husbandry students with both faculty and private support and guidance formed the Iowa State College Chapter of the Saddle and Sirloin Club. This group, along with several others at midwestern land grant colleges, borrowed its name from the original headquartered in the Chicago Livestock Exchange. The group was formed to stimulate interest in the field of livestock production among undergraduates, partly in response to the increased demands World War. I placed upon agriculture and also to foster intercollegiate events such as stock judging. On December 19, 1918, representatives from the Iowa State Club as well as Kansas, Missouri, and Nebraska in Chicago during the International to charter a new organization specifically for students of animal husbandry. They selected the name Block and Bridle, which had obvious and significant ties to that of the Saddle and Sirloin. From the start, Iowa State maintained a tradition of leadership in the national organization as animal husbandry students at colleges around the nation founded chapters. This has continued through the changes of "Iowa State College" to "Iowa State University" and "Animal Husbandry" to "Animal Science".

The constitution of the Block and Bridle club lists three primary objectives, and they remain the focus of the group into the present. They are:

1) To promote a high scholastic standard among students of animal science;
2) To promote the study of animal science and foster related skills; and
3) To bring about a closer relationship among the men and women pursuing animal science as a profession.

The first is achieved by honoring those who maintain a high grade point average, both in animal science courses and in general. Grade point averages are required on applications and for consideration for positions of leadership within the club, as well as being criteria for the awarding of honors presented by the club. The second is fulfilled in a variety of ways. Events such as the Little North America promote animal science to 4-H and FFA youth, the future students of animal science. The Block and Bridle Horse Show is one of several events that promote ISU, the Department of Animal Science, and its club to the animal industry and public at large. The VEISHEA display is an excellent vehicle for advertising to the students, faculty, and employees of ISU. Members gain and/or sharpen valuable skills while planning and conducting these events.

The emblem of the Block and Bridle, a capital B enclosing both a meat cleaver and butcher block as well as a bridle and reins, is steeped in meaning. In addition to representing the different areas of interest that fall within the club (beef cattle, sheep, swine, poultry, and horses), it is rich in symbolism. The straight perpendicular of the "B" stands for straight moral character, sincerity, and honor. The two curves of the B represent the material side of life, and the ability to direct and utilize talents and efforts. The cleaver represents the fact that members must be able to separate right from wrong and the just from the unjust—a reminder to choose the honorable course of action. The bridle represents control of temper and emotions, and attitude towards others. The reins remind members that they must have a "check" on themselves at all times. The colors of the Block and Bridle are royal purple and navy blue, and the flower is the lilac.

Leadership to the Block and Bridle is provided by a cabinet of officers, elected each year by the membership. These officers include President, Vice-President, Secretary, Treasurer, Jr. and Sr. Ag Council Representatives, and Sergeant-At-Arms. The club holds monthly formal business meetings, where activities are discussed and business pertaining to the club as a whole are made. However, because of the large size and diverse nature of the club, much of the activity takes place outside the main meetings. A system of interest groups and activity committees has been set up to provide opportunities and leadership in a wide variety of different areas.
INTEREST GROUPS

Beef Interest Group

The Beef Interest Group is both the largest and oldest. It was founded in 1965 as the Angus Interest Group and was the first such grouping of members with a common focus. Events for the first year included an interstate trip to view purebred Angus herds and presentations by industry leaders—events that have continued popular into the present. In 1968, the group was reorganized as the Beef Interest Group in order to accommodate "supporters" of other breeds. By 1973, the group enjoyed close ties with the Iowa Cattlemen's Association and hosted six speakers over the course of a year in addition to taking both a spring and fall trip. Currently, the beef group has more than seventy-five members, and it has added events such as the Annual Female Production Sale and the artificial insemination school at the ISU beef farm to its calendar of activities.

Horse Interest Group

The Horse Interest Group was formed in 1969 in response to member interest and the success of the beef group. Early activities were varied and included trips and speakers such as Dick Sparrow of forty-horse-hitch fame. The group was also affiliated with the Horseman's Clinic, a joint venture between the Department of Animal Science and the Iowa Quarter Horse Association. This event was targeted at area high school and ISU students who had an interest in horses, and it was a popular event for many years. The Horse Interest Group continues to be popular, and recent activities have included taking trips to Minnesota, Illinois, and the Waverly Draft Horse Sale as well as promoting the ISU Equine Program at the Iowa Horse Fair.

Meats Interest Group

The Meats Interest Group has always been small in size but large in activity. Formed in 1968, the meats group takes a cross-species focus on the end result of livestock production. The group's main activity was the production of summer sausage for the annual fund-raiser, though they enjoyed trips and speakers from related fields as well as hosted an extremely popular "whole hog" roast for students and staff. The Meats Interest Group continues to provide leadership to the production of sausage for the Summer Sausage & Cheese Sale, as well as the engaging in a variety of activities relevant to the meat industry.

Sheep Interest Group

Twenty-three members formed the Sheep Interest Group in 1972. The group worked closely with the Iowa Ram Testing Association as well as the Iowa Suffolk and Hampshire Associations in planning and conducting events for the Iowa sheep industry. They also worked closely with the Iowa Sheep Association Woman's Auxiliary in hosting the finals of the "Make-It-Yourself-With-Wool" contest. Currently, the group is still very active. The sheep group hosts the Sheep Dog Trials during VEISHEA, assists with the lamb weigh-in and show at AK-SAR-BEN, and is involved with the Iowa Sheep Symposium.

Swine Interest Group

Soon after the formation of the beef group, the Swine Interest Group was established. From the beginning, the swine group has taken an active interest in keeping abreast of changes in the pork industry. Tours have concentrated on research facilities, processing plants, registries, and progressive producers. The 1994/1995 year proved no exception. Speakers gave informative presentations on a variety of subjects, including livestock exportation, quality assurance, trends in purebred breeding, and the future of the industry.

Livestock Industry Interest Group

The Livestock Industry Interest Group is the newest in Block and Bridle, having been formed in 1992 and restarted in 1994. This group makes its focus issues of current concern to the livestock industry. An issue of particular interest to the group has been that of animal welfare/rights. Two recent events in cooperation with the beef and swine groups concerned educational efforts and confinement systems.

EVENTS AND ACTIVITIES

Little International/Little North American

In 1914, the then Saddle and Sirloin Club held its first event—the Little International. This event was initiated to raise funds for the judging team to travel to its namesake in Chicago. The Little International
consisted of two phases—a showmanship contest (beef, sheep, swine, and horses were included) and a judging contest. It proved to be a very popular event and continued in much the same fashion for many years. With the advent of events such as the Junior Livestock Evaluation Classic and the Spring Judging Contest, the judging portion was dropped. In 1971, a novice division was added to encourage students without prior showing experience to compete. Contestants are given two weeks to work with and prepare their animals (provided by the teaching farms) before the show. Awards are presented to both individuals and teams. Now known as the Little North American, the 1996 event will be the 76th.

Horse Show

Now one of the major stops on the Iowa horse show circuit and the largest student run horse show in the nation, the Block and Bridle Horse Show was first held in 1942 as a division of the VEISHEA celebration. After a VEISHEA hiatus during World War II (1943-1945), the Block and Bridle took over management of the show. For many years, the show was held in the Armory on campus during VEISHEA. As both the show and VEISHEA grew, however, this became impractical, and the show was moved to the state fairgrounds in Des Moines where it has been ever since. Traditionally, the show has provided classes for all aspects of the horse industry. In 1973, the horse show gained status as an American Quarter Horse Association approved show, thus adding another facet to its development. The 1995 show was the largest to date—in addition to two Quarter Horse shows, society, open, and 4-H classes, an approved Paint Horse show was held. A record total of over 1600 entries were received in 163 classes over the three days of the show. The horse show has (usually!) generated a substantial profit and, until the Summer Sausage & Cheese Sale, was the club’s largest money-making project.

Summer Sausage & Cheese Sales

The Summer Sausage and Cheese Sale, initiated in 1968, is the club’s annual fund-raising project. Originally, the sale was coordinated by members of the meats group. Working in the ISU Meat Lab, they produced sausage that consisted of 54% pork and 46% beef—the approximate ratio of beef and pork slaughtered in Iowa. With its success, it quickly became an event that the whole membership engaged in with both the processing and the sale of the product. In 1988, the club joined with the Dairy Science Club and added cheese to the gift boxes sold. In 1994, this practice was discontinued, and the club now sells cups of cheese with their sausage. More than 5,880 pounds of sausage were produced for the 1994 sale, and for the first time the club acted as a wholesaler selling sausage to several other groups for fundraising activities. The Summer Sausage & Cheese Sale has built a very positive relationship between members and the faculty and employees of the Meat Lab.

Junior Livestock Evaluation Classic

The Junior Livestock Evaluation Classic, or JLEC, is a relatively new event. It provides livestock judging experience for the 4-H and FFA youth of Iowa and has proved to be very popular with well over 200 contestants at the 1994 event. Contestants judge in one of two divisions, one giving oral reasons and the other answering questions, depending on experience and skill. JLEC is provided as both a service and as a shop window for ISU, the Animal Science Department, and the Block and Bridle. Its success may be gauged by the number of members who have fond memories of competing in this event themselves!

Spring Judging Contest

The Spring Judging Contest is an outgrowth of the Little International. This event continues the tradition of providing a judging contest exclusively for the members of Block and Bridle. For this event, each member of the current ISU Livestock Judging Team selects four members to judge with him/her as a team. The contestants judge twelve classes, with the senior division (judging team members) giving six sets of oral reasons and the junior division giving three sets of reasons and answering three sets of questions. Awards are given both on an individual basis and to the top teams.

VEISHEA Display and Food Stand

Block and Bridle has always maintained a strong presence in VEISHEA right from the inception of the event. The Block and Bridle's display, usually featuring a mother and offspring from each of the four species, has long been a crowd favorite. The members provide a theme for the year's display, generally tied to that of VEISHEA itself. The display represents not only Block and Bridle, but the Animal Science department as well.
On numerous occasions awards have been received for the display. Block and Bridle also operates a very popular food stand at this event.

Yearbook

In 1973, it was decided to produce an annual yearbook chronicling the events and achievements of the year. This has been done faithfully, with the result a very attractive and professional presentation. The yearbook not only covers Block and Bridle, but also focuses on other activities within the department and the judging teams as well. The yearbook has also served as an important tool for the club and department.

Animal Science Banquet

The annual Animal Science Banquet has always been organized and hosted by the Block and Bridle. This event, held each March, gives tribute to the accomplishments of the club and department over the previous year. The banquet program includes distribution of awards presented by Block and Bridle and the department, recognition of leadership within the club, presentation of the judging teams and their results, and an overview of the club's activities. After the banquet, a dance is held. The 1995 banquet was held at the Gateway Center, and attracted over 250 guests.

In addition to the events listed above, social functions are held by the club each year. These include the Freshman Barbecue, Spring Picnic, and initiation of new members. The club also provides assistance with several activities within the department such as the Animal Science Quadrathalon, Regional Meats Contest, and others. To recognize the effort and dedication these events require, a variety of awards are presented by the club.

AWARDS AND DISTINCTIONS

Outstanding Initiate

This is awarded to a freshman who has excelled in both campus involvement and Block and Bridle Activities.

Outstanding Service Award

This is awarded to a senior Block and Bridle member who has excelled in providing leadership and dedicated service to Block and Bridle activities, yet has not held a major club office. Nominees must have at least a 2.00 grade point average.

Activities Leadership Award

This award is given to an activity chair who has paid great attention to detail, deadlines, delegating responsibility, communications, and leadership.

Outstanding Senior Leadership Award

This award is given to a non-animal science major who has made a significant impact on the club through leadership and involvement.

Outstanding Senior

This award is given to an Animal Science senior based on the following criteria: Scholarship - 35%, Block and Bridle activities - 45%, and other activities - 20%.

Honorary Member

This honor is conferred upon an individual who has made a significant impact on Block and Bridle activities, and has never been a member of the Block and Bridle.

1980 Edwin A. Kline
1980 Tom Wickersham
1981 Tammy Rueckert
1982 Allen E. Christian
1983 Barbara Ball Comer
1983 Wanda Linn Niemann
1984 Marshall Ruble
1987 Brad Skaar
1988 Roger Bruene
1989 Chris Skaggs
1990 Susan Durham
1991 Helen Kepler
1992 Curtiss Youngs
1993 Peggy Miller
1985 Andrew Allison 1994 Jerry Knight
1986 Don Hummel 1995 Douglas Kenealy

Hall of Fame
Induction into the Hall of Fame is the highest honor that can be conferred by the Block and Bridle. This honor is given to an individual who is an alumnus of Block and Bridle (not limited to the ISU chapter) and who has made a significant mark upon the livestock industry in Iowa and Iowa State University. Hall of Fame members are:
1970 Carroll R. Plager
1971 Durward Lyons
1972 B. F. Easou
1973 J. Merrill Anderson
1974 Phineas Shearer
1975 Gene Wiese
1976 James J. Kiser
1977 Lyle Haring
1978 Solon A. Ewing
1979 Bernard W. Ebbing
1980 James M. Bradford
1982 Eric and Allan Dee
1983 Paul E. McNutt
1984 Marvin J. Walter
1985 Steven K. Radakovich
1986 Harlan D. Ritchie
1987 Lauren L. Christian
1988 Carl F. Hertz
1989 Richard O. Shuler
1990 Richard L. Willham
1991 Donald D. Gingerich
1992 Connie Greig
1992 John Greig
1993 Harold Hodson
1994 Allan H. Trenkle
1995 Harold A. Trask

Past Presidents
1975 Roxanne Beale
1976 Brad Greiman
1977 Kathy Inman
1978 Ted Greiman
1979 Bruce Carrothers
1980 Tammy Rueckert
1981 Mike Isley
1982 Jack Schlicting
1983 Rich Powell
1984 Linda Aliphan
1985 Dave Duello
1986 Jon Schanben
1987 Darren Dies
1988 Todd Wiley
1989 Tina Geffert
1990 Karol Peters
1991 Brian Becker
1992 Kim Anderson
1993 Mark Venner
1994 Bryan Thill
1995 Mike Fischer

Past Club Advisors
1975 Marshall Jurgens
1977 Joseph Sebranek
1978 Peter Hoffman
1979 F. C. Parrish
1980 Gene Rouse
1981 Max Rothschild
1982 George Brandt
1983 Gene Rouse
1984 Phillip Spike
1985 Marshall Jurgens
1986 Brad Skaar
1987 Loren Christian
1988 Joseph Sebranek
1989 Dan Morrical
1990 Curtiss Youngs
1991 Brad Skaar
1992 Dan Loy
1993 Brad Skaar
1994 Douglas Kenealy
1995 Marshall Jurgens

The Block and Bridle has strived continuously since its creation to build upon the tradition and history it has developed, while staying abreast of the current environment. The club has taken pride in the leadership and dedication shown by its members. The high standards set and achieved by the club are reflected by the numerous awards it has been granted by the university and the national organization. The Block and Bridle is an integral part of Animal Science at Iowa State University—for many alumni, it is very difficult to consider the one without the other.
THE DAIRY SCIENCE CLUB*

On February 23, 1925, there was an informational meeting of students interested in dairy husbandry for the purpose of organizing a club with Ralph Williamson presiding. Some of the main concerns discussed were the fear of too many clubs lacking support, and whether the Dairy Husbandry department was large enough. There was discussion of other universities that had clubs and how effective they were with their clubs. There was also discussion of joining with the Block and Bridle Club, but many students did not think this was a good idea. The positive points of the club were to bring club members and faculty together. Voting with straws took place in order to decide if they should meet once per quarter and hold special meetings when necessary. A committee was formed consisting of Williamson, H. C. Jackson, and Professor Earl Weaver to set up a constitution.

A brainstorming meeting was set for March 1, 1925, to help with the writing of the constitution. Many questions were brought up such as dues, associate members, involvement of local dairymen, and meetings, but the big question was whether to join with Block and Bridle as a subsidiary or to be separate. It was decided to be separate. On March 4, 1925, the constitution was officially adopted, and dues were to be 50 cents per collegiate year.

Another meeting was called in which the charter members wrote the various by-laws for the constitution that was passed at the previous meeting. Charter members in attendance were: Professor Earl Weaver, A. W. Christy, G. E. Crawford, E. M. Hansen, A. H. Hilpert, H. C. Jackson, Robert C. Kallenberg, Ronald Mighell, Paul C. Miller, James K. Milnes, L. A. Moore, Henry Pillard, and Ralph L. Williamson. Ralph Williamson was voted in as president along with Kallenberg as vice president and Hansen as secretary/treasurer.

Some objectives of the club were to provide students with interesting information on their chosen field, to provide students with information on job opportunities for dairy husbandry graduates, to provide means and ways for the dairy husbandry student to learn new ideas, and to improve on student deficiencies in the agricultural field. One method of accomplishing this was by summer employment. The older club members would discuss their summer's work and various opportunities for summer employment. The faculty helped those interested students in obtaining work on some of the leading dairy farms in the nation.

The Dairy Husbandry Club was unique in that the faculty and graduate students belonged to the club. By having faculty members and graduate students at the meetings, dairy husbandry undergraduates became better acquainted with them and cooperation of faculty with students increased. The students could benefit much from this informal relationship. As a club this close and more informal relationship of faculty and students gave the students at Iowa State many more benefits than a student would normally obtain in a college career.

As the constitution and by-laws were set, the next move was to try and gain new members. In the winter quarter the club held an oyster stew at the Alpha Gamma Rho fraternity house. This event proved to be successful and was continued for several years.

Meetings continued to be held in the Memorial Union with professional dress and educational speakers, and treats were definitely a necessity. Dues were increased in 1956 to the price of $2.00 for the whole year. Some major events held that year were VEISHEA, a Sophomore Judging Contest, and the "Little International."

The first large fund-raiser of the club was during the first week in September. The Dairy Husbandry Club sold sack lunches to those dairymen attending the DHIA Cow Conference. This enabled students to get to meet various dairymen and raise money for the club at the same time. Another allotment of money to the club was the receipts from the milk machines in the various agricultural buildings.

In 1960 the first dairy princess, Miss Donna Mae Rice, was selected from within the club. The club also began to help younger members by helping plan a state 4-H and FFA judging contest. The event had over 238 youth in attendance and has continued to the present time.

The Dairy Husbandry Club changed to the Dairy Science Club in 1961, and although the name changed the ideals of the club still remained. As the number of club members increased so did the number of committees within the club.

Breed liaisons were established in 1977, and there was much enthusiasm for the members to have yet another bond with the fellow dairymen within the state. This liaison also helped to gain awareness of registered cattle within the state. The first Quadrathlon was introduced to test the knowledge of animal science students in 1978. The Dairy Science Club and Block & Bridle Club helped sponsor this event.

A Chinese Education Exchange was formed in 1980 to help educate a sister school in China, and the Dairy Science Club also hosted the Midwest Regional American Dairy Science Association-Student Affiliate (ADSA/SAD) in 1983.
As more members join the club each year and the participation of those members increases so do the activities of the club. In 1995 the Dairy Science Club had a large impact on a state-wide junior dairy event. This Iowa Junior Dairy Coalition was a huge success and plans are to continue it.

Throughout the years many things have changed within the dairy science realms of Iowa State University. Even within the Dairy Science Club much has changed. Along the same lines, however, there are many similarities. As with any organization, recruitment is always a concern and a key element to the continuance of an organization. From the beginning recruitment has been a concern. It is obvious, however, that it has been worthwhile and prosperous when you look at all the excellent people involved within the club.

Involvement within the club, College of Agriculture, or the university is not a problem for Dairy Science members. Within the club there are officers from other organizations, student leaders, ag ambassadors, athletes, scholars, musicians, and many other gifted individuals. This causes a problem, however, when trying to plan meetings around everyone's schedule. That is why the club has set dates and times for the meetings.

Throughout the years it is obvious to see that the university, dairy industry, and the world have benefited from the involvement of Dairy Science Club members. Throughout the years, the club has cherished its history. The basis of our lifestyle is greatly appreciated—the landing of the first dairy animals in this country in Jamestown, Virginia, in the 1600's. This one event has changed the lives of many. It will never be forgotten.

**OFFICERS**

As with any organization that you are involved with, you begin to notice the important and crucial role that the officers of a club play in the total picture of the organization. The same is true with the ISU Dairy Science Club. When the club first began organizers saw the need for a president, vice president, and secretary/treasurer. Since then more offices have been added. The Dairy Science Club is represented on the Ag Council by a Junior and a Senior Representative. When more money began entering into the club the secretary/treasurer position was divided into two separate offices. The secretarial position was again broken down into two offices with one being the recording secretary, who takes the minutes at the meetings and posts them, and the other is a corresponding secretary who writes to the members to inform them of the upcoming meetings and other activities of the club. Because the history of the club was an important element of the club a historian was also added. The intramural chair was added into the list of officers when the club became very active in intramural competition, and as the club became involved with the American Dairy Science Association-Student Affiliate Division, it was deemed necessary to have an ADSA Representative to keep members abreast of the current ADSA-SAD activities.

All of the officers and the advisors form the executive council. They meet before every meeting to discuss the major issues affecting the club at that time. The committee also plans the agenda, goes over the details, and raises questions crucial to the club.

**Past Presidents of the ISU Dairy Science Club**

<table>
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<tr>
<th>Year</th>
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FIRST MEETING OF THE YEAR

The first meeting of the year is really not a meeting, but a chance for all the new students to get their first taste of the Dairy Science Club. This first meeting is always held at the ISU Dairy Farm where homesick students can feel more at ease around the dairy farm atmosphere. A BBQ and tons of fun are always a must. It was a tradition to play football before the meal; not a full tackle event, but just a chance to interact physically with one another. Recently, in the late 80’s and 90’s, the football tradition has been traded for volleyball. And, the infamous “watermelon auction” is a long tradition at this meeting with auctioneer, pedigrees and all. This first meeting helps to recruit students, both majors and non-majors, into the club.

RECRUITMENT

When the Dairy Husbandry Club originated it consisted mainly of Dairy Husbandry majors, although membership was open to non-majors who had an interest in the future of the dairy industry, and applicants had to be approved by the executive committee to become a member. To recruit individuals, the club held an oyster stew around December at the Alpha Gamma Rho fraternity. This brought in many new members to choose from and was an opportunity to see what the club was about. Most every person who went before the executive committee was granted membership into the club. Eventually, oyster stew did not seem as popular and the club moved out to the dairy farm and had a BBQ as their first gathering of the year. Club members help to recruit when they are at events.

BIG BROTHER/SISTER - LITTLE BROTHER/SISTER

The “buddy system,” as it was called in 1956, was an important and crucial part of the club. It meant that members of the club would bring their friends with them to the meetings. In the late 80’s this system became the Big Brother/Sister and Little Brother/Sister program. This consists of an older member in the club pairing up with a new freshman and/or a transfer student. This allows the newcomer to the group to have at least one person they know well within the club that they can go to for help, ask questions and further expand their friendships. The “big” person gets to share their knowledge of ISU with a “little” person and pass on the traditions of the club. “Big” people are also supposed to remind their “little” persons of the meetings, offer them rides, and inform them of other activities. Everyone really gets into this event and gains a lot from it.

REGULAR MEETINGS

In 1925 when the Dairy Husbandry Club began, it met four times a year, or once a quarter. Eventually that was changed to meet once a month, with special meetings called for certain upcoming activities. Meetings were originally held in the Memorial Union and in 1965, Kildee Hall. The university changed to the semester system in the Fall of 1981, which had a minimal affect on the club calendar. The business meetings, with formal dress, are run with parliamentary procedure. Educational events are also important; therefore, speakers throughout the industry and university are guests at the club meetings to speak on various aspects of the dairy industry. At the end of every meeting it is also traditional to have a little snack; doughnuts and milk were very popular in the originating club, and lately the snack is milk and cookies.

4-H & FFA JUDGING CONTEST

In 1960 planning began for the first 4-H & FFA Judging Contest to be held at the ISU Dairy Farm sponsored by the Dairy Husbandry Club. The first contest was held in September of 1961 with 238 participants. The Dairy Farm was a sea of 4-H emblems and FFA jackets. The club members helped extensively with this activity, especially the judging team members. In 1962 participation increased by 100 percent. This activity was deemed a huge success and is still continued today. Some of the repeated winning counties included Dubuque, Scott, and Bremer. Many of the top judges at the contest continued on with their career and judged with the ISU Dairy Cattle Judging Team. This also helps to recruit future students. The numbers have dwindled for this contest, but it is still an important and beneficial event. The day consists of judging classes of ISU cattle, giving orals reasons, and taking a tour of the dairy farm.
QUEEN CONTEST

In 1960 the ISU Dairy Science Club decided to pick a Dairy Princess from within the club. The princess would hand out ribbons at the Little International and would compete in the Iowa Dairy Princess Contest. The first princess was Miss Donna Mae Rice from Lime Springs, Iowa. In 1962 the Dairy Princess Contest was considered the Story County Dairy Princess Contest, and Audrey Chown from Nickles, Iowa, was chosen as the princess. The contest only continued for two more years, with Roseanne Wortiington and Jill Truesdale chosen for 1963 and 1964, respectively.

DAIRY JUDGING TEAMS

Because the club included a large portion of Dairy Husbandry majors, there was also a large portion of the judging team members in the club. Dairy Cattle evaluation was and is a large part of the dairy industry and therefore is an interest for many members in the club. The coach of the team is usually also an advisor for the club.

MILK MAID CONTEST

For many years students held a "Little International" Livestock Show (for which students fitted and showed animals of the species and breeds they preferred from university herds and flocks) conducted jointly by the Block and Bridle and Dairy Science clubs. Originally, the show was held in the Armory on campus, but the risks of accidents and other problems involved in moving dairy cattle to the Armory caused the change of location for that portion of the show to the pavilion at the Dairy Farm.

Since the dairy show was comparatively small, various novelty acts were introduced for the interest of the audience. This included goat milking, clown acts, and a milking contest for girls. The popularity of the milking contest made it become a feature of the "Little International" show, then being held in the Livestock Pavilion on campus. Originally Holstein nurse cows from the beef barn were used, since costs and health risks prevented bringing milking cows to campus, but that didn't work very satisfactorily. The fitting and showing contest at the Dairy Farm had dropped to seven contestants, so in 1966 the Dairy Science Club took over and continued what was to become the Milk Maid Contest as a separate event sponsored solely by the Dairy Science Club at the dairy farm pavilion. The growth in attendance and participation grew from a single session with 10 or 12 maids, to two sessions one night, then two session in two nights, and in 1975 to five sessions with 71 maids in the contest. At its peak, 3200 people attended in two nights, and the event grossed $1600.

All residence halls, sororities, and off-campus organizations were invited to enter a milk maid, and as the contest grew, men's residences and fraternities joined to support a women's residence. A tea was held the preceding Sunday afternoon to inform contestants about the contest. The pavilion was decorated with streamers and balloons, Dairy Science Club members acted as clowns to entertain as well as to provide "clean up" and crowd control. It also became a tradition for the freshmen men in the club to act as escorts for the milk maids as they were introduced at the beginning of each session. Milk maids were judged on costume, affection of the milk maid for the cow, the amount of milk produced, and residence support, which not only included the number of people supporting their maid, but the creativeness of yells, cheers, chants, loudness and enthusiasm, and, sometimes, the costumes of supporters. In 1985, the idea of a different overall theme each year was developed. Three judges were chosen for each event, consisting of faculty and staff, prominent dairy people (dairy princess usually), radio or TV personalities, and ISU athletes or coaches. Trophies, ribbons and later, T-shirts, were given to winners in each of the categories.

Having the event in the dairy farm pavilion allowed a very close, intense and exciting atmosphere. Each person was charged a small admission fee for their session and then required to leave to make room for supporters for the next session. This was one of the biggest fund-raisers for the club and had earned a campus-wide reputation. It was later moved to Parent's Weekend so that parents could also be involved.

After a few years at a peak, numbers of contestants started to gradually diminish, even after the "age of equality" allowed for men to participate as milk maids. The event was canceled in 1990 with the 25th annual contest.
MILK MAN CONTEST

With the success of the Milk Maid Contest in the fall, the idea for a complementary men’s event to be held in the spring arose. In the spring of 1975 a “Dairy Fair” was held at the dairy farm pavilion. In 1978 the name was changed to the Milk Man Contest. There were three parts to this contest: obstacle course relay, milk chugging, and goat dressing. The contestants were judged and awarded ribbons and trophies for their accomplishments, and admission was charged for supporters. This event did not attract as much interest as the Milk Maid Contest however, but there were as many as 38 participants in this event. In 1983 the Milk Man Contest was discontinued due to lack of interest and support, along with high risk factors.

CHRISTMAS CARD PARTY

Christmas cards are sent to the many dairy producers, families, and friends of the Dairy Science Club who give encouragement and support to club activities throughout the year. In the beginning the card included summaries of the club’s events for the year as well as good wishes. The Christmas card party was held in a church basement or other hall and cards made of construction paper with inserts were assembled, stapled and hand addressed by assembly line. This was followed by singing Christmas carols, possibly a skit, and the arrival of Santa Claus and treats. With the arrival of computers and copy centers, and increased costs, the cards were simplified and designed as a single card and verse. Self-adhesive labels are prepared by computer, so the actual process is reduced to folding cards, stuffing envelopes, applying the labels, and stamping the return address. To continue the tradition as an event, the party is held at a local restaurant with pizza following the card preparation.

CLUB TRIP

When the Dairy Husbandry Club originated, the members felt strongly about the importance of dairy producers throughout the state and world. They realized how much education could be gained if they were to travel on weekends and visit with these dairymen and thank them for the hard work that they had done. These thoughts are what started the idea of a club trip. In the beginning, they went every weekend to various farms within the state and eventually moved throughout the Midwest. The farther the trips were the harder it was to accomplish in one weekend, so the trips were turned into a yearly event when the members would leave for a whole weekend. Participation continued to grow and so did the places that the students visited. In the mid-80s when the club joined the ADSA/SAD, the Midwest Region began to have regional meetings; eventually this was incorporated into the club trip. Busloads of students would take off on a Thursday morning in early February and head off to look at dairy farms and dairy related industries with the Midwest Regional ADSA/SAD meetings as the destination. This event continues to be very popular and the dairy producers are still very important to the quality of the trip.

FUND-RAISING

There have been many attempts at fund-raisers throughout the years. In the beginning the only fund-raisers were the dues that the members paid, selling sack lunches at the DHIA Cow Conference held at the ISU Dairy Farm, and receiving a portion of the milk sales from all the agricultural buildings on campus. In 1967, when there was a lack of funds, Gregg Briggs organized a cattle clipping project, in which members would clip various dairy producers’ cattle when they were getting classified and/or for state sales. In the first year, the club members clipped 276 head of cattle. This was a great fund-raiser and continued for many years. Clipping cattle allowed the students to work with producers one-on-one and really get to know them. The club also had a food stand at the McHone Dairy Sale. Various other fund-raisers, in addition to the regular, traditional ones, occur.

ALUMNI HOSPITALITY

Alumni are very important to the future of the club members. Many ISU alumni are in prominent positions within the agricultural and dairy industries and therefore in good contact with them helps students as future job seekers. The alumni are fun to interact with and share common Dairy Science Club memories. The
first alumni gathering was held in 1976 at the ISU Dairy Farm in conjunction with the Homecoming football weekend in late October. A display showed the various things the club had been doing and cheese and crackers were served. This proved to be a worthwhile endeavor and was continued for a few years. In 1985, after a lapse of several years, the reception moved to the World Dairy Expo in Madison, Wisconsin. This change proved to be very successful and brought in many alumni now working in all areas of the dairy industry. Initially the reception was held on Friday night in the Exposition Center, but has now moved to Saturday night making it more convenient for more students to attend.

SAUSAGE & CHEESE SALES

In 1988, the Dairy Science Club joined with the Block & Bridle Club in a new venture. The Block & Bridle Club had a long tradition of selling gift boxes of sausage at Christmas time. The Dairy Science Club proposed a joint venture to include a combination cheese and sausage gift box. The Dairy Science Club would provide the cheese, help with sausage making, packaging and selling the boxes and in return receive a percentage of the profits. This was a successful venture and a good fund-raiser for the club. However, in 1994, Block and Bridle decided to sell processed cheese and not to collaborate with the Dairy Science Club. The Dairy Science Club then contracted with an alumnus of the club to provide gift boxes for his clientele. The sausage was contracted from the Block & Bridle Club and both clubs benefited by this endeavor. It was hoped to pursue this area of fund-raising in the future.

MOCK SALE

In 1979 the first mock sale was held in the pavilion at the dairy farm. This was run by the club members and the students enrolled in Animal Science 235. Dick Sears, a professional auctioneer from Ames, helped read pedigrees and did the auctioneering. This turned into an event with great participation by the whole club. It also became a small money maker by charging those buyers who went over their dollar allotment. This event was discontinued in 1994 because of lack of students enrolled in the course.

YEARBOOK

In 1956, club members thought about the idea of putting a booklet together that included all the club activities and could be distributed to all Dairy Husbandry students. Nothing more was done about this idea until the late 60's to the early 70's. The first yearbook, called Squirts 'n Kicks, was published in 1971 as a 5"x7" booklet. In 1974, it changed to an 8½"x11" format. Articles were typed and pictures added to the layout and taken to a professional printer. In 1984, the yearbook became a part of the computer age. An Apple III computer with the Apple Writer word processing program was used. This substantially reduced the cost of having the yearbook printed, and a new era had begun. In 1991, the yearbook first used PageMaker desktop publishing, and in 1992 started using a full-color photo cover. That yearbook won first place in the National ADSA-SAD yearbook contest. The yearbook subsequently won 4th place in 1993 and 3rd place in 1995.

The purpose of Squirts 'n Kicks was to inform the dairy industry of the activities of the ISU Dairy Science Club and its members, to inform prospective Dairy Science students about the Dairy Science Club and to provide a "memory" book for the present and past graduating Dairy Science students. The yearbook has been written, edited, laid out, and created by the members of the Dairy Science Club, and funding came from ads sold by club members.

BANQUET

When the club originated one of the main things the club wanted to accomplish was to meet with the various dairy leaders within the state and honor them for their accomplishments. The first banquet was held on May 23, 1925, at the Sheldon-Munn Hotel with more than 60 people in attendance. W. W. Marsh, a premier Guernsey breeder from Waterloo, was chosen as the first Honorary Member. C. F. Curtiss, the Dean of Agriculture, H. H. Kildee, Head of the Animal Husbandry Department, and Earl Weaver, Head of the Dairy Husbandry Department, gave short talks at the banquet. There was also an election of officers: President, Floyd Arnold; Vice President, Dwight Seath; and Secretary/Treasurer, Donald Doughty. There were also many outside dignitaries in attendance.
This first banquet gave the groundwork for the banquets to come. The second banquet was then held in the basement of the Collegiate Presbyterian Church. In 1930, the banquet was moved to the winter session and has since been held in late February. In 1964, the banquet moved to the Memorial Union, where it is still held to date. Banquets were traditionally held on Tuesday evenings, until 1975 when they were moved to Sunday noon.

Attendance has been into the hundreds at the various banquets, including members, honorary members, distinguished dairy leaders, industry leaders, past and present professors, and the friends and families of the members. Awards are given to the judging team and outstanding sophomores; and leadership awards are given to seniors. Various special scholarships are also recognized at this time.

Honorary Members

When the Dairy Husbandry Club began, it was set out with the dairy producer in mind. As a club, members felt that honoring dairy producers throughout the state who had made a significant impact on the dairy industry was important. This honorary member would be nominated by the club members with the producers involvement and improvement of the dairy industry as the main criterion. This award is given to individuals dealing with the production end of dairy science, and they need not have graduated from Iowa State or have been a member.

<table>
<thead>
<tr>
<th>Year</th>
<th>Honor And Name</th>
<th>Location</th>
<th>Year</th>
<th>Honor And Name</th>
<th>Location</th>
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<tr>
<td>1925</td>
<td>Wilbur Marsh</td>
<td>Waterloo</td>
<td>1963</td>
<td>Homer Fike</td>
<td>Toledo</td>
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<tr>
<td>1926</td>
<td>Peder Pederson</td>
<td>Cedar Falls</td>
<td>1964</td>
<td>G. Joe Lyon</td>
<td>Maning</td>
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<td>1927</td>
<td>W. B. Barney</td>
<td>Chapin</td>
<td>1965</td>
<td>George Opperman</td>
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<td>1928</td>
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<td>1966</td>
<td>Wallace McKee</td>
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<td>1929</td>
<td>Clark Mountain</td>
<td>Des Moines</td>
<td>1967</td>
<td>Robert Ellis</td>
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<td>1930</td>
<td>E. M. Sherman</td>
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<td>1968</td>
<td>J. P. Eves</td>
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<td>1931</td>
<td>Joseph Golivaux</td>
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<td>1969</td>
<td>Arthur Gerlach</td>
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<td>1932</td>
<td>Frederic Larabee</td>
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<td>1970</td>
<td>Harvey Moeckly</td>
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<td>1934</td>
<td>R. G. Kinsley</td>
<td>McGregor</td>
<td>1971</td>
<td>Bernard Monson</td>
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<td>1936</td>
<td>Orville Hammer</td>
<td>Waterloo</td>
<td>1972</td>
<td>R. Clair Wemer</td>
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<td>1937</td>
<td>Don H. Filson</td>
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<td>1973</td>
<td>Duan Woodruff</td>
<td>Indiana</td>
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<td>1938</td>
<td>William Campbell</td>
<td>Jesup</td>
<td>1974</td>
<td>Bud &amp; Ruth McHone</td>
<td>Ames</td>
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<tr>
<td>1939</td>
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<td>Ewald C. Brandt</td>
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<td>1977</td>
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<td>1942</td>
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<td>1979</td>
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<td>1950</td>
<td>Peter Huendling</td>
<td>Breda</td>
<td>1983</td>
<td>Dale Gerlach</td>
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<td>1951</td>
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<td>Clarinda</td>
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<td>William H. Gilbert</td>
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<td>1952</td>
<td>Ivan Gates</td>
<td>West Liberty</td>
<td>1985</td>
<td>Roger &amp; Florence Gerlach</td>
<td>St. Ansgar</td>
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<tr>
<td>1953</td>
<td>Folmer Hansen</td>
<td>Cedar Falls</td>
<td>1986</td>
<td>R. Don Wilson</td>
<td>St. Charles</td>
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<td>1954</td>
<td>M. M. Campbell</td>
<td>Newton</td>
<td>1987</td>
<td>C. F. Foreman</td>
<td>Sun City, AZ</td>
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<td>1955</td>
<td>William Hitz</td>
<td>Polk City</td>
<td>1988</td>
<td>William Regan</td>
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<td>1956</td>
<td>Robert Lage</td>
<td>Davenport</td>
<td>1989</td>
<td>Lee Barber</td>
<td>DeWitt</td>
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<tr>
<td>1957</td>
<td>Ralph Bright</td>
<td>Eldora</td>
<td>1990</td>
<td>John Rodencap</td>
<td>Decorah</td>
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<tr>
<td>1958</td>
<td>Arnold Pancratz</td>
<td>Dubuque</td>
<td>1991</td>
<td>Hadwen Kleiss</td>
<td>Fredrickson</td>
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<td>1959</td>
<td>Howie Lang</td>
<td>Brooklyn</td>
<td>1992</td>
<td>Frank Sivesind</td>
<td>Waukon</td>
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<tr>
<td>1961</td>
<td>Harry Clampitt</td>
<td>New Providence</td>
<td>1994</td>
<td>John Prestemon</td>
<td>Waukon</td>
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<tr>
<td>1962</td>
<td>Willis McAlpin</td>
<td>Villisca</td>
<td>1995</td>
<td>Larry Shover</td>
<td>Delhi</td>
</tr>
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</table>
Distinguished Graduates

In 1978, it was decided the club should also honor individuals who made a significant contribution to the dairy industry but not as a producer. This individual must have graduated from ISU, but not necessarily in Dairy Science. The Distinguished Graduate is also announced and honored at the annual Dairy Science Club Banquet.

1978  Eugene Meyer ........ Fort Atkinson, WI  1987  Dr. Norman Jacobson .............. Ames
1979  Allyn E. Hagen ........ Estes Park, CO  1988  Dr. Charles Henderson .............. Ithaca, NY
1980  Thomas Lyon ............ Shawano, WI  1989  Richard Nelson .............. Brattleboro, VT
1982  James Borcherding......... Des Moines  1991  James Leuenberger .............. Shawano, WI
1984  Richard Lomen .......... Waukon  1993  Miles "Mac" McCarry .............. Deltona, FL
1985  Carl E. Zurborg .......... Davenport  1994  Dr. Henry Tyrrell ....... Burtonsville, MD

ADSA

For years professors have been attending the annual National American Dairy Science Association meetings (ADSA). In the mid-70's students also became more involved in the student affiliate organization. Whether it be presenting papers, attending meetings, or just mingling with the dairy scientists, students who have attended these meetings have enjoyed this event very much. The number of students participating has varied but has not always been large since the meetings are held in the summer when most students have jobs, internships, or are attending summer school. In 1975, six students went to Manhattan, Kansas, to represent ISU at the national meeting. Mike Garver was elected second vice-president. In 1976, eight students traveled to Raleigh, North Carolina, and Mike was elected as president of the national student organization. At that meeting he organized a committee in each of the Eastern, Central and Western regions to evaluate the possibility of establishing regional meetings like those which were quite strong in the South. Interest in this development was high, especially in the Central Region and was to be discussed at the 1977 meeting. That year (1977) Iowa State University hosted the national meeting. While the club hosted the student affiliates, no mention was made of the formation of a regional conference. In addition to Mike Garver, other students who have represented ISU as national officers have been Steve Wallace, secretary in 1983, and Dawn Hovey as president in 1992. Many other students have presented papers and ranked in the top three or four places.

In 1981, at the ADSA annual meeting at LSU, the club conducted a referendum to spark interest in having a regional conference to improve communication among all the dairy science clubs at universities in the Midwest. The result was a conference to be held the following February at the University of Illinois to include such business as election of a student executive council and a paper presentation contest. Thus a Midwestern ADSA Regional Student Affiliate was formed. The following year (1983) Iowa State served as the host school for the Midwest regional conference, with over a hundred students attending from thirteen midwestern colleges and universities. Dairy Science Club member Mary Luckstead was elected secretary. In 1990, the Dairy Science Club again hosted the regional conference with club member Crystal Vierhout serving as regional president. In 1992 Dawn Hovey was elected regional president, and in 1994 Jim Hammerman was elected officer-at-large.

Attendance at the regional ADSA-SAD conference averaged from five to eight students from ISU who were able to attend, and the club voted to designate some funds to help with travel expenses. In 1991, it was decided to coordinate the annual club trip at the same time as the regional meeting by extending the trip one extra day, thus allowing for a much greater participation by the entire club at the regional meeting. This has proved to be a great success and has been a highlight of the year ever since.

Jay Mattison, Vice President of the Dairy Science Club, took the ag travel course to China in 1980 and while there met many prominent people within the dairy industry. The Chinese, however, did not have the opportunity to get the various dairy journals that we take for granted. He then came back and told the club about his experiences. At this same time, other students were planning an exchange trip to China. The club then took Shen Yang Agricultural University as a sister institution and sent them various magazines, such as Hoard’s Dairyman. This idea was a great educational and hospitable activity for a club to do, and it received the “Most Innovative Idea” award from the College of Agriculture Council that year.

83
BREED LIAISON

This committee was formed to increase the involvement of the Dairy Science Club in the state breed associations' activities and to better inform the state associations of the club and its activities. Because of the wide variety of backgrounds represented in the club, not all members were aware of the different breed activities or of the registered livestock business in general. Members were selected to attend the various state breed association meetings, making contact with the association's events, and to provide information about the Dairy Science Club to the breed associations. This activity has been discontinued, however, for the past few years.

VEISHEA

VEISHEA is the club's biggest event. In the early days of the club, it had a float in the parade and an open house display in the basement of Curtiss Hall. The display was very extravagant and followed a different theme every year. The hard work spent on these projects paid off by winning various awards for their display and float. In 1963, the club moved its display to the Livestock Pavilion on campus where there was more room. After Kildee Hall was built, the Dairy Science display moved to the foyer with a "Little Red Barn" petting zoo located east of Kildee. Eventually the club began to make homemade ice cream and sold it as a fund-raiser. The amount of ice cream produced has increased tremendously over the years and the club still sells out every year. In 1994 an "I Milked a Cow" event was added to the list of things the club offers for public participation. The club has won first place in the College division many times for its display, and the University Sweepstakes award for the display at least twice, most recently in 1995.

"I MILKED A COW"

In 1989 the Dairy Science Club staged the first "I Milked A Cow" project at the Iowa State Fair. It was quite successful and was attempted again in 1990 but with a little less enthusiasm and organization. In 1991 it was canceled. However, with renewed enthusiasm it was reestablished in 1992 at the Iowa State Fair. This time the club and the ISU Dairy Farm took cows to the Iowa State Fair to show, exhibit, and use in the display. The general public could buy a chance to milk a cow. This was a huge success and was a great money maker for the club. It also helped to educate the general public about cattle, milk, and the university. In 1994 "I Milked A Cow" was first attempted at VEISHEA and was a huge success. With "Get a Grip" as the theme, many people were waiting to get their chance to grip a cow. This event, both at the state fair and at VEISHEA has really taken off and will continue in the future.

SENIOR STEAK FRY

The last meeting of the year is traditionally a farewell to the graduating seniors. At one time, this spring picnic was held in a city park, with volleyball or softball, followed by a "bring your own steak" fry with the graduating seniors being in charge of other food and drinks. During the later part of the 1970s, this event was moved to other locations indoors to accommodate music and dancing after the grilling and eating. This eventually faded out, and the picnic once again was held in city parks with volleyball, brats, and hot dogs provided by the club. It still remains as the last event of the year and a farewell to graduating seniors.

* Prepared by Tami Schwartz
THE POULTRY SCIENCE CLUB

The Iowa State University Poultry Science Club, defunct since the Poultry Science Department incorporated with the Animal Science Department in 1973, has a long yet obscure history. The club was almost certainly originally formed as a branch of the old Agriculture Club, though at what date it became a separate entity is unknown. The first references to the Poultry Club date back to 1925, when the club sponsored its first annual Egg Show. This show was designed to promote the Iowa poultry industry, then in its heyday and one of the largest in the nation. In 1925, the club also won the VEISHEA parade float competition with a horse-drawn float that held a large egg basket and a banner reading "Iowa—Egg Basket of the Nation."

The Poultry Science Club continued its involvement with VEISHEA for many years, holding the Egg Show in conjunction with the event until 1958. The show grew over the years, adding classes for both chicks and pouls. This show was the only one of its kind in the nation and drew considerable nationwide interest. A sale was held after the show, and the revenue was used to support the Poultry Judging Team's trip to the Collegiate Poultry Judging Contest in Chicago. After 1958, the club prepared a display highlighting the poultry industry during VEISHEA.

The major fund-raiser of the club in later years was the processing and distribution of turkeys. Turkeys were bought live from area producers, and the students dressed the birds at the ISU Poultry Farm. The turkeys were marketed to the faculty and residence halls. The project was successful, with upwards of one hundred turkeys sold a year.

In 1962, the club produced its first yearbook—the "Cock's Crow." This yearbook, in addition to highlighting the activities of the club and its membership, contained numerous articles on the current state of research into poultry production and the Poultry Science Department at ISU. The venture was well supported by the Iowa poultry industry through advertising. More than five thousand copies of the yearbook were distributed throughout the nation, being sent to every agriculture college, as well as all the high schools and hatcheries in Iowa.

Though the club was always small in numbers, they enjoyed a wide variety of social activities and could boast near 100% attendance at meetings. A variety of picnics, home visits to faculty, and tours was enjoyed by the members. The club, in conjunction with the department, also held a very popular Alumni Day event. This undertaking drew in excess of 100 people. For many years, club membership exceeded enrollment in the poultry department, giving testimony that these events and others were well received. By the time of amalgamation with the Animal Science Department, membership had dwindled, and the club was absorbed into the Block and Bridle.
1984 B. Skaar: Kevin Allman, Todd Benton, Dean Engel, Kevin Miller, Mark Fcrsyth, Tim German, Cary Gilman, JoAn Erickson McGraw, Brad Sheriff, Rich Werner, David Wood: NA-14th, D-9th, R-1st
1990 Bryan Reilling: Karol Peters, Dave Mente, Juli Keese, Kent Mower, Kara Hickman, Scott Schmitz: D-6th, S-6th, IBE-3rd, H-7th, NBS-2nd, MS-2nd, MA-4th, R-12th, NA-11th
1992 Dave Du ello, Scott Greiner: Kurt Steinkamp, Mike Brown, Dan Lane, Jim Gibson, Brian Becker, Dwight Sexton: D-4th, S-2nd, IBE-5th, H-4th, NBS-2nd, MA-3rd, R-4th, NA-1st
1995 Scott Greiner: Leamme Bettos, Beau Brecht, Jason Brune, Brad Chapman, Tracy Collland, Mike Fischer, Matt Gaul, Matt Greiman, Sue Naughton, Dan Rohrbeg, Aaron Schafer, Tyler Strathe, Chad Younge: D-7th, C-1st, S-1st, IBE-2nd, NBS-2nd, MA-2nd, MC-1st, R-1st, NA-6th

Contest Codes
I = International
S = Sioux
H = Houston
MA = Mid American
R = American Royal
MS = Mid South
C = Denver Carlot
KSC = Kansas State College
CI = Chicago International
NA = North American Show
D = Denver
IBF = IBF
NBS = National Barrow Show
MC = Mid Continent
NC = National Cattle Congress
IBE = Iowa Beef Expo
FW = Southwest at Fort Worth
NCS = North Central States
ABS = Austin Barrow Show
DAIRY CATTLE JUDGING TEAMS*

The Dairy Cattle Judging team has a reputable history that deserves the pride it's earned. In 1908, under the instruction of H. G. Van Pelt, the first Iowa State Dairy Judging team was formed. Since then the team has had only 14 coaches and many outstanding members. Iowa State University is respected as one of the nation's top dairy judging teams having won 15 national contest including the very first intercollegiate contest which was held in 1908 at Chicago. Today Iowa State's Dairy Judging team and coaches continue to dedicate much time and effort to uphold the fine art of dairy judging.

All information that is available on the Dairy Judging Team has been included in this report. The information is listed for each year's team starting at 1908 extending to 1995. There were no teams in 1942, 1943, and 1944 due to World War II and in 1915 due to the outbreak of hoof and mouth disease. The year 1918 is missing without explanation.

DAIRY CATTLE JUDGING TEAMS

1908  H. G. Van Pelt: F. D. Hawk, H. F. Patterson, G. T. Guthrie: NC-1st
1911  H. H. Kildee: James G. Watson, Guy E. Harmon, Ann N. Dunlap: NC-7th
1912  H. H. Kildee: L. S. Gillette, George Thompson, C. L. Burlingham: NC-2nd
1915  H. H. Kildee: Susie, Tuttle, Noble, Parsons
1916  L. S. Gillette: W. S. Mason, L. V. Wilson, W. L. Henderson, J. A. Sturtevant (alt.): NC-5th
1918  No team
1921  Earl Weaver: B. W. Kilgore, Jr., D. D. Offringa, Fred E. Ferguson, Cal Goelken (alt.): NC-6th, DCC-1st
1923  Earl Weaver: Floyd Johnston, A. M. Kirby, Porter Jarvis, Ralph Mygott (alt.): NC-5th, DCC-1st
1924  Fordeyce Ely: Robert C. Kallenbarg, Willard Torgren, George A. Mark, Ralph Trizzell (alt.): NC-14th, DCC-7th
1926  Fordeyce Ely: Willard J. Grove, Ernest M. Wright, Clifford C. Davis, Kenneth Cash (alt.): NC-14th, DCC-2nd
1928  Burt Oderkirk: Warren K. Nelson, Joe Shaw, Ralph W. Held, Byron Smith (alt.): NC-3rd, DCC-6th
1929  E. N. Hansen: William I. Pepper, Carroll Plager, Edward Syndergaard, William Bowie (alt.): NC-10th, DCC-6th
1930  E. N. Hansen: Robert D. Stewart, Arthur Porter, Donald Groves, Howard Ely (alt.): NC-1st, DCC-1st
1931  E. N. Hansen: Kenneth E. Walter, Harold Carver, Martin Fabricius, Harry Rapius (alt.), Clifford Johnson (alt.): NC-3rd, DCC-2nd
1932  E. N. Hansen: Russell Plager, Edwin Matzen, William Probert, Clarence Powell (alt.): NC-1st
1933  E. N. Hansen: Marshall Dearden, James Hillier, Hilton Boynton, Carl Hertz (alt.): NC-1st
1934  E. N. Hansen: John Gleason, Wayne Tyler, Roy Olson, Lindley Finch (alt.): NC-10TH

93
1936  E. N. Hansen:  Kermit Teig, Harry C. Tooley, Harold Hofstrand, Richard McWilliams (alt.): NC-7th, DCC-5th
1937  E. N. Hansen:  Verald Brown, Robert Lichty, Lindley Finch, Vincent Kelley (alt.), Thomas Gleason (alt.): NC-9th, DCC-3rd
1938  E. N. Hansen:  Vincent Kelley, Kenneth Kramer, Norman Kulsrud, Claire Wemer, Max Naylor (alt.): NC-2nd, DCC-2nd
1939  E. N. Hansen:  Robert Lage, Jacob Stimson, Claire Wemer, Clyde Gleason (alt.), James McKenna (alt.), Jack Spearing (alt.): NC-1st, DCC-9th
1941  E. N. Hansen:  Lyle Jackson, Russell Lyon, Lyle Hoyt, William Hitz: NC-1st, DCC-4th
1942  E. N. Hansen:  Eugene Meyer, John Morris, Robert Clause, Allan Bentley, Lidvall: DCC-1st
1943  No Team
1944  No Team
1945  No Team
1948  A. R. Porter:  W. D. Willer, Tom Smith, Robert Bellman, Bert Eason: NC-2nd
1949  A. R. Porter:  George Lancaster, Joe Hoopes, George Leland, Robert Bellman, Maurice Beaver: NC-1st, ARDS-1st
1951  A. R. Porter:  John Compton, Maurice Core, Dean Kingston, Gene Wiese: NC-1st
1953  A. R. Porter:  James Borcherdning, Joe Cooper, Judd Leland, Bill Opperman: NC-10th, KSF-1st, ILE-3rd
1954  Lon McGilliard:  Charles Christians, Gerald Cornelius, Don Funk, George Loupee, Ernie Thomas: NC-2nd, ILE-8th, KSF-3rd
1955  C. F. Foreman:  David Breeze, Max Cory, David Diehl, John Eilts, Paul Eness, Dean Harmon, Gail Riegle: NC-5th, KSF-2nd, ILE-5th
1959  C. F. Foreman:  John Besh, Kermit Coggsball, Harold Hodson, Seth Riegle, Curtiss Rodgers, Sterling Schelkopf, John Syndegaard: NC-5th, KSF-1st, ILE-4th
1960  C. F. Foreman:  John Besh, Kermit Coggsball, David Harville, Harold Hodson, William Klodt, Thomas Lyon, Gordon Reisinger: NC-4th, KSF-3rd, ILE-1st
1961  C. F. Foreman:  Dave Kjome, William Klodt, Thomas Lyon, James Hosch, Gordon Reisinger, Paul Miller, David Harville (alt.): NC-8th, KSF-2nd, ILE-6th
1964  J. A. Sims:  Charles Detch, Herbert Dodds, Ronald Orth, Robert Pruessner, Benjamin Buskohl, Larry Mahr, Byron Bryant: NC-4th, KSF-3rd, ILE-13th
1967  J. A. Sims: Sr. Team; Gregory Briggs, David Glime, Dale Green, James Leuenberger, Douglas Wilson, Dean Rodgers, Jr. Team; Richard Alquist, Richard Clark, Larry Madren, Larry Shover, David Wessel; NC-5th, DCC-4th, ILE-4th

1968  J. A. Sims: Sr. Team; Richard Clark, Loren Englebrecht, Larry Madren, Larry Shover, Richard Alquist, David Wessel, Jr. Team; Daniel Burkhart, James Holst, Gary Janssen, Donald Lenth, Mark Telleen; ILE-8th NC-13th, MWR-4th, WDE-7th

1969  J. A. Sims: Sr. Team; Daniel Burkhart, James Holst, Gary Janssen, Ronald Lenth, Mark Telleen, Jr. Team; M. Kent Carrothers, Richard Dewey, Dennis Woodruff, Glenda Fike, Roger Lenius, James Thompson; NC-8th, DCC-2nd, WDE-7th, ILE-4th

1970  W. Wunder: Sr. Team; Gary Kamrath, Roger Lenius, Meredith McHone, Michael Snyder, Jr. Team; James Ellis, William Hall, David Joachim, Roger Peterson, Dale Pierce, Donald Williams; NC-8th, DCC-2nd, WDE-9th

1971  W. Wunder: Sr. Team; Kent Carrothers, Richard Dewey, Jim Ellis, Dave Joachim, Jr. Team; Stan Henderson, Craig Lang, Claret Laurence, Charles Medlang, Jay Merryman, Chuck Thompson, Steve Henderson; NC-4th, MSF-2nd, WDE-1st

1972  W. Wunder: Sr. Team; Stan Henderson, Steve Henderson, Craig Lang, Claret Laurence, Bob Lyon, Jay Merryman, Bruce Telleen, Mike Trampil, Jr. Team; Mark Lyon, Geary Meyer, Chuck Thompson; NC-12th, DCC-2nd, WDE-1st

1973  W. Wunder: Sr. Team; Clay Bernick, Mark Lyon, Gary Meyer, Chuck Thompson, Jr. Team; Dennis Cline, Gene Henderson, William F. Peterson, Yvonne Pfaff, John Schulte, Jo Wilson; NC-9th, DCC-4th, WDE-7th

1974  W. Wunder: Sr. Team; Dennis Cline, Gene Henderson, Yvonne Pfaff, William F. Petersen, Ken Vial, Kathy Jo Wilson, Jr. Team; James Droste, Bruce Epley, Eric Lyon, Garry Zumbach; NC-1st, DCC-6th, WDE-2nd

1975  W. Wunder: Sr. Team; Bruce Epley, Gene Henderson, Eric Lyon, Norman Nabholz, Garry Zumbach, Jr. Team; Mark Lang, Dan Griffiths, Karen Lage, Tom Polacek, Mike Rankin; NC-8th, DCC-1st, WDE-2nd

1976  W. Wunder: Sr. Team; Charles Glase mann, Karen Lage, Mark Lang, Mike Rankin, Jr. Team; B. Neal Anderson, Rose Harrold, Gary Kregel, Peter Lyon, Christopher Spangler, Noman Voelker, Dennis Worden; NC-6th, DCC-7th, WDE-11th

1977  W. Wunder: Sr. Team; Neal Anderson, Gary Kregel, Norman Voelker, Dennis Worden, Jr. Team; Greg Lyon, Sherry Newell, Mike Augur, Dave Bolin, Janice Keene, Mark Uhlenberg; NC-9th, DCC-1st, MSF-5th

1978  W. Wunder: Janice Keene, Greg Lyon, Pete Lyon, Dave Miles, Sherry Newell, Darwin Sneller; NC-19th, DCC-5th, A-ADS-9th

1979  W. Wunder, Asst. Les Hansen: Sr. Team; Heidi Mills, Sherry Nichols, Lewis Olson, Jeff Rugg, Mark Sollien, Jr. Team; Dave Petersen, Mark Butz, Dennis Erpelding; NC-3rd, DCC-1st, MSF-3rd

1980  W. Wunder, Asst. Les Hansen: Sr. Team; John Becker, Dave Petersen, Joan Crawford, Dennis Erpelding, Stan Gable, Fred Hall, Matt Hamlett, Jr. Team; Steve Ledvina, Mark Steffens, Dave Weigel, Gary Lien, Bill Ormston, Greg Palas; NC-13th, DCC-4th, MSF-12th

1981  W. Wunder: Sr. Team; Dan Bernick, Steve Ledvina, Gary Lien, Greg Palas, Dave Weigle, Steve Wilson, Jr. Team; Ken Burke, Dan Gilbert, Mark Kerndt, Gordon Leader, Connie Ray, Rick Sullivan; NC-5th, DCC-1st & 2nd, A-ADS-11th


1983  Tom Aitchison, Asst. W. Wunder: Sr. Team; Elaine Barber, Scott Bentley, Cindy Clawson, Trent Henkes, Eric Lang, Monica Monson, Jr. Team; Doug Brown, Randy Frank, Warren Lyford, Kurt Lyon, Dave Sullivan, Mike Turley; NC-2nd, DCC-2nd, A-ADS-17th M-5F-6th

1984  W. Wunder, Asst. T. Aitchison: Sr. Team; Doug Brown, Mike Turley, Randy Frank, Warren Lyford, Linda Sacquinte, David Sullivan, Jr. Team; Brad Possam, Kathy Foster, Devan Funk, Paula Lang, Ron Sersland, Dan Sivesind, NC-8th, DCC-4th, M-5F-1st
1985  Tom Aitchison, Asst. W. Wunder: Sr. Team; Brad Fossum, Kathy Foster, M-SF-5th, Devan Funk, Ron Sersland, Dan Sivesind, Jr. Team; Dan Weigel, Ross Meinert, Steve Bierschenk, Todd Cohrs, Scott Eberling, Ron Franck, Jackie Friedrich, Steve Hoover: NC-4th, DCC-3rd, A-ADS -5th


1989  W. Wunder, Asst. M. Schutz: Sr. Team; Maureen Barber, Bonnie Cowell, Brian Hanson, Connie Hotvedt, John Metzger, Mike Opperman, Crystal Vierhout: NC-6th, DCC-5th, A-ADS-13th, Jr. Team; Scott Bernick, Mike Gerds, Tim Harbaugh, Tracy Pleis, Tim Schmitt, Joe VanDerSchaaf: DCC-3rd, NAILE-3rd

1990  W. Wunder: Sr. Team; Mike Gerds, Tim Harbaugh, Tim Schmitt, Joe Vander Felitz: NC-7th, A-ADS-4th, Jr. Team; Amy Chown, Mike Engelbrecht, Renae Moon, Brad Rodenberg, Loren Wille: DCC-7th, NAILE-13th

1991  W. Wunder: Sr. Team; Mike Engelbrecht, Chris Illams, Renae Moon, Brad Rodenberg: NC-7th, A-ADS-10th, Jr. Team; Brian Bigler, Rhonda Franck, Michael Gast, Dawn Hovey, Krista Liebenow, Julie Tritz, Ron Welper: DCC-7th, M-SF-3rd

1992  W. Wunder: Sr. Team; Brian Bigler, Rhonda Franck, Dawn Hovey, Ron Welper: NC-13th, A-ADS-7th, Jr. Team; Steve Benz, Becky Cowell, Beth Palmer, J. Schanbacher, Kurt Wierda, Melissa Wilder: DCC-12th, NAILE-13th


Contest Names
NC - National Contest
DCC - Dairy Cattle Congress
NADS - North American Dairy Show
WDE - World Dairy Expo
A-ADS - All-American Dairy Show
M-SF - Mid-South Fair
NAILE - North American International Livestock Exposition
ARDS - American Royal Dairy Show
KSF - Kansas State Fair
MSF - Minnesota State Fair
T-SBCLJC - Tri-State Breeders Collegiate Livestock Judging Contest
ILE - International Livestock Exposition

*Prepared by Andrea Steffens
POULTRY JUDGING TEAMS
1920-1959

1920  H. A. Bittenbender: P. L. Fotsch, J. L. Gordon, F. H. Helmrich, S. W. Henn
1922  W. M. Vernon: M. D. Doty, C. R. Drake, C. Filer, N. Kass, F. E. Wilson
1925  H. A. Bittenbender: No record of team
1926  H. A. Bittenbender: Cotton, Porter, Schultz, Wilcke
1927  H. A. Bittenbender: D. J. Carter, C. L. Hall, W. Kohlmeyer, M. J. Maxted
1929  C. W. Knox: R. Babb, Beagley, D. Brazie, D. Pendarvis, Randolph
1932  Waters: W. H. Basset, H. L. Coolidge, C. E. Larson, K. P. Zunkel
1933  Waters: Bartlett, Boynton, R. Heeren, Simpson
1934  Cochran: Bolin, Bowstead, Gardner, Meyer
1935  T. Milby: Hopkins, Stimson, Torkelson, Walker
1936  T. Milby: S. Dayton, C. Hess, K. Lungren, E. Molln
1937  T. Milby: D. Culbertson, G. Hunting, K. Lundgren, R. White
1938  Wilcke: C. Baker, F. Spence, G. Thompson, M. Wyant
1939  No Record
1940  R. E. Phillips: R. Gloyer, M. Groeneveld, R. Kottman, R. Moses
1941-1946  No Contest
1947  R. Penquite: C. Bayles, H. Bayles, Carey, Cook
1948  R. Penquite: Davis, Jensen, W. Penquite, Potter
1949  R. Penquite: Bray, Ghostley, Lux, Lynn
1950  R. Penquite: Anderson, Bray, Hattendorf, Nelson
1951  R. Penquite: Fotsch, Nichols, Sams, Wilson
1952  R. Penquite: Hutton, Johns, McViker, Miller
1953  R. Penquite: Buchet, Owings, Reigelsberger
1954  R. Penquite: Enfield, Kruse, Thompson
1955  R. Penquite: Buchet, Clauson, Harley, Lockwood
1956-1959  No Record
HORSE JUDGING TEAMS

When Peggy Miller came the the department, a horse judging team was initiated. Sarah Garr, herdperson for horses, worked with team development. The student judges and results are as follows:

1990  Margeret Rogers, Marcia Mootz, Sue Heston, Alayna Anderson, Dave McCollum: 11th-SG, 10th-QHC, 7th-QHWS
1992  Tom Cooney, Marcus Daniels, Daren Obrecht, Carol Snyder, Jeff (Hoss) Honkomp: 4th-SG, 4th-QHC, 3rd (Appaloosa)
1993  Dan Kovitch, Dara Thomas, Rhonda Hickman, Leah Trinity, Allison Steen, Kari Bracht: 8th-SG, 14th-QHC, 9th-QHWS
1994  No Team
1995  Jeremy Bedford, Josh Hill, Mickie Burks, Lori Bries, Elizabeth Trader: SG-9th, QHC-12th

SG - Solid Gold
QHC - QH Congress
QHWS - QH World Show

WOOL JUDGING TEAMS*

Don Warner coached a wool judging team from 1961 to 1969. These teams competed at the National Western in Denver and the American Royal in Kansas City. The Iowa State team won first at the Royal in 1963. The statistics of the teams are as follows:

1962  Cortlyn Almquist, Fred Elling, Howard Graham, High, Dean Henderson, Dan Murphy, Larry Vint: D-9, KC- 3
1963  Rex Blom, Rodney Fee, Bruce Holmberg, Wesley House, Donald Longnecker, Fred Lord, Dean Senning: D-2, KC-4
1964  Lloyd Barrow, Vernon Hart, Charles Hitzeman, Robert Rinam, Arelie Robison, Paul Swanson: D-3, KC-4
1965  David Anten, Bruce Engnell, High, Curtis Olenius, Ralph Pilkington, Gary Ternus:  D-2, KC-1
1966  Franklin Albertson, Mike Dugdale, Ron Graham, Harlan Persinger, John Riebeling: D-4, KC-5
1967  Ross Butler, Bruce Dobhrmann, Dale Green, Dean Rodgers, Bruce Smith:  D-5, KC-3
1968  James Brink, Craig Conover, Gene Doran, Boyd Dohrman, Dwayne Pierschpachker, Wayne Skartwedi, Ray Doug Wilson: D-7, KC-4
1969  Robert Freese, Kenneth Kunkle, Clark Rainboth, Merle Witt

D - Denver
KC - Kansas City

*Special problem prepared by Chad Pennington

98
MEAT ANIMAL EVALUATION CONTEST *

The coordinated approach to animal evaluation was initiated to assist and encourage students of animal science to be more aware of the relationships and limitations that exist when evaluating breeding and market animals, and to help them more fully appreciate the importance of carcass excellence as it relates to production, meat processing, merchandising, and consumption. This program was specifically designed to stimulate college teaching and to motivate students to seek a more complete understanding of meat-animal evaluation from conception to consumption.

The basic idea took roots on April 21, 1955, in Chicago, Illinois, when the National Livestock and Meat Board, through encouragement by concerned educators, sponsored the first of several clinics to provide students an opportunity to evaluate market livestock, before and after slaughter. From this beginning, there has been a continued growth of interest, support, and participation until now there are, in addition to the National Ak-Sar-Ben MAEC, three similar regional activities: the Northwestern MAEC at Twin Falls, Idaho; the North Central MAE Triathlon at Madison, Wisconsin; and the Southeastern MAEC at Baton Rouge, Louisiana. In addition, most universities and junior colleges having animal science programs have developed courses aimed at the concepts stated above.

The idea for the Ak-Sar-Ben MAEC developed when educators and businessmen of the livestock and meat industry designed an exercise that would emphasize all aspects of meat-animal evaluation. It was decided that breeding livestock, market livestock, and meat products should be included and that such a program be both educational and competitive. They organized the first event through the cooperation of the late Lewis Thompson and the Rath Packing Company, Waterloo, Iowa, in 1964. Forty students participated. Three contests later, 87 students from 11 universities competed in the 1967 contest held at Farmbest, Inc., and IBP, Inc., in Denison, Iowa. In 1968, the program was moved to Omaha, Nebraska, where 117 students from 11 universities competed under the sponsorship of the Knights of Ak-Sar-Ben and the cooperation of Armour and Company, George A. Hormel and Company, and the Omaha Livestock Market, Inc. Starting in 1990, Con Agra Inc. joined the Knights of Ak-Sar-Ben in sponsoring this event and 132 students representing 15 universities were assembled to test and compare their knowledge. In 1995, the contest was moved from Omaha to St. Joseph, Missouri, and 88 students representing 11 universities participated. In addition to the breeding livestock, meat-animal evaluation, and meat products contest, starting in 1994 teams also participated in a Communications contest which was developed for the entire team to participate and discuss a current topic from three different aspects-producer, packer, and consumer. In 1995, teams also had a retail meat class added to the contest to better prepare themselves to become consumers as they evaluated meat products bought from a grocery store. The following is a record of how Iowa State's MAE teams have fared from their first contest in 1970 to 1995.

MEAT ANIMAL EVALUATION TEAMS

1970  David Topel, Donald Warner: Dwayne Buettner, Tom Eveland, Don Fischer, Geoffrey Haaland, Craig Mann, Carroll Ose, Paul Queck, Bill Ramsey, Sterling Young, Alan Koehler: Team; MA-3, BA-6, O-5
1971  David Topel, Donald Warner: Ervin Behrens, Charles Downy, Ken Epperson, Larry Haas, Fred Knoep, Dudley McDowell, David Meeker, Merle Petersen, Jim Ullrich, Delbert Winterhof: Team; MA-1, BA-5, M-5, O-2
1972  Donald Warner, Jim Bergkamp: Gary Berg, John Danner, Gene Doran, Hugh Hartley, Ralph Lents, Will McClough, Kenneth Meeker, Daniel Petersen, Stephen Smith, Gary Wunder: Team; MA-11, BA-4, M-3, O-8
1974  David Topel, Donald Warner: Grant Conover, Susan Gahn, Douglas Geerdes, Marvin Groth, Mark Gustafson, George Hornung, John Hugh, James Weigel: Team; MA-3, BA-8, M-7, O-2
1975  David Topel, Donald Warner: James Alexander, Joel Brinkmeyer, David Fisher, Charles Goodman, James Hanson, Thomas Hotz, Mickey Mente, Ken Rosmann, Jim Venner: Team; MA-7, BA-5, M-2, O-3
1976  David Topel, Donald Warner: John Allen, Brian Carlson, William Coan, Dean Danilson, David Jacobson, Wayne Lents, Rhonda Moffatt, Reed Olsen, Tom Robinson, John Wall: Team; MA-3, BA-2, M-10, O-3
1977  David Topel, Donald Warner, F. C. Parrish, Jr.: Joe Broders, Sue Farrow, Mark Fischer, Dean Friedrichson, Brian Garrels, Kathy Inman, Loren Jackson, Duane Olsen, Bev Schmitt, Jack Tank: Team; BA-9, M-8, O-12

99
1978  Donald Warner, F. C. Parrish, Jr.,: Russell Euken, Brad Golightly, Ted Greiman, Barry Johnson, Dave Julius, Brian Kirkpatrick, Dallas McDermott, Dennis McDermott: Team; MA-4, BA-1, M-5, O-3
1980  Donald Warner, F. C. Parrish, Jr.: Craig Amos, Terry Gray, David Judd, James Klindt, Delrae Martin, Gene Mohling, Craig Musfeldt, Jeffrey Sandage, Heidi Sauser, Jeff Schlichting: Team; MA-3, BA-2, M-6, O-5
1982  Donald Warner, F. C. Parrish, Jr.: Doug Borkowski, Steve Bryce, Ed Harkema, Craig Huff, Pat Miller, Jim Scotts, Jeff Verschoor, Gary Weeda: Team; MA-7, BA-5, M-8, O-6
1985  No Team
1988  F. C. Parrish, Jr., Dave Duellio: Darren Dies, Mike Carlson, Bret Hultman, Scott Greiner, Steve Greiner, Steve Lonergan, Tom Rathje, Jeremy Schram, Ron Secklock: Team; MA-10, BA-4, M-1, O-6
1989  No Team
1992  F. C. Parrish, Jr., Brad Skaar: Angela Greiman, Alayna Anderson, Eric Smith, Mike Kalsem, Dale Schwartz, Mike Tometich, Dean Link, Doug Deppe, Terry Wicks, Todd Jurgett: Team; MA-8, BA-1, M-1, O-2
1994  F. C. Parrish, Jr., Brad Skaar, Mark Venner: Eric Annis, Chad Berentschot, Kari Bracht, Scanlon Daniels, Ken Grimm, Mark Hulsebus, Kristin Long, Kevin Maas, Edward Moser, Colette Ohl, Jeff Pudenz: Team; MA-7, BA-3, M-1, O-4
1995  F. C. Parrish, Jr., Brad Skaar: Dennis Deppe, Dwayne Faidley, Alan Friedricksen, Dominic Hogan, John Lane, Jason McVicker, Steve Murty, Julie Sieren, Samantha Simon, Matt Sternberg, Jeff Tschosik, Scott Wiley: Team; MA-4, BA-3, M-4, O-2

Contest Codes
MA - Market Animals   M - Meats
BA - Breeding Animals O - Overall

*Independent study by Kevin Maas
MEAT JUDGING TEAMS *

Currently, meats judging teams are educated much as a USDA grader. They judge not only carcasses and wholesale cuts, but also yield and quality grade, write five sets of reasons, and judge ten specification cuts. I know that past generations of judges were allowed to touch the carcasses and cuts, but no longer. Today's judge is not allowed to touch any lean cut surfaces during the contest. Additionally, meats judging has become much more intense over the years with classes added every couple of years to challenge and better educate students for a future in the meat industry.

MEAT JUDGING TEAMS

1930 M. D. Helser: Dexter Artz, Joseph Caputo, Clifford Hardie, Raymond H. Smith: 1-8, AR-1,
1931 M. D. Helser: Herman J. Christie, Paul A. Goeser, Don Groves, Glen Hinde, Edwin Matzen, 1-2, AR-2
1933 Fred Beard: Gleason Diser, Roy M. Huntoon, Roy E. Olson, Thomas Scott: 1-2, AR-1
1936 Fred Beard: Leo Bodenstine, Nelson Fox, Wayne Jackson, Dave Lorenson: 1-10, AR-4
1937 Fred Beard: Herman deNeul, Lucian Harryman, Buford McClurg, Don Ritter: 1-3, AR-5
1938 Fred Beard: George Byrne, Buford McClurg, Phillip Poland, Max Wright: 1-2, AR-10
1940 Fred Beard: Harold Barrett, Robert Fincham, Kester Gillis, A. Leonard Mitchem, Marion Nicholls: 1-10, AR-10
1941 Fred Beard: Verle Arnold, Leland Beneke, John Harding, Clarence Moffitt: 1-5, AR-6,
1942 No contest
1943 No contest
1944 No contest
1945 No contest
1957 E. A. Kline: Jim Kelley, Ron Kuehn, Fred McKibbin, Bob McLain, Bill Shott: 1-5, AR-9, SWE-2,
1959 E. A. Kline: Bob Bucher, Burton Butler, Doug Groecke, Jim Mailander, Lloyd Swanson 1-8, AR-5, SWE-9
1961  E. A. Kline: Robert Domer, Rodney Fee, Dean Henderson, James Johnson, Jack VanNice, 
Lynn Woodworth: 1-6, AR-5, SWE-2


1963  R. E. Rust: Eric Dee, Craig Cooper, Mike Ford, Marion Greaser: 1-10, AR-8, SWE-7

1964  No Team

1965  David Topel: Frank Alberston, Dennis Carlson, Dale Green, Harold Hadden: 1-6, AR-12


1967  Dennis Marble, Jerry Weiss, Ad: David Topel: Dennis Behrens, Larry Florko, Russ Hanson, 
Wayne Rasmussen, J. Edward Slaughter, Mary Ann Ebbing, Don Wilson: 1-2, AR-Tied 10

1968  Al Stein, Jerry Weiss, Ad: David Topel: Dewayne Buettner, Dennis Dewitt, Don Fischer, 
Rodney Jahn, Robert Olinger, Wilbur Ramsey, Steven Schmalenberger, Dennis Walker: 1-10, AR-14

1969  Jerry Weiss, Ad: David Topel: Tom Cavanaugh, Alan Kaehle, Richard Mobery, Carol Ose, 
Paul Queck, Edwin Ricks, Gary Steffens: 1-9, AR-15

1970  Don Wilson: Ervin Behrens, Ken Epperson, Tom Furlong, Dudley McDowell, Merle Peterson, 
Dale Vincent: 1-10, AR-19

1971  Jim Bergkamp: Duane Asbe, Gary Berg, Ken Crawford, John Danner, Landen Hillyard, Dan Peterson, 
Steve Smith: 1-13, AR-10

1972  John Mabry, Dennis Dewitt: Myron Danner, Jay Merryman, Doug Harper, Tim Reaman, 
Sharon Shildler, Roger Smith, Gene Warren: 1-14, AR-1

1973  John Mabry: John Baldwin, Keith Edwards, Sue Gahn, Marv Gustafson, Brad Schaufler, C. Watson, 
Jim Wigiel: 1-4, AR-5

1974  C. Watson: Jim Alexander, Joel Brinkmeyer, Charles Goodman, Jim Hanson, Randy Hertz, Tom Hotz, 
Jim Venner: 1-13, AR-13

1975  C. Watson: Mary Baldridge, Gerald Berg, David Jacobsen, Henry Montag, Mike Muff, Reed Olson, 
Penny Sharp: 1-7, AR-8

1976  C. Watson, F. C. Parrish, Jr.: Joe Broders, Sue Farrow, Dean Friederichs, Brian Garrels, Kathy Inman, 

1977  F. C. Parrish, Jr.: Sherieda Bender, Bruce Bandstra, Michelle Davis, Mark Fischer, Ted Greiman: 
I-Tied 15, AR-12

1978  F. C. Parrish, Jr.: Jackie Fain, Doug Hamlin, Brad Knudson, Doug Ricke, Melanie Wagner, 
Ann Weymiller: 1-3, AR-9, ISU-3

1979  F. C. Parrish, Jr.: Terry Gray, Kirk Kirkegaard, Del Rae Martin, Tammy Rueckert, Heidi Sauser, 
Jeff Schlichting: 1-12, AR-Tied 8, ISU-1

1980  F. C. Parrish, Jr.: Theresa Danner, Laura Freese, Dan Golightly, Arlin Karsten, Dave Stender, 
Dale Venner, Bruce Whitaker: 1-8, AR-4, ISU-4

1981  F. C. Parrish, Jr.: Steve Bryce, Mark Fassler, Mike Fear, Craig Huff, John Maass, Joan Schmidt: 1-8, 
AR-13, ISU-5

1982  F. C. Parrish, Jr., Dave Stender: John Kennedy, Brian Royalty, Todd Stumpf, Don Underwood, 
Darrel Uthoff, Regina Whitaker: 1-5, AR-7, ISU-3

1983  F. C. Parrish, Jr., Dave Stender: Teresa Anderson, Mike Ford, Mike Lynch, Eric Nelson, 
Kent Swanson, 
Al Vermeier: 1-2, AR-5, ISU-1

1984  F. C. Parrish, Jr.: Doyle Anderson, Nanette Fowler, Jeff Henningsen, Dave Moody, Tom Nicholson, 
Tony Stumpf: 1-6, AR-4, ISU-4

1985  F. C. Parrish, Jr.: Tom Cooley, Stacey Hamilton, Jon Northrup, Kent Puller, Bryan Reiling, 
Dale Stevermer: 1-5, AR-9, ISU-4

1986  F. C. Parrish, Jr., Jane Ann Boles: Carl Brincks, Darren Dies, Bill Kuecker, Ken Lane, 
Mike Petzenhauser, Jon Schaben: 1-5, AR-8, ISU-1

1987  F. C. Parrish, Jr., Jane Ann Boles: Tim Broen, Jan Ann Boles, Mike Carlson, Scott Greiner, 
Sue Leazer, Steve Lonergan, Jeremy Schram: 1-2, AR-3, ISU-4

1988  F. C. Parrish, Jr., Jane Ann Boles, Robert Johnson: Chad Anderson, Greg Anderson, Kurt Greiman, 
Curt Greiner, Rich Hall, Brad Pellet, Todd Wiley: 1-6, AR-Tied 5, ISU-3

1989  F. C. Parrish, Jr., Robert Johnson: Doug Cook, Dawn Gorham, Tiffany Hodges, Kristi Moblty, 
Tom Rathje, Dan Schaeffer, Janis Brownlee: 1-6, AR-7, ISU-2
1991  F. C. Parrish, Jr., Dan Schaefer: Brian Becker, Mike Brown, Doug Deppe, Jeff Friest, Angie Greiman, Mike Kalsem, Dwight Sexton, Kurt Steinkamp, Dave Tometich: I-6, AR5, ISU-2
1994  F. C. Parrish, Jr., Becky Thiel: Craig Beinhart, Jennifer Carrico, Tracey Cofland, Mike Fischer, Matt Greiman, Randy Robinson, Julie Sieren, Samantha Simon, Matt Sternberg: I-9, AR-6, ISU-1

Contest Codes
I - International
AR - American Royal
SWE - S. W. Exposition
ISU- ISU Judging Contest

*Independent study by Kevin Maas
ANIMAL SCIENCE ACADEMIC QUADRATHLON.

1979        Stan Gable, Dave Hansen, Jim Klindt, Jeff Schlichting
1980        Stan Gable, Jim Klindt, Dave Petersen, Jeff Schlichting
1981 (a, b) Stan Gable, Jim Klindt, Doug Mootart, Jeff Schlichting
1982 (c)    Theresa Danner, Mike Fear, Arlin Carsten, Dave Stender
1983        Cindy Clawson, Rick Powell, Jim Stotts, Julie Stucket
1984        Jana Frohling, David Hanson, Linda Oliphant, Todd Stumpf
1985 (d)    Cary Gilman, Mike Lynch, Clint McDonald, Pete Nettleon
1986 (e)    Mike Borman, Kathleen Foster, Michelle Hansen, Scott McClure
1987        Stacy Hamilton, Charlie Peters, Brian Relling, Steve Schwarting
1988        Margaret Flanigan, Doreen Huinker, Paul Klemme, Mark Rees
1989        Bonnie Cowell, Tina Geffert, Linda Hansen, John Orr
1990        Tim Breon, Doug Cook, Phil Gauger, Matt Musselman
1991        Darl Enga, Arnold Hippen, Karen Peters, Jeff Westberg
1992        Carol Bauman, Steve Keelner, Bill Liska, Loren Willie
1993        Bill Bosworth, Traci Johnson, Kelli Jones, David Korver
1994 (f)    Nathan Mass, Jennifer Puls, Dan Rohrbert, Allison Steen
1995        Galen Erickson, Doug Mashek, Mara Preisler, Kim Vonnahme

8 in contest
7 in contest
8 in contest
10 in contest
8 in contest
6 in contest
8 in contest
7 in contest
5 in contest
5 in contest
2 in contest
4 in contest
4 in contest
3 in contest
3 in contest
3 in contest

a. Competed without Schlichting who was on Ag Travel Course trip to China.
b. Four universities at first contest.
c. Had 8 teams at Midwest competition during this time. By late 80s and into 90s there were
   13 to 16 teams. Wisconsin-Madison and Illinois took turns hosting the Lab Practicum.
d. Last Chicago contest.
e. First contest in Des Moines.
f. Three sophomores and one freshman.
HONORS AND AWARDS

SADDLE AND SIRLOIN CLUB PORTRAITS

<table>
<thead>
<tr>
<th>NAME</th>
<th>YEAR</th>
<th>SECTION</th>
</tr>
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<tbody>
<tr>
<td>C. E. Barnhart</td>
<td>1987</td>
<td>MS &amp; Ph. D.</td>
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<tr>
<td>E. T. Benson</td>
<td>1960</td>
<td>MS &amp; D Agr.</td>
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<td>W. L. Blizzard</td>
<td>1939</td>
<td>Extension</td>
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<td>H. M. Briggs</td>
<td>1978</td>
<td>BS</td>
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<td>J. A. Craig</td>
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<td>Exp. Station</td>
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<td>C. F. Curtiss</td>
<td>1925</td>
<td>Head &amp; Dean</td>
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<td>E. F. Ferrin</td>
<td>1961</td>
<td>Faculty</td>
</tr>
<tr>
<td>C. W. Gay</td>
<td>1950</td>
<td>BS &amp; Inst.</td>
</tr>
<tr>
<td>J. C. Hillier</td>
<td>1993</td>
<td>BS &amp; MS</td>
</tr>
<tr>
<td>J. C. Hobart</td>
<td>1973</td>
<td>Faculty</td>
</tr>
<tr>
<td>M. P. Jarnagin</td>
<td>1951</td>
<td>BS &amp; MS</td>
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<tr>
<td>H. H. Kildee</td>
<td>1938</td>
<td>Head &amp; Dean</td>
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<td>R. J. Kinzer</td>
<td>1939</td>
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<td>A. B. Kline</td>
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<td>S. A. Knapp</td>
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<td>President</td>
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<tr>
<td>J. L. Lush</td>
<td>1956</td>
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<td>C. R. Musser</td>
<td>1936</td>
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<tr>
<td>R. H. Nelson</td>
<td>1990</td>
<td>Ph. D.</td>
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<td>G. L. Noble</td>
<td>1947</td>
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<tr>
<td>W. H. Peters</td>
<td>1948</td>
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<td>W. H. Pew</td>
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<td>R. C. Pollock</td>
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<td>H. D. Ritchie</td>
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<tr>
<td>P. S. Shearer</td>
<td>1953</td>
<td>BS &amp; Head.</td>
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<td>H. H. Sheppard</td>
<td>1921</td>
<td>BS &amp; D Agr.</td>
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<td>C. E. Terrill</td>
<td>1989</td>
<td>BS</td>
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<td>E. N. Wentworth</td>
<td>1940</td>
<td>BS &amp; Inst. &amp; MS</td>
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<tr>
<td>J. &quot;Tama Jim&quot; Wilson</td>
<td>1960</td>
<td>Dean</td>
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Of the 67 portraits of academics, 28 have Iowa State connections. This represents 42% of those having their portrait hung. This is truly a heritage of leadership.

CHARLES F. CURTISS DISTINGUISHED PROFESSORS OF AGRICULTURE

<table>
<thead>
<tr>
<th>NAME</th>
<th>SECTION</th>
<th>YEAR</th>
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<tr>
<td>Jay L. Lush</td>
<td>Animal Breeding</td>
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<tr>
<td>Norman L. Jacobson</td>
<td>Nutritional Physiology</td>
<td>1963</td>
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<td>Scott Allen</td>
<td>Nutritional Physiology</td>
<td>1965</td>
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<td>Lanoy N. Hazel</td>
<td>Animal Breeding</td>
<td>1970</td>
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<td>Wise Burroughs</td>
<td>Ruminant Nutrition</td>
<td>1974</td>
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<td>Albert E. Freeman</td>
<td>Animal Breeding</td>
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<td>Richard L. Willham</td>
<td>Animal Breeding</td>
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<td>Allen Trenkle</td>
<td>Ruminant Nutrition</td>
<td>1985</td>
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<tr>
<td>Jerry Sell</td>
<td>Poultry Nutrition</td>
<td>1986</td>
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<td>Donald C. Beitz</td>
<td>Nutritional Physiology</td>
<td>1989</td>
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<td>Lloyd L. Anderson</td>
<td>Reproductive Physiology</td>
<td>1992</td>
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<tr>
<td>Lauren Christian</td>
<td>Animal Breeding</td>
<td>1995</td>
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</table>
FACULTY RECIPIENTS OF ASAS AWARDS

Morrison Award
1946  J. L. Lush
1960  L. N. Hazel
1966  W. Burroughs
1970  N. L. Jacobson

Nutrition Research Award
1953  D. V. Catron
1954  W. Burroughs
1974  V. W. Hays
1989  V. C. Speer
1990  T. S. Stahly

Extension Award
1978  W. G. Zmolek
1980  T. W. Wickersham
1982  R. E. Rust
1986  E. J. Stevermer

Distinguished Teacher Award
1962  A. L. Anderson

Animal Breeding and Genetics Award
1962  L. N. Hazel
1965  J. L. Lush
1978  R. L. Willham
1979  A. E. Freeman
1995  M. F. Rothschild

Animal Physiology and Endocrinology Award
1966  R. M. Melampy
1988  L. L. Anderson

Meats Research Award
1973  D. E. Goll
1979  D. G. Topel
1985  R. M. Robson
1986  F. C. Parrish

Animal Management Award
1978  H. L. Self
1989  M. P. Hoffman

Animal Industry Service Award
1986  R. L. Willham

Fellows
D. Acker  H. H. Kildee
R. Beresford  W. F. LaGrange
Wise Burroughs  J. L. Lush
W. A. Craft  R. E. Rust
C. C. Culbertson  R. M. Melampy
R. C. deBaca  P. S. Shearer
S. A. Ewing  V. C. Spear
A. E. Freeman  E. J. Stevermer
L. E. Hanson  A. H. Trenkle
N. L. Jacobson  R. L. Willham

Past Presidents
1913  C. F. Curtiss
1918  J. M. Evvarad
1935  H. H. Kildee
1939  J. L. Lush
1947  W. A. Craft
1950  P. S. Shearer
1995-  D. N. Marple

FACULTY RECIPIENTS OF ADSA AWARDS

Award Of Honor
1978  N. L. Jacobson
1986  L. D. McGilliard

Distinguished Service Award
1966  J. H. Hilton
1966  J. L. Lush
1989  N. L. Jacobson

Animal Breeding Award
1975  A. E. Freeman

Teaching Award
1964  A. R. Porter
1966  C. R. Nelson
1968  C. F. Foreman

Borden Award
1958  J. L. Lush
1960  N. L. Jacobson
1982  A. E. Freeman

Feed Industry Award
1955  N. L. Jacobson
1955  R. S. Allen
1972  A. D. McGilliard
1985  D. C. Beitz
1987  J. W. Young

American Cyanamid Award
1992  D. C. Beitz
Jay L. Lush Award
1984    A. E. Freeman

National Dairy Herd Improvement Association Award
1985    D. E. Voelker

Dairy Extension Award
1955    F. J. Arnold
1971    D. E. Voelker

Teaching Award
1984    D. R. Mertens
1994    M. D. Kenealy

Past Presidents
1907    R. A. Pearson
1973    N. L. Jacobson

Physiology Award
1989    R. L. Horst
1992    T. A. Reinhardt

FACULTY RECIPIENTS OF PSA AWARDS

Research Award
1932    N. F. Waters

Teaching Award
1949    R. Penquite

Extension Award
1960    L. Z. Eggleton

Nutrition Research Award
1974    S. L. Balloun
1990    J. L. Sell

Turkey Federation Research Award
1965    S. L. Balloun
1978    J. L. Sell

Distinguished Research Award
1972    A. W. Nordskog

Fellows
S. L. Balloun
A. W. Nordskog
G. F. Stewart

Past Presidents
1986    J. L. Sell

FACULTY RECEPIENTS OF AMSA AWARDS

Signal Service Award
1980    E. A. Kline
1990    R. E. Rust

Meat Processing Award
1978    R. E. Rust
1986    J. G. Sebranek
1990    D. G. Olson

Distinguished Extension/Industry Service Award
1965    R. E. Rust

Distinguished Teaching Award
1977    E. A. Kline
1988    F. C. Parrish, Jr.
1995    J. G. Sebranek

Distinguished Research Award
1972    D. E. Goll.
1984    R. M. Robson
1987    F. C. Parrish, Jr.
1989    M. H. Stromer

FACULTY RECIPIENTS OF ISU AWARDS

The Faculty Citation
1950    Henry Kildee
1952    Ralph K. Bliss
1954    Maurice D. Helser
1955    Rex Beresford
1957    Jay L. Lush
1958    Phineas S. Shearer
1961    Arthur L. Anderson
1963    Charles C. Culbertson
1965    William F. LaGrange
1966    Arthur R. Porter
1967    Leslie E. Johnson
1971  Norman L. Jacobson
1977  Donald E. Voelker
1982  C. Fred Foreman
1986  Richard L. Willham
1987  A. E. Freeman
1988  Vaughn C. Speer
1990  Solon A. Ewing
1991  Allen H. Trenkle
1992  Robert E. Rust

Regents Excellence Awards
1992  Donald Beitz
1993  Richard Willham
1994  Joseph Sebranek

University Professor
1993  Lauren L. Christian
1993  David F. Cox
1995  Frederick C. Parrish

Burlington Northern Awards for Career Achievement
1986  Lauren L. Christian
1993  Frederick C. Parrish

Foundation Awards for Early Achievement
1990  Brad Skaar
1994  Mark Honeyman

Iowa Legislative Awards For Teaching Excellence
1989  Douglas Kenealy
1990  Donald C. Beitz
1990  Joseph Sebranek
1991  Brad Skaar

First Mississippi Research Awards
1979  A. E. Freeman
1981  Allen Trenkle

Walnut Grove Excellence Awards
1980  Donald C. Beitz
1981  Phillip Spike
1981  Joseph Sebranek
1982  Douglas Kenealy
1982  Gene Rouse
1983  Palmer Holden
1983  Richard Robson
1984  Stephen P. Ford
1984  Daryl R. Ströhbehn
1985  Max Rothschild
1986  Lee Kilmer
1987  Daniel Loy
1987  Dennis Olson
1989  Susan J. Lamont
1990  Brad Skaar
1993  Mark Honeyman
1993  Stephen Nissen
1994  Leo Timms

Louis Thompson Award for Scholarly Achievement In Teaching
1987  Joe Sebranek

Excellence in Applied Research and Extension
1984  Robert Rust
1984  Robert Ramsey
1986  Phillip Spike
1988  Emmett Stevermer
1994  Doyle Wilson

Margaret E. White Graduate Faculty Award
1986  David F. Cox
1989  Donald C. Beitz
1990  Joseph G. Sebranek

College Of Agriculture Award for Achievement and Service
1994  Mahlon Shell

DAIRY SHRINE CLUB

Guest of Honor Award
(Pictures hang in Dairy Shrine Museum)

Faculty
1949  H. H. Kildee
1965  Harold Searles
1969  Jay L. Lush
1970  Earl Weaver
1972  James H. Hilton
1984  C. Fred Foreman

Animal or Dairy Science Graduates
1954  Joe Eves
1977  Raymond Becker
1987  Eugene Meyer
1987  Bob Walton
1988  John Morris
1991  G. Joe Lyon

108
Pioneer Award
A. R. Porter  Earl Schultz
Harry Clampitt  Les Wilson
Elmer Hansen  W. B. Barney
Floyd Johnston  Floyd Arnold

Presidents of Dairy Shrine
1955  Floyd Johnston
1963  H. H. Kildee
1954  James Hilton
1969  Joe Eves

1970  A. R. Porter
1981  Eugene Meyer
1988  George Opperman
1990  C. Fred Foreman
1992  Dave Kjome

Secretaries of Dairy Shrine
1949-68  Joe Eves
1975-80  Miles McCarry
1980-89;
92-Present  Jim Leuenberger
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