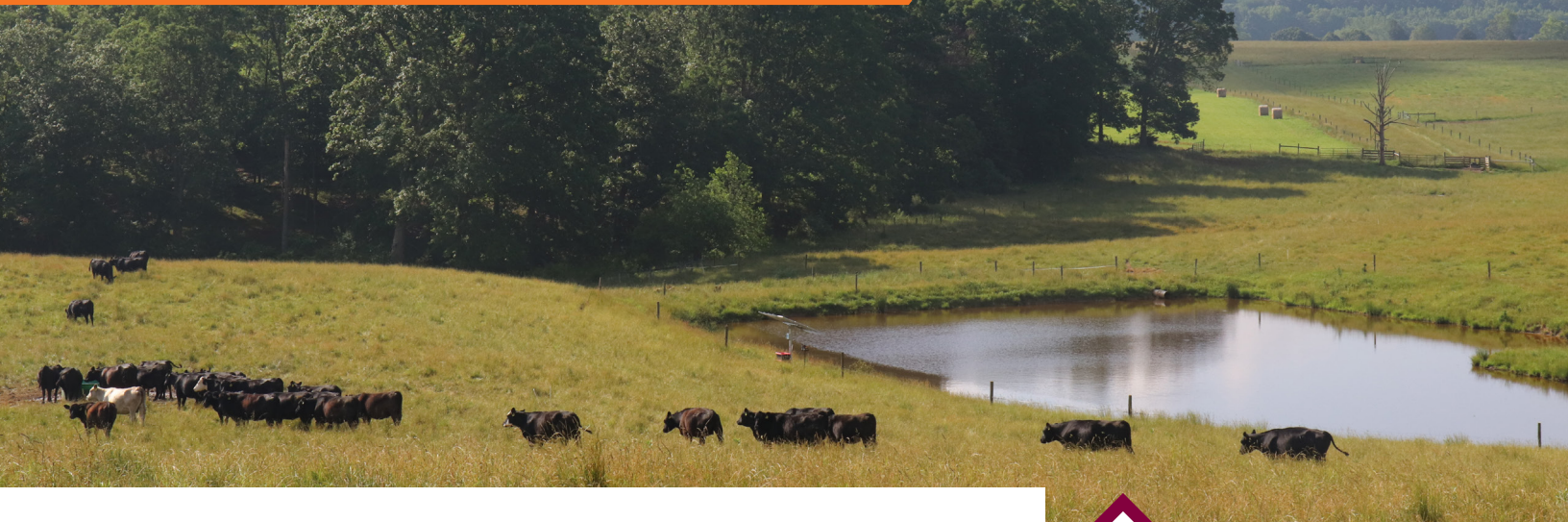


# SHENANDOAH VALLEY

Agricultural Research and Extension Center  
McCormick Farm



To help reduce pollution in the Chesapeake Bay, Virginia's Watershed Implementation Plans have recommended additional pasture fencing to keep more livestock out of surface waters by the year 2025.

Installing alternative livestock watering systems will likely be necessary for many of these pastures. For some locations, the cost to extend the electrical grid to power a small water pump may be prohibitively expensive. Such improvements can be problematic on rented acreage with annually renewed leases.

Non-permanent, solar-powered water pumping systems may prove a viable option for certain applications during freeze-free months to improve pasture management opportunities and provide off-stream water to cattle on rented ground.

Virginia Cooperative Extension faculty recently installed a small, solar-powered water pumping demonstration system at the Shenandoah Valley Agricultural Research and Extension Center. The demonstration site was strategically selected as it regularly hosts outreach events for agricultural producers and technical service providers.



A solar-powered pump delivered over 24,000 gallons of water uphill out of a pond and into a trough for cattle at the Shenandoah Valley AREC.

## PARTNER WITH US

128 McCormick Farm Circle  
Raphine, VA 24472  
(540) 377-2255  
[www.arec.vaes.vt.edu/arec/shenandoah-valley](http://www.arec.vaes.vt.edu/arec/shenandoah-valley)

"Forest management and research at SVAREC, while relatively new, has reached broad audiences to include loggers, landowners, Master Naturalist Volunteers and many thousands more on the simple but effective Marl Creek Trail which tells key forestry stories. Thanks to great support from the Virginia Department of Forestry, VT-CNRE Faculty and local volunteer foresters, the value of this resource is improving financially and educationally."



**ADAM DOWNING**  
EXTENSION FORESTER, VIRGINIA COOPERATIVE EXTENSION

"We have purchased rams through the Virginia Ram Test Sale at the SVAREC for over a decade. The ram test gives us easy access to high quality genetics without having to travel all over the state. Recently, we've started marketing our own rams and ewe lambs through the SVAREC sale. This not only gives us a venue to sell extra breeding stock, but also provides advertising for our flock and has increased our on-farm sales."



**SCOTT NEIL**  
MEADOWVIEW DORSETS

# SHENANDOAH VALLEY AREC, McCORMICK FARM AT A GLANCE



## DISCIPLINES

- Forestry and silvopasture
- Pasture systems
- Ram performance testing
- Beef cattle production

## INNOVATIVE TECHNOLOGIES

- Portable and fixed Calan feeding systems
- Novel tall fescue systems
- Temple Grandin cattle handling facility
- Weather station with real-time weather data
- Solar-powered SmartScales
- Acoustic grazing detection systems

## FACILITIES

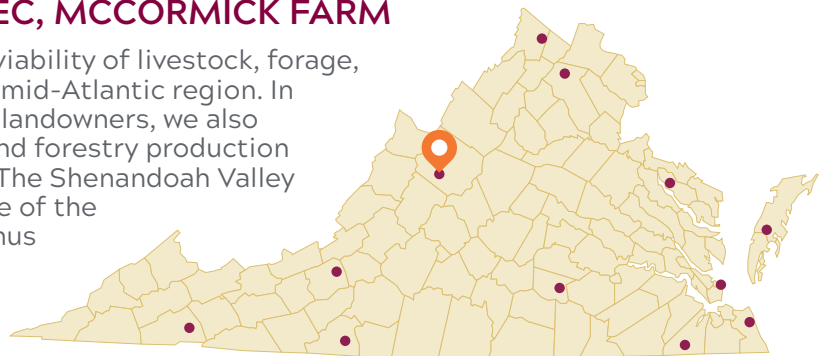
- Over 900 acres of owned and leased land
- Three barns (bank barn, feeding barn, sheep barn)
- A two-acre National Historic Landmark Memorial Plot, including a Grist Mill and Museum

## INDUSTRY PARTNERS

- Forage and livestock industries
- Forestry industry

## ABOUT THE SHENANDOAH VALLEY AREC, MCCORMICK FARM

The Shenandoah Valley AREC works to improve the viability of livestock, forage, and forestry production systems in Virginia and the mid-Atlantic region. In addition to our extension programs for farmers and landowners, we also seek to improve the understanding of agricultural and forestry production systems by students and other visitors to the farm. The Shenandoah Valley AREC, also known as the McCormick Farm, is the site of the development of the first mechanical reaper and is thus widely recognized as the birthplace of the modern mechanical revolution in production agriculture.



## 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.

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg



VIRGINIA AGRICULTURAL  
EXPERIMENT STATION  
VIRGINIA TECH.

