2007 Review - ISU Sheep Teaching Farm South State Avenue, Ames, Iowa

A.S. Leaflet R2371

Daniel Kiesling, superintendent Animal Science Sheep Teaching Unit

Mission

Provide facilities, livestock, and instruction for undergraduate education and extension outreach programs on sheep production and flock management.

History

The Iowa State University Sheep Teaching Farm is one that is steeped in tradition and excellence. Iowa State University has been exhibiting sheep at the highest levels of competition since the very beginnings of livestock shows in the United States. Iowa State University's interest in sheep production dates back to the early 1900's when Iowa State College exhibited Oxford and Southdown wethers at the 1912 International Livestock Exposition in Chicago, IL. The farm still continues to raise productive, competitive breeding stock today.



An early judging class at Iowa State College.



This building was headquarters for the sheep farm until 1965 when the farm was relocated to its current site on South State Street Avenue.

Farm Area and Land Use

The farm is currently being transitioned into a rotational cropping system for parasite control and pasture renovation. The rotation consists of corn/soybean production, hay stands consisting of an alfalfa, brome and bluegrass mixture and pastures of that same composition. In the previous 35 years, pastures and hay fields were much more static resulting in eventual losses in both productivity and grass and legume species diversity.

Facilities

Facilities consist of three buildings. The first building is 30' x 218' and was built in 1966. It has ten 18'x24' pens, two lambing rooms, an office with restroom, and two small storage rooms. The building is mainly used during late gestation and lactation of the winter lambing ewes, and finishing lambs in the summer and fall months. Also, in 1966, a 30' x 90' structure was built. Its main purpose is for developing replacement ewe lambs and housing stud rams when they are not in use. The third and final structure is 32' x 80' and was built in 1956. This building is used mainly in the late fall and winter months when pasture is no longer available. At this sight, mature females are housed during the first two trimesters of their pregnancy and during any open periods before breeding and after weaning when sheep are not being grazed.

Teaching Activities

The Iowa State University Sheep Teaching Farm plays a critical role in undergraduate education providing hands on interaction with various components of sheep production. The farm contributes to the following undergraduate classes both on and off campus.

Animal Science 101 L	Working with Animals
Animal Science 214 L	Domestic Animal Physiology
Lab	
Animal Science 229	Sheep Science
Animal Science 270	Foods of Animal Origin
Animal Science 305	Livestock Evaluation
Animal Science 332	Laboratory Methods in Animal
	Reproduction
Animal Science 336	Livestock Behavior and Well-
	Being
Animal Science 429	Sheep Systems Management
Animal Science 475	Intercollegiate Judging Training
	and Competition



A group of lactating ewes and lambs in early spring.

The farm and its livestock are also used for a variety of events for the Block and Bridle club including the Little North American Showmanship Competition, the Junior Livestock Evaluation Competition, the VEISHEA petting zoo, and Ag Olympics. Block and Bridle club members also organize and schedule tours of the farm for daycare centers and pre-schools in the Ames area.

In addition to classes, the sheep teaching farm has also held several programs and labs for the Iowa state 4-H office, as well as providing judging workouts for youth, junior college and senior college judging teams from across the country.

Flock Composition

The flock consists of 220 mature ewes divide among three different production systems. The first is a 100 head commercial white face flock that is mainly comprised of Polypay and Polypay cross females. This flock is a forage based, low labor system where ewes are moderate to small framed, easy fleshing, durable and prolific. Ewes are fed average to low quality forages during the dry lot period and little or no concentrate. Lambing is done on pasture in May on a rotational grazing system. Weaning usually occurs between August 1 and September 1 depending on pasture availability.

The second production system is a 30 head registered Hampshire flock, which is enrolled in the National Sheep Improvement Program (NSIP). These ewes are lambed inside in January and February. Moderate frame size, rapid growth and ribeye area, in combination with desirable phenotype are the selection criteria in the Hampshire flock. Breeding stock are sold private treaty and at state and national sales.

The final producing group system is a flock of 90 wether-type Hampshire and Suffolk cross ewes, which lamb from late December through February. The objectives of this flock are to produce competitive show lambs for sale to junior livestock exhibitors for local, county, state, and national exhibition. Select stud ram prospects and replacement ewe lambs are also sold private treaty and at state and national sales. The quality of the flock has helped in recruiting junior lamb exhibitors who are interested in furthering their education at Iowa State University.



Discussion of Ruminant Anatomy and Physiology by Dr. George Brandt in Animal Science 214L.



ISU 7148- High selling (\$2,700) Hampshire ram at the 2007 Center of the Nation NSIP Sale.