

SHEEP Improvement Demonstrated by U. S. Southdowns The foundation stock for the flock of purebred Southdown sheep, owned by the department at Sheep Acres, Beltsville, Md., was selected in November, 1909, from the Huntleywood flock of Beaconfield, Canada. Sheep Acres is a part of the United States Animal Husbandry Experiment Farm. At the time the sheep were purchased the Huntleywood flock was owned by George Drummond, who had made extensive importations of sheep from England, principally from the famous Babraham flock of C. R. W. Adeane and the Sandringham flock of the King. It was considered at that time one of the best flocks in America. The selection consisted of 29 yearling ewes and a yearling ram, Babraham Hercules, 23701.

This ram, as well as the ewes, was carefully selected from a large number and the entire lot consisted of individuals of outstanding merit. While there was but little apparent difference in the individual excellence of the ewes purchased, they differed so greatly in their ability to transmit desired characteristics in their offspring that careful selection of the stock for breeding during the last 20 years has eliminated the offspring of all but 10 of the original 29 ewes. Of the 49 ewes now in the breeding flock, 37, or 76 per cent, trace directly on their maternal side to 5 of these 10 ewes.

All the purebred Southdowns were kept at the United States Morgan Horse Farm, Middlebury, Vt., until November, 1915, when 43 ewe lambs were shipped to the United States Animal Husbandry Experiment Farm, Beltsville, Md. These ewes were culled rigidly in 1916 as yearlings and were the nucleus of the flock at that farm. Additional ewes were added from the Middlebury flock in 1918 and all the remaining Southdowns were shipped to Beltsville from Middlebury in 1920 to make room for a flock of experimental grade ewes.

Choice Ewe Lambs Replenish Flock

In 1920 the Southdown flock at Beltsville consisted of 120 breeding ewes, but it has been reduced to about 50 ewes at present in order that experimental flocks of the Shropshire, Hampshire, and Corriedale breeds could be kept. Since the purchase of the original Drummond ewes no new ewes have been added to the flock. The flock has been kept replenished by the best ewe lambs produced, about one-fourth of the ewes in the flock being replaced each year by yearlings.

Only the best rams obtainable have been used as sires and every effort has been made to maintain and improve the excellence of the flock. The original ram, Babraham Hercules, proved to be an exceptional breeder. The next ram used to any considerable extent was Cheveley Parallel 31528, a ram shown at the Royal in England and one of a pen of three that took first premium at that show. Two sons of this ram, U. S. D. A. 222, 34064, and U. S. D. A. 276, 35293, were also used extensively in the flock. These two rams were followed by the ram Gatton Park, W-84 (fig. 215), bred by Jeremiah Colman and shown at the English Royal in 1921, where he was in the first pen of three yearling rams. This ram was imported that fall by Glimmerglen Farms, of Cooperstown, N. Y., from which he was obtained by the department.

This ram was first used in the fall of 1922 and has been used extensively every year since until the fall of 1927. He has been a wonder-

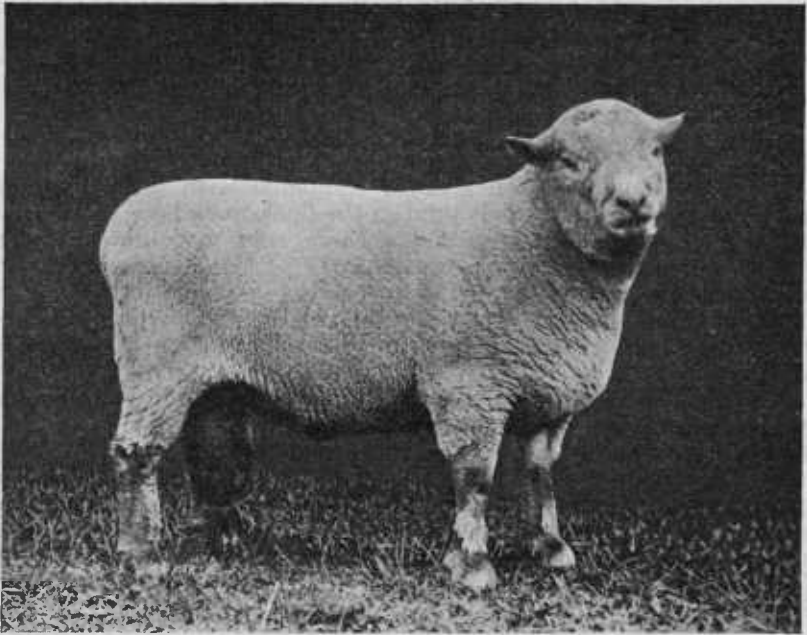


FIG. 215.—Southdown ram in use at the United States Animal Husbandry Experiment Farm, Beltsville, Md., and sire of most of the ewes now in the flock. (Photograph taken soon after shearing.)



FIG. 216.—Purebred Southdown ewes on lawn at United States Animal Husbandry Experiment Farm, Beltsville, Md.

ful sire and most of the ewes now in the flock are either his daughters or his granddaughters. (Fig. 216.) Two sons of this ram have been used to a limited extent in the flock, with very good results and a yearling linebred son now in service will no doubt be extensively used in the future to carry on the blood of this magnificent sire.

Some Show-Ring Awards

While the department has never competed with breeders in the show ring, numerous animals bred in the flock have been shown with considerable success. Individual wethers, sold to private breeders, have been shown at the International Live Stock Exposition, Chicago, on five occasions. These five showings resulted in three grand championships and one other Southdown championship, while on only one occasion was the Government-bred wether defeated within the breed.

In 1923 a carload of purebred and grade Southdown lambs bred by the department was also made grand champion carload of lambs at the International Live Stock Exposition.

The flock at present is noted for the excellence of its individuals and extreme uniformity. The foregoing show records are given merely as an indication of the superior merit which has been established through years of careful selection and corrective matings on a basis of production of sire and dam rather than on the individual excellence of each parent.

C. G. POTTS.

SHEEP Watering Permits Use of Dry Grazing Land There are large areas of grazing land in the western part of the United States that have not been fully used for grazing purposes owing to the lack of an adequate supply of surface water, such as running streams or other natural watering places for livestock. Much of this range is of the highest type, but has been used only to a slight extent by livestock, and that only during short periods when water was supplied by rain or snow. With the areas of the open ranges becoming smaller, the problem of developing natural water supplies and otherwise making water available on dry ranges is of more and more importance to the range livestock industry.

This problem is being studied at the United States Sheep Experiment Station at Dubois, Idaho. The station is well equipped to study the water requirements of range sheep on dry ranges. The station range includes about 28,000 acres of semiarid grazing land, which has a very limited supply of natural water. The annual precipitation on this range runs from 6 to 16 inches, with a mean of about 13 inches, most of which comes as snow during the winter and early spring. This range is of the sagebrush type, the forage cover consisting mainly of grass, with a few weeds and some short browse, but with no shade for the sheep. One well, 750 feet deep, has been provided at the station headquarters, together with a power pumping outfit, and underground concrete storage reservoirs. The water table is very low, making well drilling expensive. It is considered that water can be hauled to outlying points on the range at a lower cost than that of drilling additional wells.