Parent lines important in market lambs

CLAY CENTER, NEBRASKA — Profits from market lamb production can be increased substantially by using crossbred ewes of superior maternal breeds to produce lambs sired by rams of superior meat breeds.

Developing potentially superior breeds for use in such terminal crosses is the objective of SEA geneticists Lawrence D. Young and Kreg A. Leymaster at the Roman L. Hruska U.S. Meat Animal Research Center, Clay Center, Neb.

Young is directing development of maternal breeds and Leymaster development of paternal breeds. Each is determining the usefulness of multibreed populations, or "composites," as compared with the usefulness of the breeds forming these populations.

The researchers are giving priority to intensive or moderately intensive production of market lambs, for lambing either out of season or annually. Research on lamb and wool production under range conditions is underway at other federal and state research locations.

In development of maternal breeds, Young is taking advantage of genetic differences among breeds in such economically important traits as age at puberty, length of breeding season, and litter size. Ewes will come from this breed for the final cross.

Ewes are managed under two systems differing in labor and feed requirements.

One system calls for three lamb crops a year. These ewes are exposed to fertile rams in April, August, and December, giving each ewe an opportunity to lamb every 8 months. Young says that this intensive management system allows producers to more fully use confinement facilities and year-round farm labor.

The other system is conventional annual lambing, with ewes exposed to rams in November. Young says labor and available feed will continue to be seasonal in many areas, even for some producers willing to raise sheep in semiconfinement.

The flock for three-times-a-year lambing, designated Composite I, is half Finnsheep, quarter Dorset, and quarter Rambouillet breeding. Young established Composite I by mating Finnsheep-Rambouillet crossbred ewes and rams to Finnsheep-Dorset ewes and rams.

The Composite II flock for annual lambing is half Finnsheep, quarter Suffolk, and quarter Targhee breeding. Mating Finnsheep-Suffolk crossbred ewes and rams to Finnsheep-Targhee crossbred ewes and rams established Composite II.

Selection emphasis while upgrading the two flocks will be somewhat different.

In Composite I, improving out-of-season breeding will have priority; in Composite II, increasing the number of lambs produced per ewe each year will have priority. Earlier age at puberty, better mothering ability, and larger litter size are additional selection objectives in both composites. The breeds forming each composite will be similarly selected for comparison.

In his part in the study, Leymaster is working with both a Suffolk flock and a three-breed composite population. The paternal breeds he is developing are potential sources of rams for sheep producers specializing in market lamb production.

In previous research at the Center, the Suffolk breed excelled in lean growth rate as compared with the Hampshire, Dorset, Rambouillet, Targhee, and Corriedale breeds. The Clay Center scientists also found that Suffolks were superior to Hampshires and Oxfords as terminal sires of market lambs.

Leymaster is developing selection procedures for paternal breeds in the Suffolk flock. His major emphasis is on producing market lambs with more efficient lean growth up to relatively heavy weights.

The three-breed paternal composite is based on a crossbred foundation established by mating selected Columbia rams to Suffolk-Hampshire crossbred ewes. The resulting composite is half Columbia, quarter Suffolk, and quarter Hampshire.

This composite population will be placed in a selection program for improving efficiency of lean growth.

This long-term breeding and selection effort should produce information useful to producers of purebred and commercial stock.

Results of these studies should be especially useful to those producers who wish to apply genetic principles in improving market lamb production under intensive or semi-intensive management.

Selection methods developed by Young and Leymaster for upgrading sheep populations as sources of ewes or rams will aid producers in establishing their own breed improvement programs.

Drs. Lawrence D. Young and Kreg A. Leymaster are located at the Roman L. Hruska U.S. Meat Animal Research Center, P.O. Box 166, Clay Center, NE 68933.—(By Walter Martin, SEA, Peoria, Ill).

Mason-Dixon P. Hereford Assoc. elects directors

ARTHURDALE, W.V. — The Mason-Dixon Polled Hereford Association held its First Annual Field Day and business meeting on June 6 here at the Stoney Run Farm of Mr. and Mrs. Edward P. Bucklew.

About seventy-five interested breeders and friends braved the rain to participate in the events.

John Buric, University of Maryland; W.C. Taylor, Cottage Hills Farm; Keith Inskeep, University of W.Va.; Sam Hunter, Huckleberry Hall Farm; and M.R. McClung, Ex. Sec. West Virginia Cattlemens' Association, presented a variety of informative topics and demonstrations for the group.

Following the Field Day Activities the association's fifty-three members elected nine to the Board of Directors of the Association. The directors are: Edward P. Bucklew, Independence, W.Va.; Dr. William H. Buser, Swanton, Md.; Lawrence A. Chaikcic, Vanderbilt, Pa.; O. Randall Harman, Accident, Md.; Samuel Hunter, Smithsburg, Md.; Paul C. Peaslee, Kingwood, W.Va.; Dr. Leslie P. Midls, Marianna, Pa.; Don E. Ross, Bruceton Mills, W.Va.; and James B. Watson, Westernport, Md.

The membership also adopted by-laws to be used by the Association and received a preliminary sales report related to the Association's fall sale to be held October 24.

The Board of Directors elected as its officers: Dr. William H. Buser, president; Don Ross, vice president; Randall Harman, treasurer; and Brenda Jenkins, Friendsville, Md.