

SOUTHWEST VIRGINIA

Agricultural Research and Extension Center



Lee Wright (right) explains how to evaluate sheep for signs of anemia. Symptoms are typically caused by an infestation of barber pole worms and can be extremely devastating to the performance of a sheep flock.

Internal parasites are the primary production challenge for sheep producers in Virginia and the surrounding region. Genetic selection for parasite resistance is becoming a critical control mechanism as other strategies have become less effective. Therefore, properly designed and implemented genetic evaluation protocols for parasite resistance are needed.

In response to these needs, a forage-based ram evaluation program, the first to be conducted nationally, was initiated at the Southwest AREC in 2012. Interest in the program has attracted producers from 16 states who have contributed 722 rams. Rams from these flocks are evaluated over the grazing season for growth performance and parasite resistance with researchers applying protocols based on previous research conducted at the center. At the conclusion of each test, AREC staff host an educational field day during which top-performing rams are offered for sale to the public.

The program has successfully demonstrated methods for collection of on-farm data necessary to select for the economically-relevant traits of growth and parasite resistance. Sources of variation in parasite resistance have been documented and serve as benchmarks for on-farm application by producers. They are also included in national genetic evaluation programs for the sheep industry. A subset of 248 tested rams have sold at auction, averaging \$1,129 per ram. The rams have gone to 15 states. The estimated value-added per ram was \$700 over typical market value. Results have been shared through Extension publications, to the popular press, and to the scientific community.

PARTNER WITH US

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“The corn silage testing program at the Southwest AREC includes a regional and a state test. A prominent seedsman in Virginia stated that he relies on the regional test to determine which hybrids he will market in our region.”

PHIL BLEVINS
SENIOR EXTENSION AGENT
WASHINGTON COUNTY



“The Coalfield Beef Cattle Association has partnered with the Southwest AREC on several successful projects focused on beef cattle production. Our members have achieved tremendous benefits both educationally and financially by incorporating Virginia Beef Quality Assurance practices learned at the AREC into our stocker calf backgrounding programs.”

**MEMBERS OF CBCA
& VA CATTLEMAN'S
ASSOCIATION**

SOUTHWEST VIRGINIA AREC AT A GLANCE



DISCIPLINES

- Beef cattle production and heifer development
- Sheep production management
- Genetics and parasite resistance evaluations
- Forage production and livestock nutrition
- Corn grain and corn silage variety trials
- Christmas tree production
- Pasture management

INNOVATIVE TECHNOLOGIES

- Sheep genetic evaluation software
- Electronic animal ID data collection
- Apps for data collection and management
- Apps to map land use
- Weather station with real-time weather data

FACILITIES

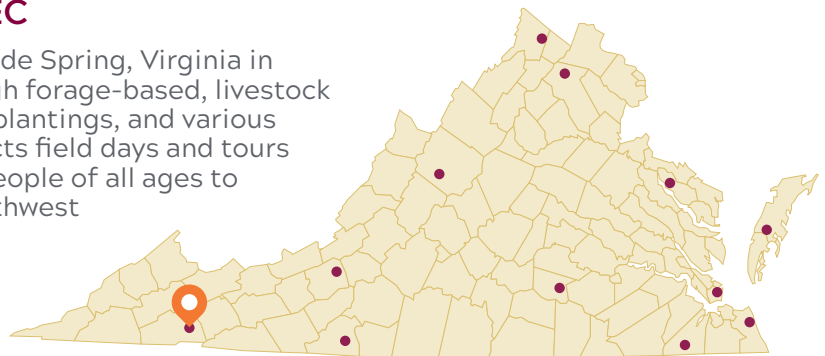
- 210 acres
- 4 barns, 3 equipment/hay storage facilities
- Multi-purpose ram test barn and educational facility
- Beef cattle handling facility
- Permanent and portable sheep handling facilities

INDUSTRY PARTNERS

- Beef cattle industry
- Sheep industry
- Seed industry
- Chemical companies

ABOUT THE SOUTHWEST VIRGINIA AREC

The Southwest Virginia AREC was established in Glade Spring, Virginia in 1947 and primarily serves the commonwealth through forage-based, livestock production systems research. Corn trials, pine tree plantings, and various specialty crops are also produced. The AREC conducts field days and tours for producers and the general public to introduce people of all ages to our programs and to the world of agriculture in Southwest Virginia.



A COLLABORATIVE NETWORK

The ARECs are a network of 11 centers strategically located throughout the state that emphasize close working relationships between Virginia Agricultural Experiment Station, Virginia Cooperative Extension, and the industries the work with. The mission of the system is to engage in innovative, leading-edge research to discover new scientific knowledge and create and disseminate science-based applications that ensure the wise use of agricultural, natural, and community resources while enhancing quality of life.

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VIRGINIA AGRICULTURAL
EXPERIMENT STATION
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