2009 Review - ISU Sheep Teaching Farm
South State Avenue, Ames, Iowa

A.S. Leaflet R2571

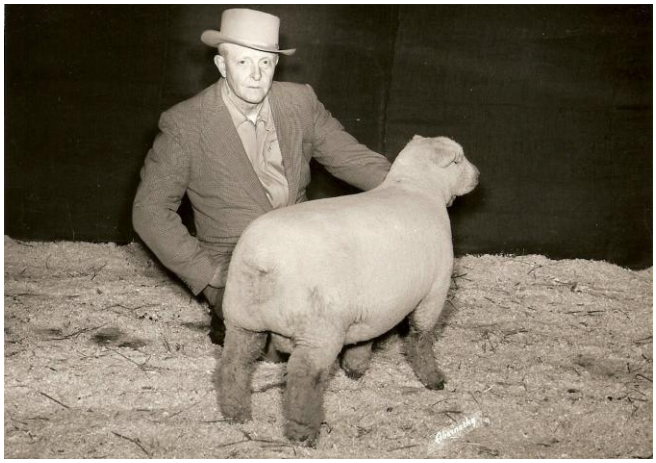
Daniel Kiesling, superintendent,
Animal Science Sheep Teaching Unit

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.



Top: Al Dixon, shepherd, exhibiting the Champion Wether at the 1961 International in Chicago.

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 provides for a hands-on learning experience where students are able to see in real time how sheep react to different procedures and methods instead of reading out of a book.

The farm aids in 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 429	Sheep Systems Management
Animal Science 475	Intercollegiate Judging Training and Competition

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, and the VEISHEA petting zoo.

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

Among classes, tours, labs, and extension activities, resources were utilized by over 500 students (from Iowa State University and other schools) and over 350 non-students.

Students learning how to shear a sheep in ANS 229- Sheep Science, taught by Dr. Curtis Youngs.

The farm also provides employment opportunities for undergraduates. This gives students the chance to work in a real sheep production operation where they are exposed to current sheep management practices, technology that is making sheep production more efficient, in addition to interaction and networking with members of industry.

Flock Composition

The farm consists of 150 mature ewes, and is comprised of three different production systems. The first is an 80 head commercial white face flock which is comprised of Polypay cross females. This flock is a low input, 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 spring pastures 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 40 ewe registered Hampshire flock, which is enrolled in the National Sheep Improvement Program (NSIP). ISU is proud to be home to the oldest registered Hampshire flock in the United States. 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 is sold off the farm and at state and national sales.

ISU 7104- Trait leader for 120 day weight in the Hampshire breed. This sire is now owned by University of Wisconsin- Madison.

The final management system is a flock of 50 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 off the farm and at state and national sales. The flock has helped in recruiting junior lamb exhibitors who are interested in furthering their education at Iowa State University.

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 in pastures.

Facilities

Facilities consist of four buildings. The first building is 30’ x 218’ and was built in 1966. It has ten 18’x 24’ 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. A 30’ x 90’ structure was also built in 1966 and its main purpose is for feeding replacement ewe lambs, and it also has two pens where stud rams are housed when not in use. The third structure is 32’ x 80’ and was built in 1956. This building is used mainly in the late fall and winter months when pastures are no longer available. At this site, 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. A fourth structure was constructed this 2007, a 30’ x 100’ hoop barn that allows for on-site hay and straw storage.

Pasture born lambs being finished in the 30’ x 218’ barn.