

SOUTHWEST VIRGINIA

Agricultural Research and Extension Center



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 over 1,000 rams from collaborating producers, representing flocks from 16 states (VA, AR, FL, GA, IN, KY, MD, MO, NC, OH, PA, SC, TN, TX, WI, WV). Rams from these flocks are evaluated over the grazing season for growth performance and parasite resistance, applying protocols based on previous research conducted at the center. At the conclusion of each test, an educational field day is hosted, and top performing rams 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 continued to be documented, and serve as benchmarks for on-farm application by producers, and for inclusion into national genetic evaluation programs for the sheep industry. A subset of 343 tested rams have sold at auction, averaging \$1,336 per ram and gone to 17 states. Estimated value-added per ram was \$750 over typical market value. Results have been shared through Extension publications, popular press, and to the scientific community.



Ewes and lambs grazing spring pastures at the Southwest AREC as part of a pre-weaning study of genetic resistance levels to internal parasites.

PARTNER WITH US

12326 VPI Farm Rd., Glade Spring, VA 24340
(276) 944-2200
www.arec.vaes.vt.edu/arec/southwest-virginia

“Forages are a key component to all livestock operations in Southwest Virginia, and our climate allows cool season forages to thrive. Area VCE agents work closely with SWAREC to conduct numerous variety and fertilization trials, to assist producers with management decisions to maximize quantity and quality of forages to maintain profitable family farming operations.”



LEE WRIGHT
SWAREC SUPERINTENDENT
SENIOR RESEARCH ASSOCIATE

“By any measure, the Ram Test Field Day & Auction is an absolute success, and of great value to sheep producers in the region. Our flock has benefited greatly from the genetics purchased through this program. Thank you for your vision and many years of hard work. We cannot say enough positive things about this annual event.”



CHARLIE & AMY HURT
OWNER/OPERATOR OF LONE OAK FARM, ESMONT, VA

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
- GrowSafe & C-Lock feed intake monitoring systems

FACILITIES

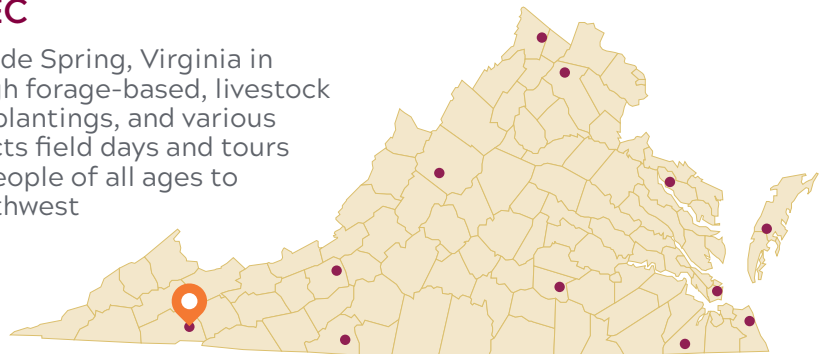
- 210 acres
- 4 barns, 3 equipment/hay storage facilities
- Multi-purpose ram test barn and educational facility
- Beef cattle handling facility
- Permanent and portable sheep handling facilities

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 they 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.

Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and local governments. Its programs and employment are open to all, regardless of age, color, disability, sex (including pregnancy), gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, military status, or any other basis protected by law.



VIRGINIA AGRICULTURAL
EXPERIMENT STATION
VIRGINIA TECH.



VT/0124/AREC-179NP (AREC-302NP)