NOTABLE DATES IN THE HISTORY

COLLEGE OF AGRICULTURAL
AND LIFE SCIENCES

JANUARY, 1899

1849 First class enroll at the University of Wisconsin.

1862 The Morrill Act is signed into law by President Abraham Lincoln, establishing a national system of colleges devoted to agriculture and mechanical arts, and funded in part by federal land grants.

1868 W.W. Daniels hired as first Professor in the Department of Agriculture, College of Arts.

1880 A.W. Henry hired as Professor of Botany and Agriculture.

1881 Wisconsin Legislature makes first appropriation for agricultural research ($4,000).

1883 Agricultural programs sited in UW-Madison South Hall, renamed Agricultural Hall.

1893 Department of Agronomy established.

1894 Tuberous testing of cattle started. UW dairy herd destroyed to demonstrate to skeptical farmers the effectiveness of tuberculin test.

1895 Bacteriologists develop proper methods for pasteurization of milk and heat treatment of canning peas.

1901 State Smith Hall constructed for $30,000.

1905 First study in the United States to measure crop water requirements and need for irrigation in humid regions.

1905 Cheese quality improved by research effect describing acetaldehyde formation.

1905 Department of Soil Science is created as the first such department in the United States. Department of Agricultural Engineering is established. (Both result from division of Agricultural Physics.)

1906 First county dairy association established.

1906 Congress passes the Adams Act, providing supplemental funding to state Agricultural Experiment Stations to support "original" theoretical research. These basic research investigations generate knowledge that allows revolutionary applied research approaches to make quantum leaps in problem solving.

1907 Harry L. Russell selected as second Dean of the College of Agriculture. Single-grain nutrition experiments are conducted. They are the basis for healthy significance vitamin research that followed.

1908 Stock Pavilion built at a cost of $200,000, large enough to allow of numbers to be used in a wagon to circulate in the arena.

1909 The College's first Agricultural Research Station is started at Spoons with a gift of 80 acres of land to the University by the local community.

Department of Horticulture and Economic Entomology is established in 1909 as the first such department in the United States.

Department of Plant Pathology established.

The horse born on Lincoln Dr., shown born in 1903, has been remodelled several times. Now a registered historic landmark, it still houses livestock.

1910 The Genetics Laboratory (Department), known then as the Experimental Breeding Department, is the first such department established in the United States.

First work on cheese flavor components reveals that fatty acids and esters are important in Cheddar cheese flavor.

Department of Plant Pathology established.
1912 Plant pathologists start research on yellow-russell cattle disease which causes cattle and livestock industries.

Agriculturalists begin breeding work. First practical hybrid results.

Ashland Agricultural Research Station established.

Charles Galpin is the station's first professor of rural sociology. His research on Wisconsin's established the new field of rural sociology, and inspired the development of the University of Wisconsin's social science program.

Wisconsin's Farmers Association becomes the first state organization to support agricultural experiment stations, work in state.

1912 In 1912, Kewaunee County and the College teamed with J.R. I. L. Linden as Waukesha's first county agricultural agent.

Manfield Agricultural Research Station established.

The Department of Veterinary Science is established.

1913 Biochemists discover Vitamin A. Wisconsin legislature establishes State Soil Laboratory. First cheese marketing studies are conducted.

1914 Bacteriologists develop improved corn bacterial culture to enhance alfalfa growth.

Agricultural economists begin helping farmers organize cooperatives.

Department of Agricultural Bacteriology now called Department of Bacteriology, established.

1915 Rural sociologists complete study of the ecology of rural communities. The first plant in the field studies is useful in both the field and the lab. This information is used in field trials. This laid the base for Wisconsin's Department of Rural Sociology.

1916 Biochemists discover Vitamin D, leading to prevention of rickets.

Hancock Agricultural Research Station established to help farmers deal with "farm-isms," sandy soils of central Wisconsin.

Landscape architecture faculty produce the first in a long series of pioneering publications advocating landscape design in rural environments.

1917 Home economics section added to state agricultural experiment stations.

1919 Agricultural information broadcast on 9CM, later WIBA, constituting the first regular radio broadcasting in America.

1922 The University of Wisconsin Agricultural Research Station established.

A rural economy and sociology section added to the Agricultural Experiment Station.

Biochemists demonstrate that cod liver oil (vitamin D) prevents rickets in chicks.

1928 Biochemists work on alfalfa meal as a dairy feed.

College identifies Prof. W. Z. Zemans as "oil enrichment specialist"—nature's first.

1924 Biochemists discover food irradiation process to activate vitamin D. This led to near-universal government of irradiation of milk, and also to formation of the Wisconsin Atomic Radiation Research Foundation—which develops unique patents and uses its profits to fund additional UW-Madison research about $60 million in 1987.

1925 Center of origin used to develop Congress passes the Pannell Act to expand agricultural economics and rural sociology research.

Dean Russell travels to Japan and Australia where he learns of conservation projects in which children plant trees. He promotes these ideas to Waukesha's school systems. The effort eventually evolves into Wisconsin's School Forest Program.

1926 Soil scientists study composition and potential value of Milwaukee sewage sludge.

Dean Russell visits the Brigham College of Agriculture at Los Banos in the Philippines. A long-term relationship develops with Los Banos, which helps launch the College as an important contributor to educational institutions building in developing countries around the world.

1927 Agricultural engineers develop field forage harvester to improve forage feed and ease back-breaking labor.

1928 Agricultural chemist Stephen Bocko's test for milk is one of the first in the nation. He was used when he coined for this magazine cover in 1928.

1929 Holstein Souvenir

1935 Congress authorizes the establishment of the National Advisory Commission on Agriculture—first in the nation. The plan approved by the federal government. Thus, tree of life and turkey produce the first comprehensive watershed conservation plan approved by the federal government. This, Coon Valley Watershed, near LaCrosse, becomes the nation's first planned watershed.

1934 UW Agriculture dedicated. It is developed in accordance with plans prepared by landscape architect C. William Long. Landscape architect Aldo Leopold, who conducts experiments in plans community restoration.

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1936 Practical soybean meal ration for livestock developed.

Dairy feed researchers adapt irradiation process to increase vitamin D content of milk.

1929 Agricultural economists publish "Cooper- tive Principles and Practice." This work continues to serve not only "Rice" for operations of cooperatives which now market more than four-quarters of the country's annual 45 billion pounds of milk production.

1937 Niacin deficiency drug to cure pellagra, disease that killed 500,000 people in the United States, is developed. This work continues to serve not only "Rice" for operations of cooperatives which now market more than four-quarters of the country's annual 45 billion pounds of milk production.

1938 Department of Dairy Husbandry (as Department of Dairy Science, since 1930) established as a separate department after being part of the Department of Animal Husbandry since 1892.

College economists' principal authors of the Chicago Federal Mill Order, which currently prices more than 40 percent of the 25 billion pounds of milk produced annually by Wisconsin dairy farmers.

1939 First Wisconsin artificial dairy cattle breeding cooperatives established in Rock, LaPointe and Barron counties. The College established the world's first departments of wildlife ecology and Aldo Leopold as its lead.

1940 Ecology and students and ecologists cooperate in "whole-farm feed demonstration" projects on efficient use of time and fertilizer.

1941 Egg yolks, extenders and butter for bull semen preservation patented. These developments laid the foundation of artificial breeding industry and led to rapid genetic improvement of dairy cattle.

1942 Cowsmats discovered in spoiled sweetcorn. Risks were demonstrated, chemical substance to be known as stachyosalin, eventually used for blood clot prevention in human medicine.

Horsepower meant horse power back in 1918, when the college's teams were praised for this portrait.
First Wisconsin county-wide Dairy Herd Improvement Association established in Winnebago County to provide central laboratory testing services. Program becomes model for DHI in Wisconsin. 

1942 Scientists begin work on mass penicillin production. Their techniques eventually make this infection-controlling drug widely available at modest cost—$66 per standard dose in 1943 compared to less than $25 cents today. Many US troops wounded in World War II benefit from mass produced penicillin.

Fertilizer and lime experiments on Antigo and Spencer soil later demonstrate that alfalfa can be grown successfully on these northeastern Wisconsin soils (once thought impossible), thus extending dairy production to this region of state.

Agricultural economists describe farm pricing method for milk that recognizes both fat and solids-not-fat components in milk. Previous approaches used only butterfat content to determine value.

1943: Edwin B. Ford, a bacteriologist, is named College Dean.

UW agricultural engineers developed this mechanical tree planter to replace the labor that went to war.

1945 Bacteriologist Ira B. Baldwin is named College Dean when Dean Ford is named president of the University of Wisconsin.

1946 Congress passes the Research and Marketing Act to encourage more agricultural marketing research.

1947 Equipment and methods for land smoothing developed. Research and design work begins on loose housing for dairy cows. Eventually leads to modern free-stall barn.

1948 Rudolph K. Froelker, an agricultural economist, named College Dean. Geneticist Joshua Lampert discovers natural reproduction of bacteria. The Nobel Prize was awarded for this work 10 years later.

Soil scientists, agricultural engineers, agronomists and home-owners collaborate on irrigation of crops. Helps transform a sandy, wind-blown wasteland into a productive area for growing vegetable crops.

Azmah Peabody appointed as College's artist in residence.

1949 Biochemists announce development of Waitecrin—one of the world's most effective and widely used rat killers.

Agricultural engineers test their first corrugated roll forage cradle. Field conditions show standard practice to reduce drying time.

1950 Veterinary scientists develop improved diagnosis by serum agglutination for brucellosis. These enabled Wisconsin to go from 15 percent of herds infected in 1950 to less than 1 percent in 1955.

1951 First embryo transplants in cattle made. A fertilized ovum is transplanted from one cow to another cow, which then gives birth to the calf. Procedure加倍 growth influen of state's best cows.

Agronomists, engineers, entomologists and soil scientists develop the first prescription method for growing corn—the Thermo- corn Club—which later is distributed to generations that follow.

Department of Food Science is created at separate unit from Dairy Foods.

1952 Three-cut alfalfa management system developed. Computer programming developed for Dairy Herd Improvement work. Wisconsin hands on DHIA testing in 1957 outproduced those not on test by an average of 4,530 pounds of milk per cow per year.

1953 Grassland Farming Program begins to build. Research and Extension programs focus on improved forage production, storage and handling. Outstanding forage producers share their experience.

1955 Research investigations conclude pigs eat millet and refrigerator meat. Cultivated grasses are effective in preserving quality of raw milk.

Policy scientists add animal fats to bread and significantly improve feed efficiency and growth. But the nation's broiler industry, this development reduces annual feed cost by about $77 million.

First Farm Progress Day held.

1956 The 2000-acre Arlington research station was purchased in 1955 with the proceeds from selling the college's Madison farm.

UW-Madison botanists and a biochemist discover the cytoplasmic class of plant hormones—growth substances that promote cell division and differentiation.

1957 College researchers begin development of computerized farm records program. Researchers develop milk emission screening procedure based on reduction of somatic compounds.

1958 College faculty begin work with Indonesia to improve agricultural research and educational facilities and programs at Bogor.

1959 Contra A. Neuhoff, Department of Biochemistry, named president of University of Wisconsin.

Dairy food researchers develop A-C test is determine when coagulated milk is ready to be cut to make cottage cheese.

1959 Food scientists are first to develop sterile concentrated milk.

1960 Superior potato variety released.

Research at Marshfield Station shows free stalls are more effective than loose housing for dairy cattle in terms of bedding requirements, clean cows, and desirable environment.

1962 McIntire-Stout Forestry Research Act passed.

Animal scientists develop methods for detecting swine stress syndrome.

Department of Forestry established.

Land tenure center is established in the College, providing a national focus for interdisciplinary research on land ownership and control issues in developing countries.

Soil scientists develop a slow-release fertilizer packet designed to frighten trees and shrubs over a period of five to ten years, or longer.

1963 Mechanical cherry harvester developed.

Foods scientists perfect a process for making cream concentrated dairy starter cultures. Year around stored feeding shown more economical than twice daily chopping or intensive pasturing of dairy cattle.

1964 Glenn S. Pound, a plant pathologist, named College Dean.

Monates cheese production modernized by dices acidification method.

Department of Landscape Architecture created as a separate unit from the Department of Horticulture. College faculty begin more than a decade of assistance to the new University of Ife in Western Nigeria.

1965 Food scientists develop methods to sew seeds into salt and spray-seeded fish to avoid rotting.

Extension created as a separate unit. Cooperative Extension Service administration removed from College.

1966 Food Research Institute relocates from University of Chicago to the College.

Food scientists develop technique to produce spray-dried butters, a useful ingredient in a variety of food products.

1967 School of Natural Resources is established in the College.

Interdisciplinary team of College researchers announces process for extracting oil from leaf protein in fertilization of diets in developing countries.

1968 Department of Nutritional Sciences is created.

Biochemists isolate and identify of the first active vitamin K metabolite, establishing that vitamin D must be metabolically activated before it functions.

1969 Wisconsin Legislative hearings on DDT set the stage for nationwide ban. College wildlife ecologists play a pivotal role in defining environmental impacts of organochlorine pesticides.

1970 Biochemist Har Gobind Khorana synthesizes the first gene, and later is awarded the Nobel Prize.

Concern about overuse of pesticides leads to establishment of the Environmental Toxicology Center.

1971 Biochemists announce the isolation and identification of biologically active vitamin D, which leads to its chemical synthesis one year later. Legislature establishes University of Wisconsin System, "creating" the University of Wisconsin and the Wisconsin State University System.

Students and faculty of landscape architecture prepare plans for the national monument project that becomes the model for historic preservation and community revitalization in many other Wisconsin communities.
1972: Dairy scientists develop somatic cell count procedure to detect mastitis infection in dairy cattle. Selenium is found to counteract mercury toxicity. The natural history of the most common mosquito-borne (summer) encephalitis of children is described.

Vitamin D-hormone used to treat milk fever in dairy cattle. College faculty begin work with Brazilian Agricultural Research Corporation to help train researchers and improve agricultural development.

Polyurethane foam is made from whey. Department of Continuing and Vocational Education is established.

1973: High protein DAL out variety is released.

Sapporo Gold elm released (resistant to Dutch elm disease).

1974: Studies at the Mansfield Research Station showed that raising calves in an unheated hutch or individual pen produced the healthiest calves.

The College's Environmental Awareness Center prepares plans for Soldiers Grove, making it a model community for use of solar power to meet energy needs.

1977: State's average corn yield exceeds 300 bushels per acre. Bacteriologist describes site of nitrogen-fixing enzyme in bacteria, a first step in long-term research that may save fertilizer costs by leading to nitrogen-fixing capability in non-leguminous plants such as corn.

1978: Montello and Green Lake head lettuce varieties resist bolting and early rot rot.

Soil scientists develop the Wisconsin Irrigation Scheduling Program. The computer-assisted, decision-making program allows growers to reduce irrigation costs, conserve water and lessen risk of ponding and fertilizers leaching to groundwater.


Leo M. Welsh, a soil scientist, is named College Dean.

1980: Horticulturists clone plant gene for the first time. Researchers show conventional tower silos to be as effective as the more expensive oxygen-limiting, bottom unloading structures.

Food microbiologists develop simplified method for detection of aflatoxin, a carcinogenic compound formed in grains due to mold contamination.

Food Research Institute toxicologist identifies staphylococcal toxin responsible for Staphylococcus enteritidis, a debilitating infection particularly affecting women.

1981: Daily researchers demonstrate on-farm filtration of milk for cheese. Bacteriologist demonstrates that chronic, an important suppressor of infection, is effective in response in mice. Animal scientists discover ways to nurture and fertilize cattle eggs outside of the cow.

The first transgenic plant (bean protein in sunflower) demonstrates the potential for genetic engineering in plants.

Food researchers develop process that overcomes flavor problems in spry-dried cheese.

Biotyping of Newcastle disease virus in poultry and birds lends way to control introduction of the disease into the U.S.

1982: Wildlife ecologists develop procedures to be used in saving the endangered California Condor from extinction.

1983: Corn yield, a high yielding, rust resistant, and virus resistant, released by plant breeders.

Food Research Institute scientists develop a process to reduce the nitrite used in curing bacon by two-thirds.

Microbiologists describe ligninase, an enzyme that degrades lignin in wood for paper making.

1984: Nutritional scientists show dietary calcium can reduce blood pressure in hypertensive women.

1985: Bacteriologist observes possible immunosuppression in mice by traces of pentoxide (alkaloid) in drinking water.

Near infrared spectrometry measures feed value of forage for improved marketing of forages.

College develops partnership with Western African country of the Gambia.

1986: Plant breeder develops high-protein strains of wheat and rice. Horticulturists advance biological pest control through discovery of two native Wisconsin fungi that control destructive parasitic swamp dodder weed in carrot and potato crops.

Chemical compounds in fried ground beef are found to inhibit cancer development. Marathon red clover variety is released.

Wisconsin farmers, acting through the Wisconsin Milk Marketing Board, fund the Center for Dairy Research—the nation's first farmer-financed dairy research center.

Researchers discovered reasons why some pigs are genetically predisposed to have high cholesterol levels in their blood.

Plant pathologist develops plants that require only five weeks from seed planting to seed planting to seed production, greatly spreading genetic research.

Food scientists modify process to remove total cholesterol from butter, tallow, hard and egg yolk. Potato management computer software helps growers make decision about pest control strategies.

1987: Very Green Pecos developed to keep canned green vegetables as green as fresh vegetables.

Carrot strain with super high vitamin A content developed to help reduce vitamin A deficiency in poorer countries.

Lysozyme, a natural compound in tears, found to kill bacteria that cause food poisoning.

Agroengineers begin genetic engineering experiments on alfalfa to change plant into "biochemical factory" to produce industrial enzymes. Initial work focuses on enzymes important to paper pulp industry.

Animal scientists create calves by transferring nuclei from multi-cell embryos to one-cell embryos.

Microorganisms and enzymes from various sources shown to age cheese quickly and produce a tastier product. Such accelerated ripening gives low-fat cheddar cheese with better flavor.

1988: Dairy Research Center opens to scientists to develop "forever farmer machine that shortens time hay must cure in field before harvest, reducing chances of costly rain damage.

Plant pathologist Jo Handelsman and Jessica Pellin found native soil bacteria that could be used to ward off root rot in peach, soybeans and alfalfa. Such biological controls can reduce the need for chemical controls.

DNA probe for John's disease shortly diagnostic confirmation time from three months to three days—promises to help in marketing Wisconsin dairy cattle.

Agroengineers transfer antiseptic trait from wild beans to plants to commercial varieties to control naturally destructive bean seed storage pest.

Promising new early fertility test of Al bulls as well as new diagnostic tool for human sexuality problems developed.

Perginogene factors, extract in Wisconsin since 1825, reintroduced on UW campus. Using techniques developed by wildlife ecologists.

Agricultural economists report widespread use of bovine growth hormones would likely increase milk production sufficiently to trigger price drop in government support program and lower dairy farm income.

Protoplast fusion overcomes sexual reproduction barriers between wild and commercial potatoes.