



## Some Unique Features of Karakul Fat-Tail Sheep

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**F**at-tail sheep constitute one of the more prevalent types found in the world, and they almost certainly make the greatest contribution to mankind. Most of these are triple purpose animals producing meat, milk and fiber. Most fat-tail sheep tend to have certain traits in common which, in addition to accumulation of fat in the tail, include the production of carpet wool, adaptation to arid regions or more specifically arid regions with great variability in temperature and feed supply, a higher rate of milk production than most breeds and generally low fecundity with good lamb survival. There are many breeds or genotypes of fat-tail sheep, but perhaps the two most widespread, or at least best known, are the Awassi and the Karakul. The latter is thought of as a fur type with the lambs being sacrificed at a very young age to produce Persian lamb skins. However, in practice many lambs are not sacrificed at birth, but are utilized at later ages for meat. The only breed of fat-tail sheep known to be present in the U.S. is the Karakul. These are often used to produce wool for the handicraft trade because of their color and some unique characteristics of the fleece. The genetics of color in the breed are reasonably well worked out and will not be reviewed at this point. However, there are a number of characteristics of this type of sheep which should be of interest.

The Texas Agricultural Experiment Station established a small flock of Karakul sheep approximately 10 years ago. One of the reasons for doing this was to assist in the preservation of a genetic resource which appeared to be in danger

of being lost in this country. The second reason had to do with using this breed as an example of the larger fat-tail population of the world in a series of studies contributing to the U.S. AID Small Ruminant Collaborative Research Support Program. The flock was managed under Texas range conditions with winter or very early spring lambing. A series of studies have been conducted and the results will be reviewed and summarized in this paper. Many of these studies have been previously reported in more detail.

## Results and Discussion

### Fleece Quality

A bulk lot of 865 pounds of Karakul wool was evaluated for a number of characteristics with the following results by Lupton and Shelton.<sup>4</sup>

Average grease fleece weight, 2.86 kg.

Yield, 58.1%

Residual grease (following scouring), 0.6%

Vegetable matter, 1.3%

Fiber diameter, 29.2 microns

Standard deviation in diameter, 11.1 microns

The color ranged from white to black. There were significant differences in fiber diameter between colors, but it is not known what significance to attach to this. It may in fact represent purity of the type. Black colored wools were of the

