Identifying genetically-superior bucks

by Susan Schoenian

A pasture-based meat goat performance test was initiated at the University of Maryland's Western Maryland Research & Education Center (WMREC) in Keedysville, Maryland in 2006. The test is sponsored by University of Maryland Extension (UME). Since 2006, 478 bucks have been tested.

The purpose of the test is to evaluate the post-weaning performance of male goats consuming a pasture-only diet with natural exposure to gastro-internal parasites, primarily Haemoncus contortus (the barber pole worm). The test provides an opportunity to evaluate the performance of meat goats under typical Mid-Atlantic production conditions.

Each year, male goats, of any breed or breed cross, are tested at the Western Maryland facility. While on test, the goats are evaluated for growth performance, parasite resistance (FEC) and parasite resilience (FAM), and carcass merit.

The test bucks are managed as a single group on pasture from early-June until mid-September. They do not receive any supplemental feed, other than free choice minerals. Though sometimes, drought conditions have necessitated the feeding of nutritional tubs and/or grass hay.

The pasture system consists of six, two-acre paddocks containing various warm and cool season grasses and forbs. The goats always have access to a central laneway containing port-a-hut shelters, mineral feeders, water, a treatment pen, and a handling system. The goats are handled every 14 days to determine body weights, FAMACHA©, body condition, coat condition, dag and fecal consistency scores. Low stress livestock handling techniques are emphasized (no handling by the horns). Individual fecal samples are collected every 14 days. Pooled samples are collected every 28 days for larvae ID.

Toward the end of the test period, the goats are scanned to determine carcass characteristics. They are evaluated for structural correctness and reproductive soundness and given a frame score and USDA grade.

Bucks meeting Gold, Silver, or Bronze standards of performance for growth, parasite resistance, and parasite resilience and minimum standards for structural correctness and reproductive soundness are eligible to sell for breeding. Goats that do not qualify for the sale are returned to their owners or sold at a sale barn (for meat).

For two years, some of the bucks were harvested to collect carcass data and characterize the carcasses from pasture-fed meat goats. Starting in 2011, the research center began comparing the performance and carcass characteristics of pen vs. pasture-fed goats.

For more information about the test, visit the blog at http://mdgoattest.blogspot.com. All pertinent documents can be downloaded from the blog.

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