ALFALFA IN THE SHIRLEY DAIRY OPERATION

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Mr. Larry Thomas Shirley grew up on a small dairy farm in southern Barren County, Kentucky where they milked 25 cows by hand. In 1960 he graduated from Austin-Tracy High School and attended Western Kentucky University for 2 years. He has also taken several other hours of class time at night. In 1962, he married Martha Spillman and they have 3 children; Debra 26, John 14 and Ben 11.

Mr. Shirley's first job was as a computer operator for Malone & Hyde, a wholesale grocery company. He worked in this position from 1962-1968. In 1968 he worked for Glasgow Manufacturing as a buyer for an auto parts factory. He also bought his first farm of 35 acres during this year. In 1970 he worked as a sales manager for MWM Company which is a Pharmaceutical company. In 1976 he started his own brokerage company for pharmaceuticals which was called L & M Enterprises.

Mr. Shirley went into full time farming with a commercial dairy herd in 1983. On December 13, 1985 (Friday the 13th) he bought his first registered Jersey cattle. His farm currently consists of 800 acres on which he grows 47,000 pounds of tobacco, has 130 acres of alfalfa, 120 acres of double crop soybeans, 100 acres wheat, 75 acres oats, 120 acres of corn for grain/silage (1000 ton silage/year) and the remainder is used for pasture and grass hay.

In the Spring of 1990, Larry started a wholesale veterinary medicine distribution business.

Contributions to Advancement of Alfalfa

Mr. Shirley was one of the first in his area to use no-till establishment of alfalfa in small grain nurse crop and sod. He was the first local producer to use buffered propionic acid as a preservative. Larry is a pioneer in development of a cash alfalfa market program and was heavily involved in developing a state hay marketing program. He uses good management techniques such as, 1) fertilizes using UK soil test recommendations, 2) monitors hay moisture with probe and a tested on bale chamber, 3) bales hay at night for better leaf retention, 4) automated bale handling, 5) hydraulic compression chamber, center flow baler, 6) stores and cures all hay before offering for sale, 7) sells only by weight.

Basic Description of Farming Operation

Larry’s farming practices begin with individual field mapping and soil fertility monitoring. He makes adjustments to soil fertility based on UK soil test
recommendations and then follows with good conservation practices. He has received the Master Conservationist Award from the Soil Conservation District.

He milks 153 registered Jersey cows and is on the Official DHIA Test. In 1989 his yearly average per cow was, 13,693 pounds of milk, 597 pounds of butterfat and 496 pounds of protein. He uses embryo transfer on 3-4 cows per year. He also uses a Total Mixed Ration (TMR) system and feeds three times per day outside, never in parlor. He feeds a balanced ration using alfalfa hay and corn silage and other additives are bought and stored in bulk lots.

His herd culling rate is 16-20% per year and is based on age, soundness and production. He sells approximately 30-40 registered springer heifers annually and 10 bulls per year. He sold one bull, "Sir Walter", to Landmark Genetics as a bull stud.

Alfalfa production techniques consist of cutting every 31-33 days, 4-5 cuttings/year. The average yearly production is approximately 5.5 tons/acre but it ranges from 7.0 tons/acre to 3.0 tons/acre. He is currently growing 119 acres of Anstar and 11 acres of Buffalo. Establishment takes place only with Spring seedings at a rate of 18 pounds seed/acre. The first cutting takes place as soon as weather permits to reduce damage from early weevils. He sprays for chickweed in the dormant season and usually one time for the weevil. When the pure alfalfa stand begins to thin, 2-3 pounds of orchardgrass is no-tilled in the fall to prolong stand.

Role of Alfalfa in Operation

The dairy ration is based around alfalfa hay for protein source and corn silage for energy. Approximately 300 tons of alfalfa are sold annually. The average protein test for quality ranges from 19-21%. The alfalfa is cut in the pre-bloom stage and has an average bale weight of 70 pounds. The hay is mechanically handled by use of an accumulator, there is little to no manual labor.

Uniqueness of Farming Operation

The Shirley farming operation is considered to be a large, modern, picturesque farm in Barren County. It is a very diversified operation since they have registered Jersey cattle, cash hay, grain, burley tobacco and a wholesale veterinary business. There is mechanization throughout the whole operation. They buy feed additives and store in bulk load lots. The operation is organized as a business from the field to the office. The livestock program priority is on cleanliness, sanitation and health. Larry keeps conservation in mind in all land use decisions.

Forage Spokesman

Larry was the state winner in the 1991 Kentucky Forage Spokesman Contest. He represented Kentucky as a contestant in the American Forage Spokesman Contest at the AFGC Conference at Columbia, Missouri in April 1991.