



Western Maryland Pasture-Based Meat Goat Performance Test 2012 Guidelines and Protocol

Location:

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

2012 schedule:

Delivery date - June 2

Official starting weights determined - June 7

Final weights determined - week of September 15

Pick-up date and sale - September 15

Purpose

1. To have a common environment and unbiased evaluation of economically-important traits of potential meat goat sires and their progeny.
2. To offer an alternative to traditional feed and pen-based performance tests.
3. To evaluate growth performance on pasture and measure resistance and resilience to gastro-internal parasites.
4. To determine carcass characteristics of pasture-raised meat goats.

Eligibility requirements

1. The 2012 test is open to weanling buck and wether kids of any breed or breed cross, with or without registration papers or registration eligibility.
2. For the 2012 test, goats must be born between December 20, 2011, and March 20, 2012, and weigh between 35 and 70 lbs. upon delivery to the test site on June 2. Goats towards the lighter end of the range are preferred.
3. A buck information sheet (available for download from <http://mdgoatstest.blogspot.com>) must be filled out for each goat and is due upon delivery to the test site on June 2.
4. Breeders may consign up to five goats to the pasture test. A minimum of two bucks is recommended. Half-sibs (same sire) are recommended.
5. A maximum of 80 goats will be accepted to the 2012 test. Preference will be given to Maryland breeders and previous consigners.
6. Consigners will be required to sign a statement releasing the University of Maryland from any liability.
7. There will be a fee of \$95 per goat for the test. This fee will be used to pay for daily care, pasture maintenance and renovation, fencing repairs, minerals, veterinary costs, fecal testing, larvae ID, and ultrasound scanning. \$20 is required to nominate a goat to the test. The balance of payment (\$75) is due when the goats are delivered to the test location on June 2.

Health requirements

1. 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 consigners will 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.
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. Goats which develop abscesses while on test will be removed from the test and have their abscesses tested. Goats testing negative for CL will be treated and returned to the test. Goats testing positive for CL must be picked up or transported to a sale barn.
5. All goats must have received two vaccinations for *clostridium perfringens* type C and D and tetanus (CD-T 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 hoof fully, if there are air pockets.

Test protocol

1. The 2012 test will start on June 2 and conclude the week of September 15. 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 adapt to the pasture-only diet or fail to thrive under test conditions.
2. The goats must be delivered to the test location on June 2 between 9 a.m. and 2 p.m. Special permission is required to deliver the goats to the test site prior to June 2. Goats cannot be delivered to the test site after June 2.
3. There will be a sale on September 15 for bucks meeting Gold, Silver, or Bronze standards of performance for growth rate, parasite resistance, and parasite resilience. and meeting minimum standards for structural and reproductive soundness. Goats not sold for breeding or to a commercial buyer must be picked up on September 15. Special permission will be required to pick up goats after September 15.

Performance standards from 2011 test

	Gold	Silver	Bronze	All goats
ADG, lbs./day	0.20	0.19	0.18	0.121
Avg. FEC, epg	500	750	1,000	424
High FEC, epg	1,000	1,500	2,000	12,320
High FAM, 1-5	2	2	3	5
# anthel. Tx	0	0	1	0.40

4. Upon arrival, the goats will be dewormed with anthelmintics from each anthelmintic class: moxidectin (Cydectin© sheep drench), levamisole (Prohibit sheep drench) and Albendazole (Valbazen sheep drench). They will be vaccinated for soremouth. They will be ear-tagged with WMREC test tags. A fecal sample will be collected from each goat. Additional fecal matter from each consignment will be collected to form a pooled sample for coproculture. 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 3 to 5 days at the start of the test.
5. The goats will be managed as a single group on pasture. They will have free choice minerals containing a coccidiostat, but no other supplementation unless deemed necessary due to environmental conditions. They will be inspected at least once daily. Observations and pasture movements will be recorded in a notebook.
 6. The goats will be rotationally grazed on approximately 12.5 acres of pasture, which is divided into six paddocks and includes various cool and warm season grasses and forbs. They will always have access to a central laneway which contains Port-a-hut shelters, mineral feeders, water troughs, and a handling system. Pasture movements will be balanced between forage availability and the need to expose the goats to infective worm larvae.
 7. While on test, the goats will be artificially challenged with a low dose of infective (but anthelmintic-susceptible) worm larvae (L3). The purpose of the artificial challenge is to increase the exposure to parasites to determine which goats are more resistant and/or resilient to infection. During the period of challenge, the goats will be more closely monitored for clinical signs of parasitism and the need for anthelmintic treatment. The artificial challenge will be administered under the guidance of a small ruminant parasitologist.
 8. The goats will be handled every 2 weeks to determine their FAMACHA© eye anemia scores, body condition, coat condition scores, and dag scores and the need for deworming and other treatments. Goats scoring 1 or 2 on the FAMACHA© scale will not be dewormed. 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 other factors (body condition, ADG, prior scores, fecal egg counts, scores of other goats, etc).
 9. The goats will be weighed every 2 weeks to determine average daily gain. ADG will be calculated beginning with the June 7 weight. The first 5 days of the test will serve as an adjustment period.
 10. Fecal samples will be collected from the goats every two weeks. Fecal egg counts will be determined using the modified McMaster technique by Dr. Dahlia O'Brien's lab at Delaware State University. Larval cultures will be done by Dr. Ray Kaplan's lab at the University of Georgia.
 11. Progress reports will be provided to consigners (and other interested persons) every 14 days via the blog (<http://mdgoattest.blogspot.com>) or mail (upon request).
 12. The goats will be scanned for back fat thickness and rib eye area towards the end of the test.
 13. Scrotal circumference of bucks will be measured and the bucks will be evaluated for structural and reproductive soundness.

The 2012 meat goat test committee includes Susan Schoenian (UME-WMREC), Jeff Semler (UME- Washington County), Erin Canfield (UME-WMREC, David Gordon (UME-Montgomery County), Dr. Dahlia O'Brien (DSU), Willie Lantz (UME-Garrett County), Dr. E. Nelson Escobar (UMES), and Dr. Mary Beth Bennett (WVU-Berkeley County). Dr. Kevin Pelzer (VA Tech) serves as the veterinary advisor.

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

<http://mdgoatatest.blogspot.com>