

## Houghton Hampshires Established 1965

The Houghton Hampshires flock purchased its first pedigreed Hampshire ram in 1965 from a Missouri breeder, Raymond Palmer. The Houghton flock converted from Western ewes to a purebred Hampshire flock in 1968 with the purchase of the Mike and Steve Nickell flock from Hamilton, Mo., and the purchase of the entire Hampshire flock of Dr. Harvey Holmes from Kansas. The Houghton flock registered under the names of the two youngest children, Dean and Connie Houghton.

The full commitment to the Hampshire breed can be traced to a trip to the National Lamb Show in Albert Lea, Minn., in 1970. University of Illinois professor Bennie Doane was judging, and he sat down

afterward with the Houghton family and explained his concept of "muscle sheep." This led to joint ownership of a number of purebred Hampshires with the University of Illinois through the next two decades.

The Houghton family had raised sheep since the late 1800s in Caldwell County, Mo., which was an area known for its woolen mills. "Junior" Houghton's grandfather, George, raised primarily wool breeds but began crossing with Hampshire influenced rams in the 1920s. The senior Charles Houghton dispersed the sheep before Junior Houghton purchased the farm near Polo, Mo., in 1948. His son, the late Dr. Tom Houghton, brought sheep back to the farm in the early 1960s with the purchase of Western ewes.

Herd sires through the 1970s were primarily purchased from the Ronald Hogg flock in Oregon. Several herd sires through the years were acquired from Chauncey Hubbard. Four sons of the noted Hampshire sire Rising Star were purchased from John Fagaly, a breeder from Fithian, Illinois.

The flock currently is managed by Junior's youngest son, Dean, and Dean's wife, Jerilyn. Daughter Connie is a nurse practitioner in Florida but continues to help when possible on the farm, particularly with the DNA testing. Granddaughter Erin Houghton showed the Grand Champion market lamb at the 1995 Missouri State Fair. Great-grandchildren also have shown market lambs from the Houghton flock, including CeJay Blakely and Andy and Aaron Mott.

The flock has received a number of awards through the years. Dean Houghton won the state FFA sheep proficiency award in 1975. The flock received the AHSA Sheep Breeder of the Year award in 2004. Houghton Hampshires were selected for the 2005 ASI/American Lamb series called Heart-Land-Soul, in which the Houghton family's efforts to use scientific methods to improve lamb quality were profiled.

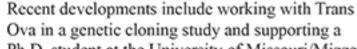
In the showring, the flock has primarily exhibited in the club lamb division. The Houghtons exhibited the 1975 Grand Champion carcass lamb at the Missouri State Fair and had numerous Hampshire ram and ewe champions through 20 years of exhibiting at the state fair. The flock produced a number of championship club lambs through the years in Texas, Oklahoma, Florida, North Carolina, Iowa and the American Royal.

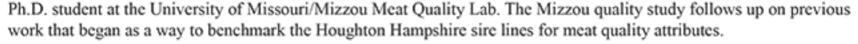
The family no longer actively shows Hampshire sheep. The Houghton family still enjoys the show ring but their passion and financial investments are headed in a different direction.

All efforts since 2000 have been on developing yearling Hampshire terminalsire rams, primarily for members of the Mountain States Lamb Cooperative. The Houghtons were original investors in this closed cooperative based in Douglas, Wyo., purchasing non-patron shares in the new company.



The Houghtons develop yearling rams for the cooperative that are guaranteed RR at codon 171; performance tested in a forage-based system for growth rate; ultrasound scanned for muscle depth; semen checked; and passed through a foot-health protocol. Until 2015, performance data was fed into a formula to develop an in-flock ratio; in 2015, the flock enrolled in the National Sheep Improvement Program, which uses the services of an Australian firm to develop a carcass index for the sires.





The continuing meat quality study now focuses primarily on the fatty acid profiles of the sire lines and attempting to link those to specific sites within the genome. Studies using Single Nucleotide Polymorphisms ("SNiPs") allow the scientists to scan approximately 54,000 SNP markers per head that may help the Houghtons use molecular markers to determine proprietary genetic factors related to carcass traits.

The goal is for these molecular markers to be used in conjunction with proprietary Trans Ova techniques for embryo flushing and recovery that will allow much more rapid genetic improvement—particularly for traits that are difficult to measure.

The late University of Missouri geneticist Dr. John Lasley helped the Houghtons establish their breeding goals in 1968 when the ewe flock converted to purebred Hampshires. He set the priorities as (a.) Reproductive rate (b.) Growth rate (c.) Body composition and (d.) Longevity. Those goals have remained unchanged for nearly 50 years; the current work with meat quality is intended only to supplement those goals as Houghton Hampshires becomes more closely aligned with food companies.

Junior Houghton, now 93, still lives on the family farm. He reflects on the changes in the Hampshire business over the past 50 years. "We selected our first Hampshire ram by flashlight in a converted chicken house," he says. "Now, my great-grandchildren are looking at spreadsheets and genetic predictions made by computers. It's a new world to me."