



Western Maryland Pasture-Based Meat Goat Performance Test

2016 Guidelines and Protocol

Location:

Western Maryland Research & Education Center
18330 Keedysville Road, Keedysville, Maryland 21756
(Located approximately 9 miles south of Hagerstown, Maryland)

2016 schedule:

Delivery date - Friday, June 24, 7 a.m. to 2 p.m.
Official starting weights determined – July 7-8
Final weights determined – September 29-30
Pick up date – Friday, October 7

Purpose

1. To have a common environment and unbiased evaluation of economically-important traits of potential meat goat sires.
2. To evaluate the post-weaning growth performance of bucks and evaluate their resistance and resilience to gastro-internal parasites, primarily the barber pole worm.
3. To offer an alternative to traditional feed and pen-based performance tests.
4. To promote the use of performance-tested bucks in the meat goat industry.

Eligibility requirements

1. Any goat producer may participate and consign up to five male goats to the test. A minimum of two goats is recommended. Half-sibs (same sire) are recommended.
2. If nominations exceed the capacity of the test, preference will be given to previous consigners and Maryland residents. The capacity of the test is 90 goats.
3. The 2016 test is open to weanling buck and wether kids of any breed or breed cross, with or without registration papers or registration eligibility.
4. For the 2016 test, goats must be born between January, 1, 2016, and March 15, 2016, and weigh between 40 and 70 lbs. upon delivery to the test site on June 24. Goats which do not meet the weight requirements will not be accepted.
5. A buck information sheet (available for download from <http://mdgoatetest.blogspot.com>) must be filled out for each goat and is due upon delivery to the test site on June 24.
6. Consigners will be required to sign a statement releasing the University of Maryland from any liability.

7. There will be a \$120 per goat testing fee. This fee will be used to pay for daily care; pasture establishment, maintenance and renovation; fencing repairs; mineral supplementation; feed (soy hulls); veterinary costs; fecal testing; larvae ID; DrenchRite® testing, NIRS analysis, and ultrasound scanning. \$20 is required to nominate a goat to the test. The balance of payment (\$100/goat) is due when the goats are delivered to the test location on June 24. Checks should be made payable to the University of Maryland.
8. All consigners to the Western Maryland Pasture-Based Meat Goat Performance Test should provide on-farm performance data of all the kids in their consigned goats' contemporary group(s). On-farm performance data should include data sire, dam, date of birth, birth weight, type of birth and rearing, weaning weight, and date of weaning and weighing. Dr. Ken Andries from Kentucky State University has agreed to process the data for consigners. Forms for on-farm performance data are available for download at <http://mdgoatstest.blogspot.com>.

Health requirements

1. All goats must be accompanied by a certificate of veterinary inspection (CVI, health papers) based on the requirements of the state of Maryland. Out-of-state consignments require interstate health papers. Consigners must also fill out the "Livestock Exhibitor's Self-Certification of Animal Health." These forms are available for download at <http://mdgoatstest.blogspot.com>.
2. All goats must have official USDA scrapie identification as specified by state and federal regulations.
3. All goats will be inspected by a committee at the time of check-in. Goats showing any signs of disease or ill-thrift will be refused entry to the test.
4. Any goat which develops an abscess while on test will be removed from the test and have its abscess tested. If the abscess tests negative for the bacteria that causes caseous lymphadenitis (CL), the goat will be treated and returned to the test. If the abscess tests positive for the bacteria that causes CL, the infected goat must be picked up from the test or taken to a sale barn.
5. All goats must have received two vaccinations for *clostridium perfringens* type C and D and tetanus (CDT or 7 or 8 way clostridial vaccine) prior to the test.
6. Goats must have been weaned for at least two weeks prior to the test.
7. Goats must have properly trimmed hooves. Zinc sulfate will not be able to penetrate the hooves fully, if there are air pockets.

Test protocol

1. The 2016 test will start on June 24 and conclude on September 30. Consigners must agree to leave their goats at WMREC for the duration of the test. Consigners will be asked to pick up any goats which fail to thrive under test conditions.
2. The goats must be delivered to the test site on June 24 between 7 a.m. and 2 p.m. Special permission is required to deliver the goats to the test site prior to June 24. No goats may delivered to the test site after June 24.
3. Upon arrival, the goats will be dewormed with anthelmintics from each drug group: moxidectin (Cydectin® sheep drench) + levamisole (Prohibit® sheep drench) + albendazole (Valbazen® sheep drench). They will be vaccinated for soremouth and

- ear-tagged with WMREC test tags. A fecal sample will be collected from the rectum of each goat. Additional fecal matter from each consignment will be collected to form a pooled sample for larvae ID. Hooves will be inspected and scored. The goats will stand in a foot bath (with zinc sulfate) before being released onto the pasture. They will be treated (in the water) for coccidiosis for 5 days at the start of the test.
4. The goats will be managed as a single group on pasture. They will always have access to a central laneway which contains port-a-hut shelters, mineral feeders, feeders, water, and a handling system. The handling system is covered by a hoop house, which provides additional areas for shelter. The goats will be inspected at least once daily. Observations and pasture movements will be recorded in a daily log book.
 5. The goats will be supplemented with whole barley (daily). The supplemental feed will be introduced and increased slowly until it reaches up to 1.0 lb. per day. For a 50-lb. goat this represents ~2% of body weight.
 6. This year's test will be split into two phases: a growth challenge and a parasite challenge. During the first phase of the test (day 1-42), the goats will graze warm season annual grasses and legumes. The annual pastures will be free (initially) from infective worm larvae. During the second phase of the test (day 42-84), the goats will graze cool season grass pastures that have been pre-infected with worm larvae by grazing sheep. The larvae contributed by the sheep has been determined to be susceptible to moxidectin and levamisole.
 7. The goats will be weighed every 2 weeks to determine average daily gain. Beginning and ending weights will be determined by averaging the weights recorded on two consecutive days. All goats will be weighed before other scores are determined.
 8. The goats will be handled (using low-stress handling techniques) every 2 weeks to determine FAMACHA® eye anemia scores, body condition, coat condition, dag, and fecal consistency scores and the need for deworming and other treatments. Goats scoring 1 or 2 on the FAMACHA® scale will not be dewormed unless they have bottle jaw or other evidence of clinical parasitism. Goats scoring 4 or 5 on the FAMACHA® scale will be dewormed. Goats scoring 3 on the FAMACHA® scale may or may not be dewormed, depending upon the criteria of the Five Point Check® and various other factors, including previous scores, scores of other goats, fecal egg counts, and scoring trends. Any goat with a FAMACHA® score of 3 will be dewormed if it has lost weight (>0.1 lbs.) during the previous 14 days.
 9. Fecal samples will be collected from the goats upon arrival and every two weeks. If a fecal sample cannot be obtained from a goat, the goat will be returned to the handling system and a second attempt will be made. Fecal egg counts will be determined using the modified McMaster technique. Pooled fecal samples will be collected upon arrival and every 4 weeks for larvae ID (coproculture). All fecal analyses will be performed by Dr. Dahlia O'Brien's lab at Virginia State University.
 10. Towards the end of the test, the goats will be evaluated for reproductive soundness and structural correctness and scanned to estimate rib eye area.
 11. The 10 top-performing bucks will be identified and recognized. The primary selection criteria will be growth rate (ADG), parasite resistance and parasite resilience. Ultrasound data, reproductive data, structural correctness, and weight per day of age will also factor into the decision-making process.

12. The bucks must be picked up at test site after the test concludes and all of the data has been received and analyzed. The test will facilitate the transport and/or sale of any goats that consignors do not want to pick up.
13. No sale will be held at the conclusion of this year's test. The test committee will help to facilitate private treaty sales of top-performing bucks. It is recommended that some of the top-performing bucks be returned to their farm of origin and be sold (as yearlings) at next year's Bluegrass Performance Invitational (in Frankfort, Kentucky). Only consignors to the Western Maryland Pasture-Based Meat Goat Performance Test are eligible to consign goats to the Bluegrass Performance Invitational. This year's sale will be limited to does, but next year's sale will include top-performing bucks from the 2016 Maryland test.
14. Progress reports will be provided to consignors (and other interested persons) every 14 days via the blog (<http://mdgoatstest.blogspot.com>) or mail (upon request). Reports may be mailed to consignors upon request.

The 2016 meat goat test committee includes Susan Schoenian (UME-WMREC), Jeff Semler (UME- Washington County), David Gordon (UME-Montgomery County), Dr. Dahlia O'Brien (Virginia State University), Dr. E. Nelson Escobar (UMES), and Dr. Mary Beth Bennett (West Virginia University - Berkeley County). Ultrasound scanning is done by Jim Pritchard (West Virginia University).

For more information, contact Susan Schoenian at (301) 432-2767 x343 or sschoen@umd.edu.

<http://mdgoatstest.blogspot.com>