



100 Years of Dairy Science at the University of Tennessee

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The Civil War devastated the livestock industry. Jerseys & Ayrshires were preferred for dairy production or for the city family that kept a cow. For many plain folk, herding ended, & livestock production continued only for household & farm use...

Tennessee dairying rebounds...

1869 – Knoxville Experiment Station established. One of first five in the nation.

1876-1877 – UT catalog mentions a dairy farming course was included in the senior year. 6 courses were offered in 1918-1919.

1872 – Tennessee Jersey Cattle Club was formed; it's the oldest farmers' organization in the state.

1882 - First list of private butter-tests of Jersey cows published by Campbell Brown of Spring Hill, Tennessee, in the "Country Gentleman."



Jerseys at the Dairy Research & Education Center (Lewisburg)

1882 – The first Jersey's (probably the first registered cow of any breed) production records were authenticated under the auspices of a national breed association, The American Jersey Cattle Club.

1900 – The Knoxville Experiment Station owned 30 milk cows. A new brick dairy building was completed & was fully equipped with milk & cream vats, separators, sterilizers, pasteurizers, bottling machines, churns & butter workers.

1918 – C. A. Hutton became the first UT dairy specialist & held this position until 1958.



Murray Miles in the 1949 Junior Dairy Show

1900-1915 – Research concentrated on raising milk production levels by (1) determining substitution rate of different forages & grains in the rations of the predominately purebred herd of 25 Jersey cows at Knoxville & (2) the importance of culling & controlling diseases, especially tuberculosis & milk fever. Specialists advised dairy farmers in Knox County & beyond to follow prescribed recommended practices. Holstein & Milking Shorthorn herds were purchased for the West Tennessee Experiment Station.

1919 – Marshall County Cooperative Cow-Testing Association was organized as a voluntary association for the testing of butterfat.

1921-1927 – Holstein herd transferred from West Station to Knoxville, Shorthorn herd was liquidated & replaced by a Jersey herd. Dairy barn built at Middle Tennessee Experiment Station (Spring Hill) & two herds of Jersey cattle were purchased for comparing Island Bred & native stock.

1929 – A U.S. Dairy Experiment Station, specializing in Jersey cattle, established in Marshall County (Lewisburg). Merged with the UT's Extension Service in 1948. 12,000 Jerseys in Marshall Co. at this time.

1934 – Maury County 4-H judging team places second at the national contest.

1948-1949 – Train loads of Jerseys from Canada were auctioned to 4-H members to improve herds. Train loads of Holsteins were purchased for registered breeders.



1950's & 1960's – Each year for 20 years, 50 to 60 Guernsey heifers were purchased with money borrowed from a middle Tennessee bank. These heifers were auctioned on a "cost-basis" to TN 4-H members.

1965 – Dr. Clyde Chappell was instrumental in assisting East Tennessee Artificial Breeders as one of three A.I. businesses to form Select Sires Inc. This is the largest A.I. company in North America & sells products & services throughout the world (2006).



1967-1980 – Tennessee Sire Selection Study (Lewisburg) – Controls bred to A.I. bulls from 1967. Production group bred to top A.I. bulls & averaged +2816 lbs Milk & +105 lbs Fat over controls.

1960's – 7 pairs of identical twin Jerseys were used to compare fast fattening growth with leaner 'normal growth.' Bodyweights differed by 237 lbs, but the leaner heifers outmilked the fat ones.



1972 – Department merger –

New combined Department of Animal Science formed from the Department of Animal Husbandry & the Department of Dairying (formed in 1922). Samuel Hansard, a pioneer in the use of radioisotope techniques in farm animal research became chairman.

1970's & 1980's – Tennessee's junior dairy project is one of the most outstanding in the nation due to the leadership of L.O. Colebank, Clyde Chappell, William M. Miller, T. Ray Spann & Monty J. Montgomery.

1984 & continuing – Dr. Stephen P. Oliver & his lab have achieved international recognition & awards for research focused on milk quality & mastitis. Research has included DNA fingerprinting techniques for identification of mastitis pathogens, prevention & control of heifer mastitis, interaction of mastitis & reproductive performance, & pre-harvest food safety research. Dr. Gina Pighetti continues her work with gene markers for their association with susceptibility to mastitis.

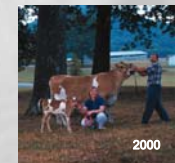


1985 – McMinn County 4-H judging team places second at the national contest.

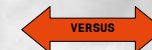
1999 – Lowfat dairy plays important role in a healthy weight loss plan - UT nutritionist, Dr. Michael Zemel

2000 & continuing –

UT Cloning Project – Millie, the first Jersey calf cloned from an adult somatic cell, was born in 2000. Emma, the second Jersey clone, was born in 2001. In 2002 ten clones of a single adult Jersey cow were born. Dr. Lannett Edwards is the leader of the UT Cloning team.



2005 – Research on dairy form/angularity, by Dr. Gary Rogers & Dr. Chad Dechow has led to the selection of bulls producing daughters that hold their body condition early in lactation.



←BCS of 2.75 is less desirable for health & reproduction than 3.75→

